NOTE: ALL THE TEXT IN DOCUMENT THAT IS HIGHLIGHTED YELLOW IDENTIFIES CHANGES TO THE DRAFT PERMIT THAT WAS ISSUED ON JUNE 6, 2014.

STATE WATER RESOURCES CONTROL BOARD

1001 I Street, Sacramento, California 95814
http://www.waterboards.ca.gov/water_issues/programs/npdes

WATER QUALITY ORDER 2014-XXXX-DWQ
GENERAL PERMIT NO. CAGXXXXXX

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR DRINKING WATER SYSTEM DISCHARGES TO SURFACE WATERS

DRAFT PERMIT

Water Purveyors in California are subject to waste discharge requirements as set forth in this Order, and as authorized by a Notice of Applicability issued by the State Water Resources Control Board, under delegation to the Deputy Director of Water Quality.

Table 1. Definition of Community Drinking Water System and Water Purveyor

Community Drinking Water System	A system with greater than 15 connections that is regulated by the California Department of Public Health or a local county department of health, with the primary purpose of conveying, treating and distributing safe drinking water.
Water Purveyor	Any entity that discharges from a community drinking water system due to activities mandated by the federal Safe Drinking Water Act and the California Health and Safety Code for protection of public health and safety.

Table 2. Administrative Information

This Order was adopted by the State Water Board on:	~~August~~ September XX, 2014
This Order shall become effective:	100 days after the adoption date of this Order
This Order shall expire on:	November 30, 2019

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CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on ~~August~~ September XX, 2014.

Jeanine Townsend
Clerk to the Board

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I. SCOPE OF STATEWIDE GENERAL PERMIT AND REQUIREMENT FOR REGULATORY COVERAGE

This Order provides regulatory coverage for short-term or seasonal discharges of potable water and treated drinking water from community drinking water systems that are a result of mandatory activities to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and the California Department of Public Health (CDPH) regulations. This Order also provides regulatory coverage for emergency discharges from community drinking water systems due to facility leaks, system failures and catastrophic events. Such discharges may occur directly, or through a constructed storm drain or other conveyance system, to waters of the United States (U.S.), including the Pacific Ocean, enclosed bays, estuaries, and inland surface waters such as creeks, streams, rivers, canals, lakes, and reservoirs.

This Order does not apply to non-community water systems or non-transient water systems.

This Order is a National Pollutant Discharge Elimination System (NPDES) general permit that authorizes discharges from community drinking water systems, as defined in Table 1 and described in the Fact Sheet (Attachment F of this Order). In order to legally discharge, this Order requires enrollment of all water purveyors in California that discharge per the description above to waters of the U.S., unless otherwise exempt from the requirement to obtain an NPDES permit under federal law, in accordance with section I and II of this Order, with the exception of water purveyors that meet the following criteria:

1. The water purveyor has entered into a local agreement with the municipal separate storm sewer system (MS4) permittee,
   AND
2. The corresponding Regional Water Quality Control Board (Regional Water Board) Executive Officer provides written confirmation to the State Water Board Deputy Director of the Division of Water Quality that the local agreement provides sufficient regulation of the subject drinking water system discharges;

   OR

3. The water purveyor is an MS4 permittee or co-permittee named on an MS4 permit that also authorizes discharges from community drinking water systems issued by the State Water Board or a Regional Water Board,

   OR

4. The water purveyor is regulated under a separate NPDES permit issued by the Regional Water ~~Quality Control~~ Board because (a) the discharge is not within the scope of activities covered by this Order, and/or (b) ~~additional permit requirements are necessary where an applicable Waste Load Allocation (WLA) and~~ a Total Maximum Daily Load (TMDL) has been adopted and the Regional Water Board has determined that TMDL-specific permit requirements for discharges from drinking

water systems are appropriate because those discharges may contribute to the impairment of the waterbody. ~~does not find the requirements of this Order to be consistent with the requirements of the WLA.~~

Water purveyors described in items 1 and 2, or 3 above maintain the option to enroll under this Order if regulatory coverage under an NPDES Permit issued specifically for their mandated discharges is requested.

All water purveyors in California who discharge treated drinking water, ~~and/or~~ potable water or raw water, as described in Section I.B. below pursuant to the activities specified within this Order must submit an application package in accordance with section II.A.1. or a Notice of Non-Applicability in accordance with section II.A.2. of this Order by December 1, 2014. Water purveyors described in items 1 through 4 above that are not requesting coverage under this Order must submit a Notice of Non-Applicability form (see Attachment B-2) to the State Water Board in accordance with Section II.B.2. of this Order.

A. Facilities Authorized To Discharge Under This Order

This Order authorizes discharges from community drinking water systems (as defined in Table 1) that do not adversely affect or impact beneficial uses of receiving waters. Authorized discharges to waters of the U.S. pursuant to this Order are those from drinking water facilities including, but not limited to, municipal supply wells, transmission systems, water treatment facilities, treated drinking water distribution systems, and storage facilities.

B. Discharge Definitions

This Order covers both planned and emergency discharges. Planned discharges are defined as discharges resulting from a water purveyor's essential operations and activities undertaken to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and CDPH regulations in order to provide reliable and safe drinking water. Planned discharges include regularly scheduled, automated, and non-regularly scheduled activities that must take place to comply with mandated regulations and that the water purveyor knows in advance will result in a discharge. Emergency discharges are defined as discharges that occur due to system leakage, system failures or other emergencies, and the water purveyor is not aware of the discharge until after the discharge has commenced.

1. Treated Drinking Water

For the purposes of this Order, treated drinking water refers to treated ground or surface water and water from drinking water distribution systems, that has been treated by a water treatment facility, and is suitable for human consumption in accordance with the drinking water regulations in Titles 17 and 22 of the California Code of Regulations, including compliance with the CDPH Primary Maximum Contaminant Levels (MCLs) and secondary MCLs as a running annual average). (sections 64431, 64444, and 64449, California Code of Regulations, title 22, division 4, chapter 15, articles 4, 5.5, and 16).

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2. ~~Raw and~~ Potable Water

For the purposes of this Order, ~~raw water is defined as untreated surface water or groundwater dedicated for drinking water supply, that has an annual running average concentration of drinking water constituents below CDPH's primary and secondary MCLs. P~~potable water is defined as groundwater that may or may not have received treatment, and meets the following criteria:

a) Is suitable for human consumption,

b) Complies with the primary and secondary MCLs as a running annual average.

3. Raw Water

For the purposes of this Order, raw water is defined as untreated or partially treated surface water or groundwater dedicated for drinking water supply but is not suitable for human consumption. To be eligible for coverage under this Order, discharge of raw water may not cause or contribute to the receiving water exceeding a primary or secondary drinking water MCL, on a running annual average basis.

C. Authorized Discharges

This Order authorizes planned and emergency discharges of raw, ~~and~~ potable or treated drinking water ~~and drinking water~~ from community drinking water systems, as defined above, due to activities mandated by law regarding the development, operation, maintenance, and rehabilitation of drinking water systems. Authorized discharges may include, but are not limited to, the following:

1. Planned Discharges:

a. Treated Drinking Water

i. Water Treatment Plant (discharges of treated drinking water only).

ii. Distribution System Storage Tank or Reservoir releases.

iii. Distribution System Dewatering, Flushing, and Pressure Testing.

iv. Fire Flow / Fire Hydrant Testing.

v. Meter Testing.

vi. Automated Water Quality Analyzers.

vii. Pressure Relief Valves.

viii. Other activities including unscheduled activities that must be undertaken to comply with mandates of the Federal Drinking Water Act and California Health and Safety Code.

b. Potable or ~~/~~Raw Water

i. Groundwater Supply Well Flushing.

ii. Groundwater Well Development, Installation, Rehabilitation, and Testing.

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iii. Groundwater Monitoring for purpose of Supply Well Development, Installation, Rehabilitation and Testing.

iv. Transmission system installation, cleaning, testing.

v. Other activities including unscheduled activities that must be conducted to comply with mandates of the Federal Drinking Water Act and California Health and Safety Code.

2. Emergency Discharges

a. Treated Drinking Water, ~~and~~ Potable Water, and Raw Water:

i. Emergency Drinking Water System Failures and Repairs including Transmission and Distribution System Failures and Repairs.

ii. Trench Dewatering due to an emergency failure.

iii. Catastrophic Events.

II. PERMIT COVERAGE AND APPLICATION REQUIREMENTS

A. Permit Coverage

This Order provides regulatory coverage to water purveyors with existing and potential discharges from a community drinking water system that do not adversely affect beneficial uses of the receiving water. Permit coverage may include discharges from work conducted by contractors on behalf of the water purveyor.

This Order does not apply to discharges:

1) Covered under a separate NPDES permit for discharges that the Regional Water Quality Control Board Executive Officer determines additional permit requirements are necessary to address Total Maximum Daily Loads (TMDL) with Waste Load Allocations (WLA) because the requirements of this Order are not consistent with the TMDL, or

2) From other entities or individuals such as fire departments, construction and insurance companies that test potable water systems, street cleaners, or other users of a municipal storm water system that discharge to waters of the U.S.

1. Community Water Systems. Community water systems serving greater than 15 service connections, or state owned/operated facilities (e.g. parks, campgrounds, rest areas) that are regulated through CDPH~~. Smaller community water systems are regulated~~ or through the local health department. CDPH may regulate the smaller system if the county does not choose to regulate them.

2. Water Purveyor. Water purveyors operate community water systems. Water purveyors (referred to herein as "Discharger" if regulated by this Order), also known as water distributors include water districts, municipalities, private companies, and

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other entities that have been issued a public water supply permit by CDPH or a local county health department.

3. **Discharge Locations.** Both planned and emergency discharges may occur in multiple locations simultaneously on any given day within a community water system. This Order authorizes single discharges at one identified location, and multiple simultaneous discharges at multiple locations. A Discharger shall report on discharge events as required in the Monitoring and Reporting Program of this Order. (Attachment E).

B. Application Package or Notice of Non-Applicability Requirements

1. **Application Package**. To obtain regulatory coverage under this Order, a water purveyor must submit to the State Water Resources Control Board (State Water Board) a complete application package including the following items. A water purveyor with multiple community water systems need only submit one complete application package, (with individual NOI forms for each of its water systems ~~and applicable fee~~) and obtain one Notice of Applicability for regulatory coverage of all its systems that discharge to waters of the U.S.:

   a. **Notice of Intent.** A Notice of Intent (NOI) form (shown as Attachment B1 of this Order) must be completed, signed, and certified in accordance with section V.B., *Signatory and Certification Requirements*, of Attachment D – Standard Provisions.

   b. **Application Fee.** A fee payable to the State Water Board in accordance with title 23, California Code of Regulations or subsequent fee regulations updates. The current fee schedule is available at the following website: http://www.waterboards.ca.gov/resources/fees/docs/fy13_14_fee_schedule_npdes_permit.pdf,

   c. **Site ~~Map~~ Information.** A site ~~map~~ schematic showing the following items:

      i. The boundaries of the water purveyor's service area(s),

      ii. The location and general un-detailed layout of the community water system(s) facilities,

      iii. The location and general un-detailed alignment of the receiving surface water(s),

      iv. The general location of representative monitoring sites, with reference to parameters to be monitored at each site.

      v. A description of the multiple uses or beneficial reuse that the discharges served (i.e. ground water recharge, irrigation), if applicable.

      vi. Identification of the portion of the community water system that discharges within a 300-foot conveyance distance from the receiving water(s) and/or within a 300-foot radius of the receiving water(s).

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d. Total Maximum Daily Loads (TMDL) Constituent-specific Application Package Supplement (applicable for discharges into waters of the U.S. that have applicable waste load allocations identified in Section K of the Fact Sheet and/or TMDL-related requirements prescribed to water purveyors as listed on Attachment G of this Order). A supplement to the application requirements listed in items a through c above that includes the following items:

i. **Laboratory Analysis of TMDL-specific constituent (s).** ~~A one-time~~ Laboratory analysis conducted by a laboratory certified by the Environmental Laboratory Accreditation Program (ELAP). The application package supplement must include a laboratory analysis sheet indicating the concentration of the applicable TMDL specific constituent(s) in ~~the water of~~ the drinking water system discharge ~~prior to best management practice implementation~~ at the point of discharge. The sample collection and analysis must be conducted in accordance with 40 CFR 136. The water purveyor must submit the following items for the application supplement to be deemed complete:

a) A minimum of two samples representative of each type of drinking water system discharge (raw, potable, and/or treated),

b) The estimated minimum and maximum discharge volume per discharge event, and

c) The estimated average discharge volume from the system per year. The estimated volumes shall be based on historical data.

ii. **TMDL-specific Best Management Practices.** Description and implementation requirements of site-specific best management practices that properly treat and/or control corresponding TMDL constituents in the discharge to a concentration or level less than the water purveyor's ~~waste load allocation~~ applicable TMDL-specific permit requirement (s) as set forth in Attachment G, if any ~~and for compliance with all TMDL-related requirements prescribed to the water purveyor~~.

2. **Notice of Non-Applicability**. To certify that regulatory coverage under this Order is not required according to Section I of this Order, a water purveyor must submit a completed Notice of Non-Applicability (shown as Attachment B2) indicating the water purveyor is not required to obtain coverage under this Order due to the following criteria:

a. The water purveyor is regulated under a separate NPDES permit issued by the Regional Water Quality Control Board because additional permit requirements are necessary to comply with an applicable Waste Load Allocation (WLA) and a Total Maximum Daily Load.

b. The water purveyor is under an established local agreement with a municipal separate sewer storm system (MS4) permittee that is acknowledged by the

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corresponding Regional Water Board in writing and submitted with the Notice of Non-Applicability.

c. The water purveyor is an MS4 permittee or co-permittee named on an MS4 permit that also authorizes discharges from community drinking water systems ~~combined drinking water system Permit~~ issued by the State Water Board or Regional Water Board.

A water purveyor with multiple community water systems need only submit one Notice of Non-Applicability for its systems that meet the same criterion out of the listed above criteria.

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C. Water Board Notice of Applicability or Notice of Non-Applicability Approval

After the water purveyor's application package or Notice of Non-Applicability is deemed complete, the State Water Board's Deputy Director of Water Quality (Deputy Director) will issue a Notice of Applicability (NOA) or a Notice of Non-Applicability Approval (NONAA). Regulatory coverage for the planned and emergency discharges described in the application package commences with the date of issuance of a Notice of Applicability to the water purveyor. If a NOA or a NONAA is not issued, the Deputy Director will send a letter outlining the reasons that the submittal is incomplete or the described discharge is not eligible for coverage under this Order. The State Water Board will provide the water purveyor 60 days from the date of the response letter to provide State Water Board staff the items necessary to complete the application.

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D. Permit Coverage Termination

1. Termination of Existing Regional Water Board Permit Coverage

Regulatory coverage under an existing Regional Water Board NPDES permit for discharges within the scope of this Order will be terminated upon issuance of the Notice of Applicability for this Order, or one year after the Adoption Date of this Order, whichever is sooner.

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2. Termination of Statewide Permit Coverage or Revocation of Notice of Non-Applicability

The Deputy Director or an Executive Officer of a Regional Water Board may terminate coverage or revoke approval of a Notice of Non-Applicability (NONA) under this Order for any of the specified causes, and require application for coverage under an individual or other NPDES permit as set forth in 40 CFR 122.28(b)(3). Causes for permit coverage termination or NONA revocation include, but are not limited to, the following:

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a. Violation of any term or condition of this Order;

b. Misrepresentation or failure to disclose all relevant facts in obtaining permit coverage or non-applicability status under this Order, or

c. Written request from a Discharger to terminate enrollment because discharge has ceased or that the permit is no longer needed.

Annual permit fees will be assessed by the State Water Board up to the date of written notification from the State/Regional Water Board to the Discharger, or the date of a termination request letter from the Discharger to the State Water Board, whichever is applicable.

E. Permit Effective Date

This Order becomes effective 100 days after the Adoption Date of this Order. By December 1, 2014, all water purveyors must submit a complete application package, or submit a completed Notice of Non-Applicability that certifies other means of regulatory coverage for discharges from its community water system(s).

F. Threat and Complexity of Discharge and Basis of Permit Fee

When mitigated through implementation of appropriate management practices, treatment and/or controls, discharges from community water systems, as defined under this Order, pose no adverse effects to beneficial uses of the receiving waters. In accordance with the State Water Board Annual Fee Schedules per California Code of Regulations (CCR), the discharges covered under this Order are of low threat and low complexity and are within category 3 of the de minimis discharges that are regulated under a general NPDES Permit that require minimal or no additional treatment systems to meet limits and pose no significant threat to water quality.

G. Permit Transfer

A change in ownership of the facilities authorized to discharge through coverage under this Order requires the current owner to provide written notice to the State Water Board at least 30 days in advance of transfer of ownership. The Deputy Director may determine that the new owner must submit an application package to seek coverage under this Order if the nature or location(s) of the discharge(s) have changed from the application package on file.

III. FINDINGS

The State Water Board finds the following:

A. Legal Authorities. This Order serves as statewide Waste Discharge Requirements (WDRs) pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA), and California Water Code chapter 5.5, division 7 (commencing with § 13370). This Order shall serve as a statewide general NPDES permit for point source discharges from single or multiple discharge points to surface waters, storm drains, and other storm water conveyances leading to waters of the U.S.

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B. Background and Rationale for Requirements. The Fact Sheet (Attachment F) contains background information and rationale for the requirements in this Order, and is hereby incorporated into and constitutes findings for this Order. Attachments A through H are also incorporated into this Order.

C. Termination of Existing Coverage Under Similar Regional Water Board Orders. The State Water Board's intention in the issuance of this statewide NPDES Permit is to provide consistent and efficient regulation of discharges from drinking water systems statewide. To provide such consistency, this Order terminates existing regulatory coverage under an existing Regional Water Board NPDES permit for discharges as described in section I and II, upon issuance of the Notice of Applicability to a water purveyor per the terms of this Order, or one year after the Adoption Date of this Order, whichever is sooner.

D. State Implementation Policy. As adopted in March 2000, and amended in February 2005, the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) establishes implementation provisions for priority pollutant criteria, and objectives and provisions for chronic toxicity control. Section 5.3 of the SIP allows for the granting of a categorical exception for drinking water system activities conducted to fulfill statutory requirements mandated by federal and state regulations.

E. California Ocean Plan. In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California (hereinafter Ocean Plan), as amended. The latest Ocean Plan amendment became effective on August 19, 2013. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean waters of the State. To protect the beneficial uses of ocean water, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan and are applicable to those discharges entering directly into the Ocean or indirectly via a storm water system that drains into the Ocean near the location of discharge. This Order does not authorize direct discharges into Areas of Special Biological Significance (ASBS).

Section III.J of the Ocean Plan allows the State Water Board to grant an exception where the State Water Board determines that the exception will not compromise protection of the ocean waters or beneficial uses and the public interest will be served.

F. Exception Resolution. On ~~August~~ September XX, 2014, the State Water Board adopted a Resolution approving an exception to the State Implementation Policy and the Ocean Plan to water purveyors statewide for discharges from drinking water systems from complying with specified priority pollutant criteria and ocean plan objectives. As provided in Resolution 2014-XXXX-DWQ, the State Water Board granted an exception per section 5.3 of the State Implementation Policy to water purveyors statewide, for planned and emergency discharges to inland surface waters, enclosed bays and estuaries. Similarly, as provided in Resolution 2014-XXXX-DWQ, the State Water Board granted water purveyors with drinking water system discharges to the ocean, other than direct discharges into ASBS, an Ocean Plan exception for compliance with specified Ocean Plan objectives. As further discussed in the Fact Sheet (Attachment F), the State Water Board finds that compliance with the requirements of this Order is in accordance with the criteria

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to qualify for an exception of the State Implementation Policy and Ocean Plan per Resolution 2014-XXXX-DWQ.

G. California Environmental Quality Act. Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA), (commencing with section 21100) of Division 13 of the Public Resources Code.

Additionally, pursuant to CEQA, Public Resources Code section 21100 et seq., on September ~~August~~ XX, 2014 the State Water Board adopted Resolution 2014-XXXX-DWQ approving a Mitigated Negative Declaration for excepting the type of discharges as covered under this Order from specified requirements of the State Implementation Policy and the California Ocean Plan.

H. Total Maximum Daily Load (TMDL) Implementation. A review of Regional Water Board TMDLs found that, as of the adoption date of this Order, only the Los Angeles Regional Water Board and the San Diego Regional Water Board have TMDLs that either directly apply WLAs to, or may indirectly imply that WLAs are applicable to, the discharges from drinking water systems regulated under this General Permit. None of these TMDLs established WLAs that apply exclusively to discharges from drinking water systems. Instead, the WLAs apply to general categories of discharges (e.g., "other NPDES dischargers") that include discharges from drinking water systems. These TMDLs and WLAs are applicable to the discharges from drinking water systems authorized under this Order and are therefore summarized below.

The State Water Board is required to ensure that the effluent limits in this permit are "consistent with the assumptions and requirements of any available waste load allocation for the discharge." (40 C.F.R. § 122.44(d)(1)(vii)(B).) Although these WLAs apply to the discharges that are authorized under this Order, none of the TMDLs or supporting staff reports indicates that the discharges from drinking water systems authorized under this Order are significant sources of the relevant pollutants. Based on the data that is currently available, and due to the high quality and intermittent and short-term nature of the discharges from drinking water systems authorized under this Order, it is unlikely that these discharges contribute to the impairment of the TMDL-related water bodies. Therefore, it is consistent with the assumptions and requirements of the WLAs in these TMDLs for this Order to not include any TMDL-specific requirements.

This Order requires sampling of discharges in these watersheds as part of the application for coverage. If a Regional Water Board determines that any of these TMDLs, or any newly approved TMDLs, establish WLAs that should be implemented through TMDL-specific permit requirements for the discharges from drinking water systems that are authorized under this Order, the Regional Water Board may issue permit(s) for those discharges. Alternatively, if further TMDLs are adopted that address pollutants that are likely to be in discharges from drinking water systems, and allocate waste loads specifically to water purveyors regulated under this Order, the State Water

Board will may consider additional adding TMDL-specific permit requirements to Appendix G of this Order in a subsequent permit amendment or renewal.

~~I. To ensure that discharges are in compliance with any applicable TMDL requirement, the Deputy Director, through written affirmative notification from a corresponding Regional Water Board Executive Officer, must find that:~~

~~(1) the requirements in this Order are consistent with the assumptions and requirements of the WLA, and~~

~~(2) the requirements in this Order are sufficient for the water purveyor to comply with its WLAs or other TMDL requirements imposed directly on the water purveyor.~~

~~Attachment G of this Order lists TMDLs that prescribe a waste load allocation (WLA) to a water purveyor.~~

I. **Notification of Interested Parties.** State and Regional Water Board staff have conducted five stakeholder meetings statewide, and numerous other informal communications, and has notified prospective water purveyors and interested agencies and persons of its intent to issue this statewide NPDES permit and prescribe these statewide waste discharge requirements. The State Water Board provided an opportunity for all interested parties to submit written comments and testimony. The Fact Sheet (Attachment F) provides details regarding the public notification.

J. **Consideration of Public Comment.** The State Water Board, in an August ~~July 1~~5, 2014 public hearing, heard and considered public comments pertaining to the Order. The State Water Board also considered all written public comments submitted by the public comment due date of ~~July~~ August 19~~8~~, 2014 prior to its consideration of adoption of this Order. The Fact Sheet (Attachment F) provides details regarding the public notice and public hearing.

THEREFORE, IT IS HEREBY ORDERED that this Order terminates regulatory coverage provided by Regional Water Quality Control Board Orders that authorize the same type of discharge specified in the scope of this Order, one year after the Adoption Date of this Order or as of the date of a Notice of Applicability issued by the Deputy Director of Water Quality, whichever is sooner. In order to meet the provisions contained in California Water Code, Division 7 (commencing with section 13000) and regulations adopted thereunder, and the provisions contained in the Clean Water Act and regulations and guidelines adopted thereunder, a Water Purveyor who has obtained coverage under this Order shall comply with the requirements in this Order.

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IV. DISCHARGES NOT AUTHORIZED UNDER THIS ORDER

The following discharges are not authorized to discharge under this Order:

A. Discharges that do not meet the specifications in section I of this Order and authorized in the Notice of Applicability issued by the Deputy Director of Water Quality.

B. Discharges to a water of the U.S. with a total maximum daily load (TMDL) that prescribes a waste load allocation to a water purveyor, ~~as listed in Attachment G of this Order,~~ where the ~~Deputy Director of Water Quality or~~ applicable regional water board Executive Officer determines that the requirements of this Order are not consistent with the assumptions and requirements of the waste load allocation and thus are not sufficient for the water purveyor to comply with ~~its waste load allocations or other~~the TMDL requirements imposed directly on the water purveyor.

C. Discharges of new drinking water systems (not an expansion of an existing system) into an impaired water body that is impaired for a constituent that exists in the new discharge at a concentration greater than the criteria used to establish the impairment of the water body.

D. Direct discharges into areas designated by the State Water Board as Areas of Special Biological Significance (ASBS).

V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The Discharger shall maintain compliance with the following specifications and effluent limitations for all planned discharges at all points of direct discharge, or discharge via a storm drain or other conveyance system, to the receiving waters, with compliance measured at the point of discharge as described in the Monitoring and Reporting Program (Attachment E). Compliance with these effluent limitations shall be determined as specified in Section IX.A. of this Order.

A. Best Management Practices (BMP) Specification for all discharges into inland surface waters, enclosed bays, estuaries and the ocean

The Discharger shall implement~~, at a minimum,~~ the BMP procedures and measures as specified in Provision VIII.C.2, or equivalent proven BMPs provided by professional associations or institutes such as the American Water Works Association, for all discharges to comply with DPH's MCLs and to assure that beneficial uses of the receiving water body(ies) are not adversely affected. For emergency discharges, the Discharger shall implement BMP procedures as soon as feasible while concurrently protecting public health and safety.

~~For discharges to receiving water bodies with Total Maximum Daily Loads (TMDLs) listed in Attachment G, the Discharger must implement the appropriate treatment or controls to comply with waste load allocations and other TMDL-related requirements.~~

B. Final Effluent Limitation for super-chlorinated discharges:

1. **Total Residual Chlorine (this limitation applies to all discharges of super-chlorinated water).** Total chlorine residual concentration in the discharge shall not exceed 0.019 mg/L.

C. Final Effluent Limitation for all planned discharges of potable water directly to a surface water or via a storm drain:

1. **Turbidity.** The Turbidity measure in Nephelometric Units (NTUs) in the discharge of potable water shall not exceed 10 NTUs as a daily average or per turbidity water quality objectives in the corresponding Regional Water Board basin plan, whichever is less.

D. Final Effluent Limitation for planned discharges directly into inland surface waters, enclosed bays and estuaries, or that discharges within 300 feet or less of the receiving water.

1. **Total Residual Chlorine.** Total chlorine residual concentration in the discharge shall not exceed 0.019 mg/L.

E. Final Effluent Limitations for planned discharges directly into ocean waters, or into a storm drain that discharges within 300 feet or less to ocean waters:

1. **Total Residual Chlorine.** Total chlorine residual concentration in the discharge shall not exceed 0.008 mg/L.
2. **Turbidity.** The Turbidity concentration in the discharge shall not exceed 225 NTU at any time.

~~**F. Final Permit Requirements for discharges to receiving water bodies with TMDLs listed in Attachment G:**~~

~~1. Discharges to receiving surface water bodies that are identified to have TMDL that either directly or indirectly name water purveyors, as listed in Attachment G, shall meet applicable permit requirements as set forth in Attachment G.~~

VI. MULTIPLE USES OR BENEFICIAL REUSE

The State Water Board encourages water purveyors with a discharge authorized under this Order to place the discharge water to multiple uses or a beneficial reuse. Discharges authorized under this Order that are put to multiple use or beneficial reuse are not required to obtain any other waste discharge requirements if the discharge is collected and reused for landscape irrigation or other uses in a manner that augments the existing supply, or if the discharge is directly or indirectly discharged to:

1. Storm water capture basin(s),
2. Low impact development features, or
3. Other groundwater-recharge system(s).

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VII. RECEIVING WATER LIMITATIONS

Receiving water limitations are based on water quality objectives contained in the Ocean Plan, Regional Water Quality Control Board Basin Plans, and State Water Board water quality control plans and policies, and are a required part of this Order. Any water purveyor authorized to discharge under this Order shall not violate any applicable basin plan or water quality control plan, and at minimum, shall not cause or contribute to an occurrence of the following in the receiving water:

A. pH. The pH level to be lowered below the pH receiving water objective in a corresponding Regional Water Board basin plan.

B. Chemical Constituents. Chemical constituents to be present in concentrations that adversely affect beneficial uses.

C. Floating Material and Trash. Floating material, debris or trash to be present that cause nuisance or adversely affect beneficial uses.

D. Sediment and Total Suspended Solids. The sediment load and total suspended solids discharge rate of surface waters to be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

E. Toxicity. Toxic substances to be present, individually or in combination, in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.

F. Hydromodification. Velocity and/or volume of discharge to modify the existing physical characteristics of a water body.

G. For Water Bodies with an applicable TMDL. An exceedance of the water quality objective for the pollutant(s) that is causing the impairment.

VIII. PROVISIONS

A. Standard Provisions

The Discharger shall comply with all Standard Provisions in Attachment D.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the Monitoring and Reporting Program requirements in Attachment E.

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C. Special Provisions

1. Reopener Provisions

The State Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances:

a. If present or future investigations demonstrate that the discharges governed by, and in compliance with, this Order cause adverse impacts on water quality or beneficial uses of the receiving waters;

b. If State Water Board precedential decisions, new policies, new laws, or new regulations are adopted;

c. If an administrative or judicial decision on a separate NPDES permit or Waste Discharge Requirements addresses requirements applicable to discharges authorized in this Order; and/or

d. As otherwise authorized by law.

2. Implementation of Best Management Practices

a. The Discharger shall implement best management practices (BMPs) that treats or controls pollutants from its discharges to maintain compliance with this Order ~~and TMDL-related requirements,~~ including any applicable TMDL-related requirements set forth in Attachment G, as applicable. The Discharger shall implement BMPs for all discharges to maintain compliance with final effluent limitations and specifications, receiving water limitations, and to achieve the following performance measures:

i. Prevent aquatic toxicity by using dechlorination chemical additions, or equivalent proven dechlorination methods;

ii. Prevent riparian erosion and hydromodification by implementing flow dissipation measures; and

iii. Minimize sediment discharge, turbidity and color impacts by implementing sediment, turbidity, erosion and color control measures.

b. The Discharger shall assure that quality assurance and quality control protocol is implemented to assure best management practices, monitoring and reporting are effective, valid and in compliance with this Order. The Discharger shall train all personnel operating the drinking water system and responding to emergency discharges to assure the quality assurance and quality control protocol is properly implemented.

c. For planned discharges, the BMPs shall be implemented prior to and during any discharge. For planned but unscheduled or automated discharges from pressure relief valves and unchlorinated pump-to waste wells, BMPs shall be implemented unless infeasible (e.g., inaccessible, inadequate space). For emergency discharges, the BMPs shall be implemented as soon as feasible following assurance that public safety, property, and infrastructure are protected.

d. In fulfilling the requirements of this section, the Discharger may implement proven BMPs per updated approved guidance established by industry experts

such as the *2014 Edition of the BMP Manual for Drinking Water System Releases* (or subsequent updates thereto), published by the California-Nevada Section of the American Water Works Association or other professional associations or entities, to comply with the requirements of this Order. The Discharger shall make available a documented log of all BMPs implemented for its discharges to State and Regional Water Board staff upon request. The Discharger shall modify its BMPs as necessary to maintain compliance with this Order.

e. Dischargers that have a waste load allocation in accordance with a Total Maximum Daily Load, as listed in Attachment G, shall submit in its application package, a list of TMDL-specific BMPs that will be implemented to directly address compliance with its waste load allocations.

3. BMP Iterative Approach

If monitoring results or other available information demonstrates that the discharge is not in compliance with the requirements of this Order, the Discharger shall determine the source of non-compliance, and develop and implement new or revised BMPs as necessary. As part of this process, the Discharger shall validate the effectiveness of any new or revised BMPs to achieve the requirements of this Order. All non-compliance and corresponding corrective actions to address non-compliance shall be reported to the State Water Board in the annual report, as required in the Monitoring and Reporting Program (Attachment E) of this Order. A log documenting the additional or revised BMPs shall be made available upon request by staff of the State and/or Regional Water Board.

D. Noncompliance

Noncompliance with any requirement of this Order may be subject to enforcement action by the State Water Board and/or Regional Water Board as authorized under the Porter Cologne Water Quality Control Act (Water Code Section 13000), as consistent with the State Water Board's enforcement policy.

IX. COMPLIANCE DETERMINATION

Compliance with the final effluent limitations contained in Section V of this Order will be determined as specified below:

A. General

Compliance with effluent limitations shall be determined using monitoring and reporting protocols defined in the Monitoring and Reporting Program of this Order. For purposes of reporting and administrative enforcement by the State and/or Regional Water Boards, the Discharger shall be deemed out of compliance with the effluent limitations if the constituent concentration or level is greater than the effluent limitation and greater than or equal to the method detection limit (MDL) of properly calibrated in-field monitoring equipment.

B. Total Residual Chlorine

Handheld chlorine measuring devices that are U.S. EPA-approved are appropriate to measure residual chlorine in the field for compliance determination. The MDL of a hand-held chlorine meter used to determine compliance with the total chlorine residual effluent limitations is 0.10 mg/L or lower. A discharge monitoring result with a total residual chlorine concentration greater than or equal to 0.10 mg/L shall be deemed out of compliance with a chlorine effluent limitation. Due to other possible interferences of these handheld devices, if readings are false positives, these will not be evaluated for compliance if explanation of cause is provided.

ATTACHMENT A – DEFINITIONS

Adverse Effect or Adverse Impact to Beneficial Uses of a Receiving Water Body
A detrimental effect upon water quality or beneficial uses of a receiving water body caused by a discharge or loading of a pollutant or pollutants.

Annual Average
The arithmetic average of sampling event results over a period of 12 months.

Authorized Discharge
Any discharge that is authorized pursuant to this National Pollutant Discharge Elimination System (NPDES) permit and meets the conditions set forth in this Order.

Basin Plan
The Water Quality Control Plan(s) adopted by a Regional Water Quality Control Board. A Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin.

Beneficial Uses
The existing or potential uses of receiving waters in the permit area as designated by a Regional Water Board basin plan or other water quality control plan.

Best Management Practices (BMPs)
Methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges. BMPs include structural and nonstructural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

Community Drinking Water System
A system regulated by the California Department of Public Health or a local county department of health, with the primary purpose of conveying, treating, storing and distributing safe drinking water to at least 15 service connections used by yearlong residents or regularly serves at least 25 year around residents of the area served by the system.

Deputy Director
The Deputy Director of Water Quality for the State Water Resources Control Board or any person(s) delegated by the Deputy Director to serve as acting Deputy Director.

Discharger
Any water purveyor named in this Order as being responsible for permit requirements within its jurisdiction. A discharger to this Order includes a contractor working on behalf of the water purveyor.

Drinking Water Systems Discharges
Release of flows from drinking water storage, supply and distribution systems including flows due to system failures, pressure releases, system maintenance, distribution line testing, fire hydrant flow testing; Releases due to flushing and dewatering of pipes, reservoirs, vaults, and supply well development, maintenance and rehabilitation activities.

Emergency Discharge

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A discharge due to a sudden unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services, including the provision of drinking water supplies in accordance with applicable drinking water statutes and regulations.

Estuaries
Surface waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater.

Enclosed Bays
Enclosed bays are hydrological indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay.

Inland Surface Waters
All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

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.

Method Detection Limit (MDL)
Minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in in 40 C.F.R. part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML) and Reporting Level (RL)
The minimum level (ML) means the concentration at which a properly calibrated monitoring system gives a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific monitoring procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed. A reporting level (RL) is the ML for reporting and compliance determination included in this Order.

Monthly Average
The arithmetic average of sampling event results over a period of one month.

Municipal Supply Well
A groundwater well that is installed, operated, maintained and/or rehabilitated in accordance with the federal Safe Drinking Water Act and the California Health and Safety Code, to pump ground water for the primary purpose of delivering drinking water to a municipality or community.

Monitoring Well

Specialized wells in which the depth to groundwater can be measured and samples of ground water can be collected for analysis to fulfill requirements mandated by the federal Safe Drinking Water Act and the California Health and Safety Code.

Non-community Water System
A water system that is not a community water system. A community water system is a water system that serves at least 15 service connections used by yearlong residents or regularly serves at least 25 year around residents of the area served by the system.

Not Detected (ND)
Sample results less than the properly calibrated monitoring equipment's MDL.

Non-transient Water System
A water system that is not a community water system and that regularly serves at least 25 of the same persons over six months per year.

National Pollutant Discharge Elimination System (NPDES)
The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA §307, 402, 318, and 405.

Pollutants
Substances defined in CWA §502(6) (33.U.S.C.§1362(6)), and incorporated by reference into California Water Code §13373.

Pollution Prevention
Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in California Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in discharge water from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Board or Regional Water Board.

Raw Water
~~Surface and ground water that has not yet received treatment to make it suitable for drinking purposes, however it complies with MCLs (based on a running annual average) and is dedicated for drinking water supply.~~
Untreated or partially treated surface water or groundwater dedicated for drinking water supply but is not suitable for human consumption.

Secondary Maximum Contaminant Level
The short-term level of a contaminant in drinking water below which there is no known or expected risk to health.

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Transmission Systems
Transmission systems include pipes, pumps, canals, pump houses, and other components used to move water from the point of origin to storage reservoirs, treatment facilities, and distribution systems. Transmission systems do not have connections to serve end users.

Waters of the State
Any surface water or groundwater, including saline waters, within boundaries of the state.

Waters of the United States (U.S.)

- **a.** All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- **b.** All interstate waters, including interstate wetlands;
- **c.** All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

    1. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
    2. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    3. Which are used or could be used for industrial purposes by industries in interstate commerce;

- **d.** All impoundments of waters otherwise defined as waters of the U.S. under this definition;
- **e.** Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- **f.** The territorial sea; and
- **g.** Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in 40 Code of Federal Regulations 423.22(m), which also meet the criteria of this definition are not waters of the U.S. This exclusion applies only to man-made bodies of water, which neither were originally created in waters of the U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with U.S. EPA.

ATTACHMENT B1 – NOTICE OF INTENT

STATE WATER RESOURCES CONTROL BOARD

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF
ORDER 2014-XXXX-DWQ
NPDES NO. CAGXXXXXX

FOR DRINKING WATER SYSTEMS DISCHARGES TO WATERS OF THE U.S.

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A. DRINKING WATER SYSTEM OWNER

Name		CDPH Drinking Water System No.: Number of Connections:	
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:[2]		Date:	

B. WATER PURVEYOR/CONTRACTOR[1]

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:[2]		Date:	

C. WATER SUPPLIERS (IF APPLICABLE)

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:[2]		Date:	

D. BILLING ADDRESS

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			

[1] If additional property owners are involved, provide the information in a supplementary letter.

[2] *I hereby certify under penalty of perjury that the information provided in this application and in any attachments is true and accurate to the best of my knowledge. By signing this Notice of Intent, I agree to closely monitor and stop the discharge if there is any violation of Order 2014-XXXX-DWQ or impact to receiving water beneficial uses.*

E. PLANNED DISCHARGE INFORMATION

Identify type of discharge (all that apply)			
☐	Water Treatment Plant (Discharge Potable Water Only)	☐	Pressure Relief Valves
☐	Storage Tank and/or Reservoir Dewatering	☐	Groundwater Well Installation
☐	Disinfection System Dewatering, Disinfection, Flushing, and Pressure Testing	☐	Groundwater Well Flushing
☐	Fire Flow Testing	☐	Groundwater Well Rehabilitation
☐	Meter Testing	☐	Groundwater Well Development and Testing
☐	Automated Water Quality Analyzers	☐	Other (explain below)

List and description of other discharges.
Are the discharges existing discharges as of the adoption date of this Order ~~August XX, 2014~~)? If not, ~~what is the date the discharges initiated~~ identify the new discharges that are proposed to take place prior to the expiration date of this Order? _____
Distribution and discharge area (Provide general ~~map~~ information (including site schematic) showing boundaries of distribution system and identifying the receiving waters. Include alignment of storm water collection system, if applicable.)
List any additives to the discharge, their purpose, and quantity (e.g. specific dechlorination agent).
List any constituents added to the system, their purpose, and quantity (e.g. zinc orthophosphate for corrosion control).

F. MULTIPLE WATER USE OPTIONS

Provide a brief description of groundwater infiltration/recharge facility that accepts the discharge (or portion thereof), or the collection and application of the discharge (or portion thereof) for irrigation or other beneficial reuse. If no multiple water use options of any portion of your discharge are viable, explain why (attach additional sheet as necessary).		
Is using a portion of the discharge ~~to~~for groundwater infiltration/recharge ~~facility~~ or other beneficial reuse a viable option?	☐ Yes	☐ No
Is land disposal of a portion of your discharge a viable option?	☐ Yes	☐ No

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G. RECEIVING WATER INFORMATION (provide on separate sheet if necessary)

Name of receiving waterbody (ies):		
Regional Water Quality Control Board where receiving water body (ies) is/are located (REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region _____ (See Attachment H-Locations of Regional Water Quality Control Boards)		
Is/Are the receiving water body(ies) listed on the current 303d list[1] for a constituent in your discharge?[1]	☐ Yes	☐ No
If Yes, then list the water body(ies) in the 303d list, the constituent causing the impairment, and the adopted TMDL if applicable:		
Does/Do the receiving water body(ies) have applicable waste load allocations identified in Section K of the Fact Sheet and/or TMDL-related requirements prescribed to the water purveyors listed in Attachment G applying for coverage under this Order? ~~(See Attachment G)~~ If yes, the following items **must** be included in your application package for it to be deemed complete: a. Laboratory Analysis and estimated volume of your discharge, after appropriate treatment or controls are implemented, for the constituent associated with the applicable waste load allocation(s) and/or TMDL-related requirements b. A copy of the additional best management practices, including applicable treatment or controls that will be implemented to comply with ~~waste load allocations and/or~~ TMDL-related requirements in Attachment G, if any.	☐ Yes	☐ No

H. BEST MANAGEMENT PRACTICES (CHECK ALL THAT APPLY)

☐ Best Management Practices (BMPs) are being implemented by operators of the subject drinking water system(s).

If not, provide date BMPs will be implemented. (Date must be within 6 months of the effective date of this Order.)

*Date that implementation of BMPs for the above identified Drinking Water System:*_____

[1] See http://www.waterboards.ca.gov/water_issues/programs/tmdl/ for current Clean Water Act section 303(d) listing.

☐ ~~If the receiving water body(ies) is/are listed on Attachment G of this Order, do you have TMDL-specific best management practices as required in Sections II.B.1.d and VIII.B.2.d of this Order, included in your application package?~~

~~*If not, explain. The Deputy Director of Water Quality must approve the TMDL-specific treatment or controls prior to issuance of a Notice of Applicability.*~~

~~*Date TMDL-specific BMPs were implemented for the above identified Drinking Water System:*~~_____

I. APPLICATION FEE

☐ Provide the appropriate applicable fees. Information on applicable fees can be found at http://www.waterboards.ca.gov/resources/fees/ Checks must be made payable to the State Water Resources Control Board.

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.

_____ _____
Signature Date

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ATTACHMENT B2 – NOTICE OF NON-APPLICABILITY

STATE WATER RESOURCES CONTROL BOARD

NOTICE OF NON-APPLICABILITY

CERTIFYING NON-APPLICABILITY OF REGULATORY COVERAGE UNDER ORDER 2014-XXXX-DWQ, NPDES NO. CAGXXXXXX

DRAFT PERMIT JULY 03 2014

A. DRINKING WATER SYSTEM OWNER

Name			CDPH Drinking Water System No.:
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:			Date:

B. WATER PURVEYOR

Name			
Mailing Address			
City	State	ZIP	Phone
Contact Person			
Signature:			Date:

C. REASON FOR NON-APPLICABILITY: (check one that applies and complete information)

Discharges from the above system(s):
☐ Are regulated by a separate NPDES Permit issued by a Regional Water Board for discharges that are outside the scope of this Order: Regional Water Board Order No. _____ NPDES Permit No._____
☐ Are covered under a local agreement with an municipal sewer storm system (MS4) permittee (Attach a copy of agreement and acknowledgement by the corresponding Regional Water Board)
☐ Are covered as an (MS4) permittee or co-permitte under Order No. _____
☐ Do not discharge to a water of the U.S. or conveyance that drains to a water of the U.S.

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.

_____ _____

Signature Date

ATTACHMENT C – BEST MANAGEMENT PRACTICES (BMPs)

The Discharger shall implement~~, at a minimum,~~ BMPs that include but are not limited to the procedures outlined below, ~~(~~or proven practices established by the American Water Works Association or other professional Associations or Institutes per feasible updated available technology~~,)~~ to comply with this Order, to protect the beneficial uses of the receiving waters and to prevent erosion or hydromodification caused by discharges.

I. BMP Procedures

A. Treated Drinking Water Discharges

All treated drinking water shall be dechlorinated. Filter bags or rolls, or equivalent, shall be used to remove any sand, silt or debris from entering the surface water or storm drain system.

B. Super-chlorinated Water Discharges

All super-chlorinated water shall be dechlorinated at the point of discharge directly into a surface water or the point of discharge into any storm water conveyance system. Filter bags or rolls, or equivalent, shall be used to remove any sand, silt or debris from entering the surface water or storm drain system.

C. Treated Drinking Water Distribution and Storage Tank Drainage Discharges

All discharges from distribution system draining for cleaning and maintenance shall be dechlorinated, pH adjusted as appropriate, and filtered to remove sediment, prior to discharging to surface waters or storm drains.

D. Municipal Groundwater Supply Well Discharges

During flushing, rehabilitation, or development of supply water wells, multi-baffled settling tanks, or equivalent, shall be used if necessary to remove large particles and to reduce turbidity to 10 Nephelometric Turbidity Units (NTU). After settling, if turbidity is greater than 10 NTU, the Discharger shall filter the water implementing a 5-micron filter bag filtration system, or equivalent practice, before discharging to achieve a turbidity threshold of 10 NTUs as a daily average.

II. BMP Measures

A. Sediment Salt, Minerals, and Erosion Control

Sediment, salt, minerals and erosion control BMPs that assess and prevent potential impacts to receiving waters, at discharge points and downstream reaches.

i. **Receiving Waters.** The Discharger shall identify methods for locating discharge points and receiving waters to determine appropriate sediment and erosion control measures.

ii. **Sediment, Salt, and Mineral Control.** Sediment, salt and mineral control practices shall be used to filter and trap sediment particles, salts and minerals to prevent them from reaching storm drains or receiving waters. The following practices may be used to control sedimentation, salt and minerals buildup in receiving waters:

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(a) Straw waddles and gravel bags may be placed in a flow pathway and around storm drain inlets;

(b) Plastic sheets may be used to line a trench and flow pathway to prevent water contact with soil;

(c) Check dams may be constructed to dissipate flow energy and minimize the potential for discharges to dislodge soil; and

(d) A storm water swale, if available nearby to the point of discharge that has sufficient capacity for the discharge.

(e) Where possible, water removed as the result of an emergency or planned discharge may be discharged to an open field or turf to remove sand and/or silt or larger particles prior to surface water discharge.

iii. Erosion Controls. Erosion control practices shall be used to protect soil surfaces at discharge points and receiving waters. Erosion control practices shall be used to prevent re-suspension of ambient sediment within a receiving water, and shoreline erosion and streambed scour. Such controls shall minimize the energy of discharges by managing flow velocities and volumes, and shall be appropriately designed so that the discharge does not exceed the hydraulic capacity of the receiving water at the point of discharge and areas downstream of the discharge point. The following measures may be used to control erosion in receiving waters:

(a) Construct check dams to slow down the flow;

(b) Install flow diffusers at discharge point;

(c) Fashion discharge flow path with as little slope as possible; and

(d) Decrease discharge flow rates and duration.

B. Dechlorination

The following types of dechlorination methods, or equivalent, will be utilized as appropriate to achieve a hand-held meter reading of non-detect for total chlorine residual, with a meter method detection level of 0.10 mg/L or less, or a detectable concentration of a dechlorination agent:

i. Dechlorinating Diffuser – The dechlorinating diffuser connects directly to a discharge nozzle (e.g., to a fire hydrant or fire hose using a standard 2 ½ inch to 4 ½ inch National Pipe Thread coupling) and contains a chamber that houses dechlorination agent. Some diffusers feature a siphon for dechlorinating agent tablets or a solution to dechlorinate the water.

ii. Dechlorination Mats – These mats are used to facilitate effective contact between the flow and dechlorinating agent during dechlorination. For dechlorination of discharges from trenches during main breaks, the tablets are placed inside synthetic mesh fabric pockets sewn together in a grid or line. The dechlorinating mats are laid across the flow path or over the storm water conveyance system.

As the discharged water flows over and around the tablets, dechlorinating agent is released, which removes the chlorine.

iii. Broadcast Dechlorination – Dechlorination granules are spread over an area, such as pavement, where chlorinated water is flowing toward a storm water conveyance system inlet.

iv. Chemical Injection Metering Pump – Occasionally, a dechlorination agent is injected into a discharge pipe, such as a tank drain, to dechlorinate the water before entering the storm water system.

Addition of dechlorination chemicals must be managed to ensure the dechlorination agent does not adversely affect or impact beneficial uses of the receiving waters.

C. Copper and Zinc Management

A Discharger that applies copper-based herbicides or zinc-based corrosion inhibitors to its water must implement BMP measures to eliminate or reduce copper and zinc concentrations in its discharges to the extent feasible, including but not limited to the following

i. Record keeping of where, when and how much zinc or copper is used to treat water that has the potential to be discharged to a surface water.

ii. Implementation of BMPs that eliminate planned discharges and minimize emergency discharges to surface water bodies from occurring within 48 hours of applying copper-based herbicides or zinc-based corrosion inhibitors.

iii. Implementation of BMPs to eliminate or reduce to the extent feasible the use of copper-based herbicides or zinc-based corrosion inhibitors by using less toxic agents or other methods in place of copper-based herbicides or zinc-based corrosion inhibitors.

D. Operation and Maintenance

All facilities and equipment must be maintained and operated to assure the requirements of this Order are met. All personnel using, operating and maintaining all facilities and equipment must be properly trained and appropriately certified by the Department of Public Health, as applicable.

E. Equipment and Supplies

Equipment and sampling meters shall be inspected, maintained and calibrated per manufacturer instructions and specifications.

F. Training

The Discharger's staff and/or contractors shall be properly trained for facility inspections and maintenance, and monitoring and reporting, and for the proper use and maintenance of the drinking water system, and comprehension of permit compliance needs.

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ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (Water Code) and is grounds for a potential enforcement action, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR 122.41(a).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a violation of this Order for a Discharger in noncompliance to immediately halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Water Purveyor to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision includes the operation of backup or auxiliary facilities or similar systems that are installed by a Water Purveyor only when necessary to achieve compliance with the conditions of this Order. (40 CFR 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR 122.5(c).)

F. Inspection and Entry

The Water Purveyor shall allow State and/or Regional Water Board staff, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the

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presentation of credentials and other documents, as may be required by law, to (40 CFR 122.41(i); Water Code section 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (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 Order (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 Order (40 CFR 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR 122.41(i)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR 122.41(f).)

B. Duty to Reapply

If the Discharger chooses to continue a discharge regulated by this Order after the expiration date of this Order and after the State Water Board has reissued this Order, the Discharger must apply for and obtain new permit coverage as required by the new Order. (40 CFR 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the State Water Board. The State Water Board may require modification or revocation and reissuance of the Order or Notice of Applicability to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR 122.41(l)(3) and 122.61.)

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III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR 122.41(j)(1).)

B. If applicable, monitoring results must be conducted according to test procedures under 40 CFR Part 136. (40 CFR 122.41(j)(4) and 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Records Retention

The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the State Water Board's Division of Water Quality Deputy Director at any time. (40 CFR 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 CFR 122.41(j)(3)(ii));

3. The date(s) sampling and monitoring were performed (40 CFR 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 CFR 122.41(j)(3)(iv)); and

5. The results of such monitoring. (40 CFR 122.41(j)(3)(vi).)

C. 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 Discharger (40 CFR 122.7(b)(1)); and

2. Permit applications and attachments, permits and monitoring data. (40 CFR 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the State Water Board or USEPA within a reasonable time, any information which the State Water Board or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the State Water Board, a Regional Water Board or USEPA copies of records required to be maintained by this Order. (40 CFR 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting sections V.B.2 through V.B.7, below. (40 CFR 122.41(k).)

2. For a corporation, a responsible corporate officer shall sign all permit applications. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR 122.22(a)(1).)

3. For a partnership or sole proprietorship, a general partner or the proprietor shall sign all permit applications, respectively. (40 CFR 122.22(a)(2).)

4. For a municipality, State, federal, or other public agency, all permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR 122.22(a)(3).).

5. All reports required by this Order and other information requested by the State Water Board, a Regional Water Board or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR 122.22(b)(2)); and

c. The written authorization is submitted to the State Water Board. (40 CFR 122.22(b)(3).)

6. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the State and Regional Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR 122.22(c).)

7. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above is making 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).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program in Attachment E of this Order.

2. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136, the results of this monitoring shall be included in the calculation and reporting of the data to the State Water Board. (40 CFR 122.41(l)(4)(ii).)

D. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall

also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR 122.41(l)(6)(i).)

2. The State Water Board or a Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR 122.41(l)(6)(iii).)

E. Anticipated Noncompliance

The Discharger shall give advance notice to the appropriate Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR 122.41(l)(2).)

F. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C and V.D above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.D above. (40 CFR 122.41(l)(7).)

G. Other Information

When the Water Purveyor becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Water Purveyor shall promptly submit such facts or information. (40 CFR 122.41(l)(8).)

VI. Standard Provisions – Enforcement

The State and Regional Water Board are authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Title 40 of the Code of Federal Regulations, Part 122.48 (40 CFR 122.48) requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code sections 13267 and 13383 also authorize the State Water Resources Control Board (State Water Board) and a Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements, which implement the federal and State of California regulations.

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I. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken as required herein shall be representative of the nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the discharge flow joins or is diluted by any other waste stream or body of water.

B. Chemical analyses that require laboratory testing are not required in this Order. (with the exception of application requirements for discharge into a water body with applicable waste load allocations identified in Section K of the Fact Sheet and/or TMDL-related requirements prescribed to the water purveyors listed in Attachment G. ~~a Total Maximum Daily Load (TMDL) and Waste Load Allocation (WLA) requirements placed on water purveyors)~~ The Discharger shall conduct onsite field measurements for pH, turbidity, and total chlorine residual per its implemented quality assurance and quality control (QA/QC) protocol. Onsite field measurements shall be performed using handheld devices by trained water purveyor personnel, or other qualified personnel acting on the Discharger's behalf. A manual containing the proper steps followed for any onsite field measurements, including manufacturer's operating instruction for any equipment must be kept onsite or at the water purveyor's office and shall be available for inspection by State Water Board or Regional Water Board staff. The Discharger must have sufficient capability, including qualified and trained employees, and properly calibrated and maintained field instruments to adequately perform all field measurements) required in this Order. The QA/QC protocol must conform to USEPA guidelines, or procedures approved by the American Water Works Association or other professional drinking water industry association.

C. Appropriate field meter devices shall be selected consistent with accepted scientific practices and used to ensure the accuracy and reliability of measurements of monitored discharges. All devices shall be properly maintained and calibrated per manufacturer instructions and as necessary to ensure their continued accuracy.

D. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.

E. The Discharger shall monitor emergency discharges according to sections II and III below, if the discharge has the potential to adversely affect the beneficial uses of the surface water, but only after protection of public health, safety, and property is

established, ~~and~~ best management practices are implemented, and ~~if~~ it is feasible to monitor.

II. MONITORING LOCATIONS AND SAMPLING

A. The Discharger shall monitor the following:

1) direct discharges to a ~~receiving~~ water ~~body~~ of the U.S.,
~~2) discharges that are located within 300 feet of a water of the U.S. (traveling via a storm drain or other conveyance system),~~
2) direct or non-direct discharges that are greater than 325,850 gallons per event.

B. The Discharger shall monitor all other non-direct discharges (traveling via a storm drain or other conveyance system), ~~(those with more than 300 feet from a surface water)~~ based on representative monitoring, as specified below.

1. The Discharger shall identify representative monitoring locations in its water supply system that represent the quality of the discharge after BMPs have been implemented and prior to the discharge entering the receiving water, or other conveyance system. The representative monitoring locations shall be determined by evaluating a location in which a sample taken at the location will represent all discharges from the system that have the following items in common:

a. The same general water source
b. The same water treatment, and
c. The same series of implemented BMPs

2. The Discharger shall monitor all labeled representative monitoring locations on its site plan, in accordance with all discharge monitoring and reporting requirements in this Monitoring and Reporting Program. In its annual report, the Discharger shall (1) identify the portions of its system in which the representative monitoring results represent, and (2) include any changes in its representative monitoring locations, as applicable.

C. Monitoring samples of the discharge are required as described below and in Table E-1. The objective of the monitoring is to validate that the BMPs are performing properly to maintain compliance with this Order and protect receiving waters from adverse impacts to beneficial uses. As shown in Table E-1 below, one sample of the discharge shall be taken and analyzed within the first 10 minutes of discharge. A second sample shall be required if the discharge lasts up to 60 minutes. For discharges lasting longer than 60 minutes, a third sample shall be required and shall be taken and analyzed approximately within the final 10 minutes of the discharge.

Table E-1. Discharge Sampling Frequency Requirements

Duration of Discharge	Sampling Requirements

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Less than 20 minutes	One sample is required during the first 10 minutes of the discharge.
20 minutes to 60 minutes	One sample is required during the first 10 minutes of the discharge, plus a second sample is required within the last 10 minutes of the discharge.
Greater than 60 minutes	One sample is required within the first 10 minutes, a second sample is required within the next 50 minutes, and a third sample is required approximately within the last 10 minutes of the discharge.

D. Monitoring is not required for any portion of the discharges that: (1) do not ultimately reach a water of the U.S., and (2) are implemented for multiple uses or beneficial reuse.

E. The State Water Board Deputy Director of Water Quality or an Executive Officer of the appropriate Regional Water Board may increase monitoring frequency at any time to ensure the protection of the beneficial uses of the receiving water.

III. DISCHARGE CONSTITUENT MONITORING REQUIREMENTS

A. Discharge Constituent Monitoring Requirements

The Discharger shall monitor discharges meeting the requirements in Section II above for the following constituents or parameters:

Table E-2. Discharge Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency per Representative Monitoring Location[3,4]	Required Analytical Test Method
Chlorine, Total Residual	mg/L	Grab	1/Event or 1/Year	[1,2]
Flow	Gallons	Estimate	1/Event or 1/Year	[1]
pH	Standard Units	Grab	1/Event or 1/Year	[1]
Turbidity	NTU	Grab	1/Event or 1/Year	[1,3]

[1] A handheld field meter shall be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. The Discharger shall maintain a calibration and maintenance log for each meter used for monitoring required by this Monitoring and Reporting Program.
[2] Total chlorine residual must be monitored with a method sensitive to and accurate at a method detection limit of 0.10 mg/L. False positives are acceptable if explanation of the cause is included.
[3] If feasible for Discharger to monitor turbidity downstream of management practices.
[4] Event as defined in section II (see Table E-1) of this Monitoring and Reporting Program. Each discharge event that requires monitoring shall be monitored once per year.

IV. RECEIVING WATER MONITORING REQUIREMENTS DURING NON-COMPLIANCE WITH THIS ORDER

The receiving water shall be monitored for all direct discharges that are out of compliance with this Order. Receiving water monitoring shall be conducted during the same sampling event of non-compliant discharges monitored in Section II above. The Discharger shall monitor the point of confluence of the discharge and the receiving water. If the receiving

water presents hazards to the monitoring personnel, visual monitoring shall be conducted using telephoto lenses and binoculars. If further hazards exist beyond such measures, monitoring shall not be required, and the hazards must be documented in the corresponding monitoring report. Receiving water monitoring shall consist of digital photographs and documentation of observed effects the discharge has on the receiving water body including the presence or absence of:

a. Erosion;
b. Floating or suspended matter;
c. Discoloration;
d. Impact on aquatic life;
e. Visible films, sheens, or coatings; and
f. Potential nuisance conditions.

Photographs and documented observation notes on receiving water conditions shall be included in the monitoring report.

V. POST-NOTIFICATION OF EMERGENCY DISCHARGES OR NON-COMPLIANT DISCHARGES THAT ADVERSE EFFECT OR IMPACTS ON BENEFICIAL USES OF RECEIVING WATER

Within 24 hours of the Discharge becoming aware of adverse effects or impact on beneficial uses of a receiving water body due to non-compliance of this Order, or within 24 hours of the Discharger becoming aware of a system failure or emergency involving a discharge from its drinking water system that may adversely effect or impact beneficial uses of a receiving water body, the Discharger shall notify the California Governor's Office of Emergency Services (CalOES), and shall confirm this notification in writing to the corresponding Regional Water Board within five days. The notification shall include the following:

A. The location and extent of non-compliance or emergency discharge
B. The cause of the non-compliance or emergency discharge
C. The date, time and expected duration of the non-compliance or emergency discharge;
D. The estimated volume of discharge,
E. The applicable receiving water body, and
F. The corrective actions taken (or being taken) to prevent future non-compliance or repair the system failure.

VI. PRE-NOTIFICATION OF LARGE PLANNED DISCHARGES GREATER THAN ONE ACRE-FOOT (325,850 GALLONS)

Three (3) days prior to initiation of a planned discharge (or retroactively within 24-hours after the Discharger is informed to conduct an urgent planned discharge) of a volume equal

to or greater than one acre-foot (325,850 gallons), the Discharger shall notify the appropriate Regional Water Board and provide:

A. The start date of discharge
B. The location of discharge and the applicable receiving water
C. The estimated volume of discharge, and
D. The reasons for discharge

VII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

3. Dischargers authorized under this Order shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

4. Dischargers shall report to the State Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act" of 1986.

5. Dischargers shall report catastrophic discharges to the California Governor's Office of Emergency Services (CalOES) within 24 hours of the discovery of the discharge or as soon as feasible after measures to protect public health and safety have been implemented. For the purposes of this reporting, catastrophic discharges include, but are not limited to, release of super-chlorinated water that is not properly de-chlorinated, high volume discharges that cause erosion and discharge sediment, salts and minerals in receiving waters, discharges that threaten public safety (e.g., washout of a hillside), and discharges potentially harming aquatic life.

6. Self-monitoring reports including compliant and non-compliant discharge monitoring information shall be submitted to the State Water Board annually and include all monitoring results according to the schedule in Table E-3 below and required in this Monitoring and Reporting Program. All non-compliant discharge monitoring information must be accompanied by the corrective actions the Discharger has taken to return the discharge to compliance. If no discharge occurred during the reporting period, the monitoring report shall report that there was no discharge.

7. Dischargers shall report if its drinking water system is discharging to receiving waters different than that noted in the approved application package.

B. Self-Monitoring Reports (SMRs)

1. At any time during the term of this permit, the Deputy Director of Water Quality may notify authorized Dischargers to electronically submit self-monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, each Discharger shall submit a hard copy of its self-monitoring reports. Subsequent guidance will be provided to the Discharger upon the Deputy Director's notification for electronic submittal of self monitoring reports. (Direction and guidance for electronic SMR submittals is currently available on the CIWQS

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Web site at
http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_npdes.shtml

2. Authorized Dischargers shall report in the SMR the results for all monitoring specified in this Monitoring and Reporting Program. Dischargers shall submit an annual SMR including the results of all required monitoring using properly calibrated USEPA-approved equipment, as specified in this Order. If a Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be reported in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in Table E-3 below. Each discharge event that meets the conditions in section II and Table E-1 of this MRP shall be monitored.

Table E-3. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
1/Event/Year	Event Specific	Jan 1 thru Dec 31	1 March

4. Authorized Dischargers shall submit the **annual** SMRs in accordance with the following requirements:

   a. The Discharger shall arrange and summarize any reported numerical data in a tabular format. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify discharge events of non-compliance with the permit; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified non-compliance must include a description of the requirement that was violated and a description of the violation.

   c. SMRs must be submitted to the State Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

State Water Resources Control Board
Division of Water Quality
NPDES Wastewater Unit
1001 I Street, 15th Floor
Sacramento, CA 95814

ATTACHMENT F – FACT SHEET

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This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order. As described in section III.B of the Order, the State Water Board incorporates this Fact Sheet as its findings supporting the issuance of the Order.

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I. PERMIT INFORMATION

A. Background

Water districts or public/private water purveyors are responsible for developing water supplies and providing drinking water to their communities and customers in accordance with statutory requirements of the federal Safe Drinking Water Act and the California Health and Safety Code. Mandatory system-development and system-maintenance activities often result in surface water discharges, either via storm drain systems or other conveyance systems, or directly to a surface water body.

The Federal Water Pollution Control Act (also referred to as the Clean Water Act) section 402 requires that a discharge of any pollutant or combination of pollutants to surface waters that are deemed waters of the United States, with certain exceptions, be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. On September 22, 1989, the U.S. Environmental Protection Agency (U.S. EPA) granted the State of California, through the State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards), the authority to issue general NPDES permits pursuant to title 40 Code of Federal Regulations (40 C.F.R.) 122 and 123.

Many discharges from drinking water systems that enter surface waters directly or via a storm water conveyance system are unregulated. For those discharges that are regulated, some Regional Water Quality Control Boards (Regional Water Boards) regulate these discharges of potable and treated drinking water using differing region-wide low threat-type general NPDES permits that regulate a broad range of constituents, and not always necessarily constituents of concern from these type discharges. Regardless, Regional Water Boards regulate these discharges through differing regulatory approaches.

Large and small municipalities have Municipal Separate Storm Sewer System (MS4) NPDES permits for discharge of storm water to waters of the United States (U.S.). Some municipalities allow drinking water system discharges to enter their storm water systems as authorized non-storm water discharges, typically through established local agreements. Other MS4 permit holders do not allow such discharges to enter their storm water systems unless the State or Regional Water Board separately regulates those discharges prior to entering the system.

40 CFR 122.28 provides for issuance of general permits to regulate a category of point sources if the sources involve the same or substantially similar types of operations; discharge the same type of waste; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a general order rather than individual orders. Thus:

1. This Order issues NPDES Permit No. CAG00XXXXX with the intent to provide consistent and efficient regulatory coverage for these drinking water system discharges on a statewide basis.

2. This Order authorizes discharges from drinking water conveyance, treatment, storage and distribution systems, transmission systems, and water supply and monitoring wells in drinking water aquifers. Owners or operators of drinking water systems that apply for coverage under this Order and that are issued a Notice of Applicability are hereinafter called referred to as "Dischargers." For the purposes of this Order, references to "discharger" or "permittee" in applicable federal and State laws, regulations, plans, and policy are considered equivalent to references to the Dischargers herein.

B. Facilities Covered Under this Order

This Order covers discharges from drinking water systems that qualify as a "community water system" as defined in the California Health and Safety Code and wholesalers of water to community water systems. Community water systems provide daily drinking water for at least 15 service connections and at least 25 individuals at least 60 days each year. These water systems must comply with the California Health and Safety Code per the California Code of Regulations titles 17 and 22. Title 17 ensures that water delivered by public water systems is wholesome and potable. Title 22 contains potable water standards, including the California Department of Public Health (CDPH) primary and secondary maximum contaminant levels (MCLs), and requires monitoring and reporting on surface water and groundwater drinking water sources.

1. **Transmission Systems.** Transmission systems are the pipes, pumps, canals, pump houses, and other components used to move water from the point of origin to storage reservoirs, treatment facilities, and distribution systems. Transmission systems do not have connections to serve end users. Pipes generally range in diameter from 24 inches to 90 inches. They may be aboveground or underground. Some facilities are open channels. The water in transmission systems may or may not meet standards for human consumption.

2. **Distribution Systems.** Distribution systems are the pipes and associated pumps, valves, hydrants, and other structure that carry potable water from treatment plants, wells, reservoirs, and transmission systems to end users. Distribution pipes generally range in diameter from 2 inches to 24 inches.

3. **Wells in Drinking Water Aquifers.** Water supply wells are installed in borings advanced into the ground to extract groundwater for use as drinking water. These types of wells are typically 12 inches to 36 inches in diameter. Monitoring wells are also in borings advanced into the ground to gage the depth to groundwater for aquifer management purposes such as groundwater overdraft protection. In addition monitoring wells serve as access points to sample the aquifer to characterize the water quality and to detect contaminants such as bacteria before the contaminant reaches the water supply. Monitoring wells are typically 12 inches or less in diameter. Discharges from water supply and monitoring wells occur during well

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development, maintenance (including flushing), rehabilitation, and sampling. This Order covers discharges from wells in unpolluted drinking water aquifers.

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II. DISCHARGE DESCRIPTION

A. Discharge Definitions.

This Order covers both planned and emergency discharges. Planned discharges are part of a water purveyor's essential operations to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and CDPH regulations for providing reliable and safe drinking water. Planned discharges include scheduled and unscheduled discharges that take place under the control of the Discharger to comply with regulatory mandates. Emergency discharges occur due to system failures and emergencies. This Order serves as a general NPDES permit for the discharge to waters of the U.S. of water that is altered by chlorine, corrosion inhibiting agents, or algaecides but meets California Department of Public Health Maximum Contaminant Levels. This Order also regulates groundwater discharges from water supply wells in unpolluted drinking water aquifers. The types of discharges this Order covers are categorized as follows:

1. **Treated Drinking Water.** For the purposes of this Order, treated drinking water refers to treated surface water and water from drinking water distribution systems that has been treated by a water treatment facility and is suitable for human consumption in accordance with the drinking water regulations in titles 17 and 22 of the California Code of Regulations, including compliance with CDPH's Primary Maximum Contaminant Levels (MCLs) as a 30-day average concentration and CDPH's secondary MCLs as an annual average.

2. **~~Raw and~~ Potable Water**

   For the purposes of this Order, ~~raw water is defined as untreated surface water or groundwater dedicated for drinking water supply, that has an annual running average concentration of drinking water constituents below CDPH's primary and secondary MCLs. P~~potable water is defined as groundwater that may or may not have received treatment, and meets the following criteria:

   c) Is suitable for human consumption,

   d) Complies with the primary and secondary MCLs as a running annual average.

3. **Raw Water**

   For the purposes of this Order, raw water is defined as untreated or partially treated surface water or groundwater dedicated for drinking water supply but is not suitable for human consumption. To be eligible for coverage under this Order, discharge of raw water may not cause or contribute to the receiving water exceeding a primary or secondary drinking water MCL, on a running annual average basis.

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B. Disinfection and Dechlorination

Disinfection processes typically involve chlorine:

1. **Chlorination.** Most Dischargers use chlorine to disinfect their water in accordance with California Code of Regulations title 22 or to control microbial growth that can lead to corrosion. Chlorine reacts with organic matter and pipe materials (such as iron); as a result, the total chlorine residual decreases following chlorine treatment as water flows throughout the distribution system, making a system vulnerable to bacterial regrowth. Dischargers manage the lack of adequate chlorine concentrations in the distribution system by occasionally flushing water from dead end areas or other parts of their system with new water that has a sufficient chlorine residual concentration. Dischargers may also use booster stations to inject additional chlorine.

2. **Chloramination.** Chloramine forms when chlorine and ammonia combine. Some Dischargers prefer chloramine over chlorine. Chloramine's disinfection power is one hundredth that of free chlorine, but chloramine is also more stable and less reactive. It is also more persistent when released into the environment. Chloramine provides longer-lasting, more reliable protection against bacterial regrowth. In addition, chloramine generates lower concentrations of disinfection byproducts, such as trihalomethanes.

3. **Super-chlorination.** Super-chlorinated water typically has a total chlorine residual greater than 4.0 mg/L, and the concentration is typically closer to 200 mg/L. Super-chlorination is necessary when disinfecting new facilities, when returning facilities to service after taking them offline, and when contamination is detected.

Common dechlorinating agents are sodium bisulfite, sodium thiosulfate, sodium ascorbate, and ascorbic acid. Chlorine removal effectiveness depends in part on chemical dose and contact time. During planned discharges, flows may be connected to devices that add dechlorinating chemicals prior to discharge. During emergency discharges, dissolving pellets or mesh bags containing the dechlorinating chemicals may be placed in the path of the flow.

C. Activities Covered by this Order

This Order covers planned and emergency discharges, which occur daily throughout the State related to the following activities. These activities are short-term or seasonal in nature.

1. **Maintenance and Repair.** Facility maintenance and repairs occur frequently (e.g., multiple times a day) at different locations. Discharges may be necessary for dewatering the repair or maintenance site. Underground facilities require excavation for access, and dewatering is necessary to prevent flooding. The resulting "trench dewatering" discharges are usually turbid because the discharge velocity may be strong enough to dislodge and transport sediment from trenches and pits. Discharges may also be necessary to maintain positive water pressure within the drinking water system. Positive pressure may be necessary during repair and

replacement of pipes, valves, and other components to prevent sediment, debris, and microorganisms from entering the system.

2. **System Flushing.** Flushing portions of a system may be necessary to replace old, stagnant water when demand is low or to remove poor quality water. Flushing may also be needed to respond to consumer complaints. Fire hydrants serve as access portals for flushing water distribution systems. Flushing can also occur from other valves or standpipe connections. Flushing may be part of routine operations, and can occur annually or more frequently based on seasonal water use or known water quality trends. Pipelines and water supply wells are periodically taken out of service for maintenance or in response to low water demands. Before reactivation, they must be flushed with super-chlorinated water.

3. **Pipeline, Tunnel, and Reservoir Drainage.** Occasionally, pipelines, tunnels, and reservoirs must be taken out of service for maintenance, such as inspections, repairs, and upgrades. Planned discharges may occur as often as once per year or as infrequently as once every 20 years. These facilities may also be drained in emergency circumstances due to unanticipated drinking-water quality concerns.

4. **Groundwater Pumping.** The most common type of discharge from a drinking water well is well "blow-off" or purging water from the well. Well blow-off is required to reactivate a well after it has been out of service, to purge the system to collect a monitoring sample, or to purge the system when monitoring indicates that the water supply does not meet water quality requirements. Discharges from water supply wells also occur as a result of well maintenance, such as unclogging a filter screen from sediment and mineral build-up. This Order covers discharges from such activities after any slurry or other waste products from the well are removed and contained pursuant to waste management regulations as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq, and as long as the water source does not exceed water quality objectives or promulgated criteria per the corresponding averaging period for determining compliance.

5. **Unanticipated Incidents.** Emergency discharges occur when pipelines or other infrastructure break or leak, valves malfunction, or other unanticipated events occur, such as noncompliance with drinking water standards or hydraulic releases necessary to prevent pipeline rupture. Emergency discharges also result from emergency flushing necessary to respond to unanticipated water quality concerns. The cause of emergency discharges is generally equipment failure, unexpectedly factors beyond the control of an operator, or operator error; however, in rare instances, a catastrophic event, such as an earthquake, landslide, or other emergency, can result in an emergency discharge. The frequencies of emergency discharges vary widely throughout the state. Based on 2012 data from the San Francisco Bay Regional municipal storm water program and data from a large water purveyor in that region, the frequencies of emergency discharges range from fewer than 25 per year for small systems serving fewer than 100,000 people, to over 3,000 per year for large systems serving over 1,000,000 people.

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D. Types of Discharges:

1. Planned Discharges include but are not limited to:

a. Treated Drinking Water

i. Water Treatment Plant releases (Discharges of treated drinking water only)

ii. Distribution System Storage Tank releases

iii. Distribution System Dewatering, Flushing, and Pressure Testing

iv. Fire Flow/Fire Hydrant Testing

v. Meter Testing

vi. Automated Water Quality Analyzers

vii. Pressure Relief Valves

viii. Other activities mandated by the Federal Safe Drinking Water Act and the California Health and Safety Code

b. Potable or/~~/~~Raw water

i. Groundwater Supply Well Flushing

ii. Groundwater Well Development, Installation, Rehabilitation, and Testing.

iii. Groundwater Monitoring for purpose of Supply Well Development, Installation, Rehabilitation and Testing.

iv. Transmission System Installation, Cleaning, Testing.

v. Other activities including unscheduled activities that must be conducted to comply with mandates of the Federal Drinking Water Act and California Health and Safety Code.

2. Emergency Discharges

a. Emergency System Repairs, including transmission system failure or leaks, and distribution system pipe breaks.

b. Trench Dewatering.

c. Catastrophic Events.

The following table illustrates more detail on the types of discharges this Order covers and their typical characteristics. This table is not inclusive of all potential discharges:

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Table F-1. Typical Characteristics of Potable Water Discharges

Facility and Discharge Category [1]	Planned or Emergency	Flow Rate (gpm) [2]	Duration [2]	Frequency [2]	Total Residual Chlorine (mg/L) [2]
Transmission Systems					
Dewatering for new construction, maintenance, or inspection [3]	Planned	200 to 3,500	2 hours to 21 days	Once per year to 20 years	0.8 to 2.5
Disinfection (new construction)	Planned	200 to 1,350	2 hours to 14 days	Upon start-up	10 to 50
Maintenance or construction	Planned	50 to 200	2 to 4 minutes	Once per year to 20 years	0.8 to 2.5
Aqueduct dewatering	Planned	250 to 50,000	1 to 2 days	1 per 2 to 10 years	0.8 to 2.5
Disinfecting (new pipeline or storage facility after repair) [4]	Both	Up to 3,500	1 hour to 21 days	Upon initial use	25 to 200
Water pipeline breaks, pipeline diameter > 24 inches (includes trench dewatering)	Emergency	5 to 3,500	30 minutes to multiple days		0.8 to 2.5
Storage Facilities					
Drain valve testing	Planned	5 to 300	60 to 120 minutes	Once per 5 to 10 years	0.8 to 2.5
Reservoir rehabilitation pipe flushing	Planned	Varies	Varies		0.8 to 2.5
Tank and reservoir draining for maintenance	Planned	200 to 1,350	1 to 14 days	2 per year to 1 per 5 years	0.8 to 2.5
Reservoir overflow	Emergency	Varies	Varies	Varies	0.8 to 2.5
Distribution Systems					
Standpipe cleaning	Planned	500 to 2,000	1 to 2 days		0.8 to 2.5
Water meter field testing	Planned	50 to 1,000	30 to 60 minutes		0.8 to 2.5
Dead-end pumping	Both	200 to 2,000	30 minutes to 1 hour	4 to 12 per year	0.8 to 2.5
Line flushing through a hydrant	Both	700 to 1,600	≤10 to 60 minutes	1 to 3 per year per hydrant	0.8 to 2.5
Distribution system maintenance or pipe breaks, pipeline diameter < 24 inches (includes trench dewatering)	Both	5 to 1,350	10 to 60 minutes		0.8 to 2.5

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Water quality management and water quality sampling (e.g., for bacteria; metals; taste; odor; etc.)	Both	100 to 15,000	5 minutes to several hours	1 to 50 (for management); up to 5,000+ events per year (for sampling)	0.8 to 2.5
Unauthorized hydrant opening	Emergency	500 to 1,000	60 minutes to 8 hours		0.8 to 2.5
Groundwater Well Operations					
Water supply well development	Planned	500 to 5,000	15 to 40 hours	Upon start-up	0
Water supply well rehabilitations	Planned	500 to 3,500	7 days	As-needed; up to 4 per year	0
Monitoring well sampling	Planned	15-60	20 minutes to 3 hours per well	Semi-annual or as needed	0
Water supply well disinfection		500 to 3,500	30 minutes to 24 hours	As needed	≤ 200
Monitoring well development	Planned	15-60	3-8 hours	Semi-annual or as needed	0
Discharge by water supply well ("blow-off") for reactivation or monitoring	Both	500 to 3,500	30 minutes to 24 hours	Up to 4 per year (planned); or more frequently for emergency circumstances	0

Unit Abbreviations:

gpm = gallons per minute

mg/L = milligrams per liter

Footnotes:

[1] Source: Tikkanen, Maria, John Schroeter, Lawrence Y.C. Leong, and Rajagopalon Ganesh, 2001. Guidance Manual for the Disposal of Chlorinated Water. Denver, CO. AWWA Research Foundation and American Water Works Association; with modifications by the Alameda County Water District, Alameda County and San Jose Water Company, Santa Clara County, 2013.

[2] The data presented are typical ranges; actual conditions may vary outside of these ranges.

[3] This information does not apply to raw, unaltered water.

[4] The processes to disinfect water pipelines and storage facilities use different chlorination methods, which have different chlorine contact times. Chlorinated water is dechlorinated before discharge under planned operations.

E. Discharge Scenarios and Corresponding Threat To Receiving Waters:

1. **Scenario No. 1:** Direct discharge to a water of the U.S.

   Threat: Threat to aquatic life due to toxicity; Potential adverse impact on beneficial uses due to: (1) loading of sediment debris and trash, (2) increased turbidity, and (3) hydromodification.

   Applicable Permit Requirements: BMP specifications, chlorine effluent limit, turbidity effluent limitation (applicable to groundwater only), monitoring, and reporting

2. **Scenario No. 2:** Discharge to a municipal storm water system where the discharge travels less than 300 feet from the point of discharge to the receiving water body; if the length of the storm drain conveyance is unknown, the distance shall be a direct 300 feet to a water of the U.S.

   Threat: Threat to aquatic life due to toxicity; Potential adverse impact on beneficial uses due to: (1) loading of sediment debris and trash, (2) increased turbidity, and (3) hydromodification.

   Applicable Permit Requirements: BMP specifications, chlorine effluent limit, turbidity effluent limitation (applicable to groundwater only), monitoring, and reporting

3. **Scenario No. 3:** Discharge to a municipal storm water system where the discharge travels more than 300 feet, or the water body is greater than a 300-foot radius of the location of discharge into the storm drain.

   Threat: Potential adverse impact on beneficial uses due to: (1) loading of sediment debris and trash, (2) increased turbidity, and (3) hydromodification.

   Applicable Permit Requirements: BMP specifications, turbidity effluent limitation (applicable to groundwater only), monitoring, and reporting.

4. **Scenario No. 4:** Discharges of superchlorinated water, either directly or via a storm water system, to waters of the U.S.

   Threat: Threat to aquatic life due to toxicity.

   Applicable Permit Requirements: BMP specifications, chlorine effluent limit, monitoring, and reporting.

5. **Scenario No. 5:** Discharges from portions of the drinking water system that: (1) Directly discharges into, or discharge to a storm water conveyance system that conveys the discharge into:

   i. Storm water capture basin(s),

   ii. Low impact development features, or

   iii. Other groundwater-recharge system(s); and

   (2) Are collected and used for landscape irrigation and/or other beneficial reuse.

   Threat: No threat to water of the U.S. or water of the state.

   Applicable Permit Requirements: Reporting only. No effluent limits or monitoring requirements.

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F. Discharge Points and Receiving Waters

Discharges flow directly into receiving waters or indirectly to receiving waters via storm drains and other conveyance systems. Discharges occur into creeks, rivers, lakes, enclosed bays, estuaries, and the ocean throughout the State.

G. Requirements in Other NPDES Storm Water Permits

This Order is a new NPDES permit for discharges from drinking water systems; however, other NPDES permits for storm water have certain specific requirements for these types of discharges.

The State Water Board issues statewide NPDES permits for the regulation of storm water discharges from small communities, and for storm water discharges resulting from construction and industrial activities. Regional Water Quality Control Boards issue NPDES permits for the regulation of storm water from large municipalities. Special conditions in these storm water orders authorize non-storm water discharges from fire hydrant flushing, operation, maintenance, or testing of potable water systems, and groundwater dewatering systems, similar to discharges covered under this Order. The State Water Board finds that the monitoring and reporting requirements and discharge limitations contained in this Order are necessary to assure protection of beneficial uses of receiving waters. However, the State Water Board will not require a water purveyor that holds a local agreement with a municipal storm water permittee to obtain regulatory coverage under this Order as long as the corresponding Regional Water Quality Control Board acknowledges in writing the local agreement. At its discretion, a Regional Water Quality Control Board may require a water purveyor to obtain regulatory coverage under this Order regardless of an existing local agreement with a municipal storm water permittee.

II. NOTIFICATION REQUIREMENTS

A. General Permit Application

Dischargers enrolling for coverage under this General Order are required to submit a complete application package, including a Notice of Intent (NOI), as detailed in Attachment B1. A water purveyor with multiple community water systems need only submit one complete application package, (individual NOIs for each of its water systems and the applicable fee) and obtain one Notice of Applicability for regulatory coverage of all its systems that discharge to waters of the U.S., The application package shall include:

1. General information about the water purveyor and the existing or proposed discharge(s).

2. A site map that includes the general location of the drinking water system, and discharge location(s) relative to the receiving water(s). The map shall also identify

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the general location of all groundwater supply wells and system facility locations that discharge to surface waters.

3. An application fee payable to the State Water Board that shall be in accordance with title 23, California Code of Regulations or subsequent fee regulations updates. The current fee schedule is available at http://www.waterboards.ca.gov/resources/fees/docs/fy13_14_fee_schedule_npdes_permit.pdf.

4. Evaluation of multiple water use or beneficial reuse options.

Article X, section 2 of the California Constitution, and Water Code section 100 prohibit the waste or unreasonable use of water. Water Code section 275 directs the State Water Board to take all actions necessary to prevent the waste or unreasonable use of water. Pursuant to these state policies, the State Water Board encourages discharges of water from drinking water systems to be captured for reuse. Therefore, to obtain coverage under this Order, a water purveyor is required to evaluate its water reuse options. These options include:

a. Discharging into a storm water system that employs low impact development practices or flows into storm water capture basins to recharge groundwater.

b. Collecting and using the water for local landscape irrigation or other appropriate uses in lieu of potable drinking water supply.

c. Discharging into a sanitary sewer collection system that conveys water to a local wastewater reclamation plant.

Discharges from drinking water systems to land that do not drain to waters of the U.S. do not need authorization to discharge under an NPDES permit. Discharges to groundwater may require waste discharge requirements issued by the State and/or Regional Water Boards. As an incentive to promote multiple uses of potable and treated drinking water, the State Water Board will not require waste discharge requirements or monitoring for discharges regulated under this Order that are beneficially reused because they are small and intermittent. A water purveyor must estimate the quantity of water discharged from its system that is beneficially reused, and report it in the annual report. If the entire drinking water system does not discharge to waters of the U.S., NPDES permit coverage is not needed.

5. Receiving water information, including names of all receiving water bodies and major downstream water bodies.

6. Implementation of Best Management Practices.

Special Provision VIII.C.3 requires a Discharger to implement best management practices (BMPs) for all discharges to maintain compliance with final effluent limitations, specifications, receiving water limitations, and to protect the discharges from causing or contributing to an impact on beneficial uses of the receiving waters.

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A log documenting the implementation of the BMPs for each discharge shall be made available to Water Board staff upon request. The BMPs implemented by the Discharger shall include, at a minimum, the elements identified in Attachment C, or equivalent.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the applicable plans, policies, and regulations identified in the Findings in section III of this Order. This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharge.

A. Legal Authorities. This Order serves as Waste Discharge Requirements pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA, and California Water Code chapter 5.5, division 7 (commencing with § 13370). It shall serve as an NPDES permit for point source discharges from multiple discharge points to surface waters, storm drains, and other storm water conveyances leading to surface waters.

B. State Implementation Policy. The *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) establishes implementation provisions for priority pollutant criteria, and objectives and provisions for chronic toxicity control. However, section 5.3 of the SIP allows the State Water Board to grant categorical exceptions from meeting priority pollutant criteria/objectives for discharges from drinking water systems conducted by the owners or operators to fulfill statutory requirements mandated by the federal Safe Drinking Water Act and the California Health and Safety Code. The California Toxics Rule contains criteria for 126 priority pollutants that may be present in these drinking water systems discharges. In many cases, discharges from drinking water systems do not comply with all of the applicable priority pollutant criteria (such as for the protection of aquatic life) since potable and treated drinking water are only required to comply with MCLs for the protection of public health. A review of the 126 priority pollutants found that there are priority pollutant criteria that are more stringent than the established maximum contaminant levels (MCLs) established by the California Department of Public Health.

The planned and emergency drinking water systems discharges covered under this Order are in accordance with the exception granted by the State Water Board through Resolution 2014-XXXX-DWQ, allowing water purveyors an exception to comply with priority pollutant criteria for the priority pollutants that have an applicable CTR criterion more stringent than its corresponding MCL, or do not have an adopted pollutant-specific MCL. The exception was granted in accordance with the requirements set forth in Section 5.3 of the State Implementation Policy.

C. California Ocean Plan. In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California (hereinafter Ocean Plan), as amended. The latest Ocean Plan amendment became effective on August 19, 2013. The Ocean

Plan is applicable, in its entirety, to point source discharges to the ocean waters of the State. To protect the beneficial uses of ocean water, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan and are applicable for those discharges entering directly into the Ocean or indirectly via a storm water system that drains into the Ocean near the location of discharge. This Order does not authorize direct discharges into Areas of Special Biological Significance (ASBS). Section III.J of the Ocean Plan allows the State Water Board to grant an exception to specified Ocean Plan requirements where the State Water Board determines that the exception will not compromise protection of beneficial uses of ocean waters and the public interest will be served. In many cases, discharges from drinking water systems due to mandated activities do not comply with all of the established Ocean Plan objectives (such as for protection of aquatic life or human health based on more stringent carcinogenic objectives) since these discharges are only required to comply with MCLs for the purpose of public health and safety. A review of the Ocean Plan pollutant water quality objectives shows that there are a number of pollutants that may occur in mandated drinking water system discharges, with Ocean Plan objectives that are more stringent than the MCLs. State Water Board Resolution 2014-XXXX-DWQ granted water purveyors an Ocean Plan exception to water purveyors for the pollutants that have an Ocean Plan objective more stringent than its corresponding MCL or do not have an adopted pollutant-specific MCL. The exception was granted in accordance with the Ocean Plan exception requirements.

D. California Environmental Quality Act. Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

Pursuant to CEQA, Public Resources Code section 21100 et seq., on September ~~August~~ XX, 2014 the State Water Board adopted Resolution 2014-XXXX-DWQ approving a Mitigated Negative Declaration (MND) for exceptions from specified requirements of the State Implementation ~~Plan~~ Policy and California Ocean Plan for statewide discharges resulting from mandated activities required by the federal Safe Drinking Water Act and California Health and Safety Code. The MND concludes that discharges from drinking water systems have less than significant impact with appropriate mitigation incorporated. This Order implements Resolution 2014-XXXX-DWQ and establishes appropriate mitigation requirements for discharges authorized under this Order.

E. Regional Water Boards' Water Quality Control Plans

The Regional Water Boards have adopted Water Quality Control Plans (hereinafter Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives for all waters addressed through the plans. In addition, the Basin Plans implement State Water Board Resolution No. 88- 63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. The Basin Plans identify typical beneficial uses as follows: municipal and domestic supply, agricultural irrigation, stock watering, process supply, service supply, hydropower supply, water contact recreation, canoeing and rafting recreation, other non-contact water recreation, warm freshwater aquatic habitat, cold freshwater habitat, warm fish migration habitat, cold fish migration habitat, warm and cold spawning

habitat, wildlife habitat, navigation, rare, threatened, or endangered species habitat, groundwater recharge, and freshwater replenishment. Requirements of this Order implement provisions contained in the applicable Basin Plans.

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F. Antidegradation Policy

Section 131.12 of 40 C.F.R. requires that 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 high water quality be maintained unless degradation is justified based on specific findings. The State Water Board and Regional Water Board's Water Quality Control Plans implement, and incorporate by reference, both the state and federal antidegradation policies. The permitted discharges must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution 68-16.

Given the nature of a general permit and the broad range of beneficial uses to be protected across the state, it is not feasible to analyze each surface water body in the state to determine which water bodies are of high quality for the constituents in the discharges authorized by this Order. The State Water Board finds that, due to the intermittent, seasonal and temporary characteristics of these discharges, the impact on existing surface water quality from these discharges will be insignificant, as further explained in the MND approved by the State Water Board in Resolution 2014-XXXX-DWQ. While surface waters may be temporarily degraded and there may be temporary excursions above water quality objectives in the immediate vicinity of these discharges, any such impacts to surface water quality that may occur are consistent with the maximum social and economic benefit of the people of the state, provided that the discharges comply with this Order. The discharges are a necessary consequence of providing safe, clean, affordable, and accessible drinking water to the people of the state in accordance with the state policy declared in Water Code section 106.3, subdivision (a), and the discharges are mandated by drinking water laws and regulations. The BMPs required under this Order constitute best practical treatment and control of these discharges. Therefore the discharges permitted under this Order are consistent with the antidegradation provision of section 131.12 and the State Water Board Resolution 68-16.

G. Anti-Backsliding Requirements

Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. This Order is a new statewide NPDES permit that regulates discharges from community drinking water systems statewide. Some of these same discharges are currently regulated under existing Regional Water Board NPDES permits. Some of these same discharges are not regulated at all. This Order, when implemented, will provide consistent regulatory requirements that apply to discharges from drinking water system discharges statewide.

The following existing Regional Water Board NPDES permits regulate discharges from community drinking water systems, among other types of discharges, so these NPDES permits' effluent limitations were analyzed for the purpose of comparing them to the requirements contained in this Order.

The Central Valley Regional Water Board Permit (R5-2013-0074) is a general permit applicable to dewatering activities and other types of low threat discharges to surface waters including discharges from drinking water systems. It includes limitations for Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), settleable solids, pH, and total chlorine residual. Since this Permit applies to a large set of what the Central Valley Water Board considered low threat discharges, it established a wide range of effluent limitations to ensure protection of beneficial uses.

This statewide Order and its requirements are specifically applicable to drinking water systems that discharge either groundwater and/or surface water that has received treatment per DPH regulations or otherwise complies with primary and secondary MCLs. The treatment of all surface waters to make them suitable for drinking includes filtration and disinfection. This treatment is expected to remove any BOD, TSS or settleable solids, if any, present in the surface water. Similarly, groundwater that is suitable for drinking water purposes receives natural or well-head treatment so it is not expected to have BOD, TSS, or settleable solids. In addition, sedimentation and erosion control BMPs are required to be implemented to prevent the discharges authorized by this Order from carrying sediment and causing soil erosion that would add TSS and settleable solids in their discharge prior to entering a storm drain or receiving water directly. It is therefore unnecessary to establish effluent limits for BOD, TSS, or settleable solids in this Order.

Community drinking water systems are required to maintain a pH of 7.0 in their distribution systems as part of their corrosion control treatment plans (40 CFR Section 141.82(f)). For all other community systems that do not need to maintain a corrosion control plan, it is expected that they will have no issues with pH levels because they have no issues with corrosion of their systems. Including an effluent limitation for pH in this Order would only over-regulate those systems that are already required to comply with a 7.0 pH level and force other community drinking water systems to add additional chemicals prior to discharging, which in turn may add salts and other pollutants that may cause water quality impacts. Therefore, it is unnecessary to include an effluent limitation for pH in this Order.

The San Francisco Bay Regional Water Board Permit (R2-2009-0033) is a general permit applicable only to surface water treatment facilities for potable supply discharges for either long term or short term. The short term discharges includes limits for TSS, settleable matter, pH, total chlorine residual, total trihalomethanes (TTHMs), zinc, and acute toxicity. As previously discussed, a surface water treatment facility operating per DPH's regulations, would remove TSS and settleable matter. For the other effluent limits of TTHMs and zinc, the discharges would be in compliance with MCLs for TTHMs as required by DPH. In addition, pursuant to the SIP and Ocean Plan exceptions, the discharges covered under this Order are not required to comply with zinc objectives.

Therefore, there is no need to establish TTHMs and zinc effluent limitations, nor an effluent limitation for pH, as previously discussed.

The Los Angeles Regional Water Board Permit (R4-2003-0108) is a general permit for discharges of groundwater from potable water supply wells to surface waters and it includes limits of TSS, turbidity, BOD, settleable solids, chlorine residual, pH, TTHMs, Methyl tertiary butyl ether (MTBE) and a list of 15 volatile organic compounds (VOCs) that are also considered priority pollutants, PCBs, and various limits for TDS, Sulfate, Chloride, Boron and Nitrogen applicable per watershed/stream reach. As previously discussed, there is no need to impose limits for BOD, TSS, settleable solids, pH, and TTHMs. In the case of PCBs and the 15 VOCs, since these are priority pollutants that are granted exceptions, it is also not necessary to establish limits for these pollutants. With regards to the various limits for TDS, Sulfate, and chloride, compliance with the MCLs, which is required of these discharges, should comply with the TDS, sulfate and chloride limits so there is no need to impose the same limitations in this Order. With regards to Nitrogen, compliance with the Nitrate MCL should ensure compliance with the nitrogen limitations. During the effective period of R4-2003-0108 there were no issues of non-compliance with the Boron limitations. This is new information to justify that there is no reasonable potential to exceed the Boron limits. Therefore, there is no need to impose a Boron limitation.

The San Diego Regional Water Board Permit (R9-2010-0003) is a general permit for discharges of hydrostatic test water and potable water to surface waters and storm drains or other conveyance systems. It establishes limits for total chlorine residual and pH. As previously discussed there is no need to include an effluent limit for pH.

This Order requires that discharges meet primary and secondary MCLs and mandates the use of multiple BMPs, and also contains effluent limitations for chlorine residual and turbidity and receiving water limitations for pH, chemical constituents, sediment and total suspended solids, and toxicity, among other requirements. This Order does not include specific effluent limitations for BOD, TSS, settleable solids or settleable matter, pH, TTHMs, zinc, acute toxicity, MTBE, 15 priority pollutants VOCs, PCBs, TDS, Sulfate, Chloride, Boron and Nitrogen, which are included in some of the comparable Regional Water Board permits, as described above. To the extent that this Order may impose less stringent limitations than those contained in the existing Regional Water Board permits, applicable exceptions to the anti-backsliding prohibition that are supported by the analysis above include: waters in attainment, where permit requirements are consistent with antidegradation (§ 303(d)(4)(B)); new information available (§ 402(o)(2)(B)(i)); and events beyond dischargers' control (§402(o)(2)(C)), due to the mandatory or emergency nature of the discharges. All requirements under this Order, when implemented, will increase the regulatory requirements over drinking water system discharges on a statewide basis. The effluent limitations for chlorine residual and turbidity in this Order are as stringent as the Regional Water Board permits.

H. Monitoring and Reporting Requirements

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. § 13267 and §13383 of the Water Code authorize the regional boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement State and federal requirements. This MRP is provided in Attachment E.

I. Endangered Species Act

This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code § 2050 et. seq) or the Federal Endangered Species Act (16 U.S.C.A. § 1531 et. seq). This Order requires compliance with effluent limitations, receiving water limitations, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

J. Impaired Water Bodies on CWA 303(d) List

Under section 303(d) of the 1972 CWA, states, territories, and authorized tribes are required to develop lists of water quality limited segments. The waters on these lists do not meet water quality standards, even after discharges of point sources of pollution have installed the minimum required levels of pollution control technology. On October 11, 2011, U.S. EPA gave final approval to California's 2010 section 303(d) List of Water Quality Limited Segments. The Basin Plans reference this list of Water Quality Limited Segments (WQLSs), which are defined as "…*those sections of lakes, streams, rivers or other fresh water bodies where water quality does not meet (or is not expected to meet) water quality standards even after the application of appropriate limitations for point sources* (40 C.F.R. Part 130.2(j))." The Basin Plans also state, "*Additional treatment beyond minimum federal standards will be imposed on dischargers to [WQLSs]. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment*." Impaired waters are those waters not meeting quality standards pursuant to section 303(d) of the CWA, thus do not support beneficial uses. States must also prioritize the water bodies on the list and develop action plans, called total maximum daily loads (TMDLs) to improve the water quality. California impaired waters, as approved by the State Water Board, are listed on http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/2010_combo303d.xls.

TMDLs in California are developed either by the Regional Water Boards or by U.S. EPA. TMDLs developed by Regional Water Boards are designed as Basin Plan amendments and include implementation provisions. TMDLs developed by U.S. EPA typically contain the total load and load allocations required by section 303(d), but do not contain comprehensive implementation provisions. This stems from the fact that U.S. EPA authorities related to implementation of nonpoint source pollution control measures are generally limited to education and outreach as provided by CWA section 319. TMDLs are currently required for all waters and pollutants on the 303(d) list. TMDLs must

consider and include allocations to both point sources and nonpoint sources of listed pollutants. Although the abbreviation stands for "Total Maximum Daily Load," the limitations contained in a TMDL may be other than "daily load" limits. There also can be multiple TMDLs on a particular water body, or there can be one TMDL that addresses numerous pollutants. The basis for grouping is whether or not there can be a common analytical approach to the assessment or a common management response to the impairment.

~~This Order includes a list of impaired water bodies with a TMDL and specified waste load allocation (WLA) applicable to discharges from drinking water systems,~~ and the ~~established effluent limitations~~ ~~shown in Attachment G of this Order. To ensure that discharges from drinking water systems are in compliance with any applicable TMDL that prescribes a WLA, this Order requires that the Deputy Director of Water Quality of the state water board or a regional water board Executive Officer must find that the requirements herein address the TMDL and are:~~
~~(1) consistent with the assumptions and requirements of the WLA, and~~
~~(2) sufficient for the water purveyor to comply with its WLAs or other TMDL requirements imposed directly on the water purveyor.~~

~~Furthermore, t~~This Order does not authorize the discharge of new drinking water systems (not an expansion of an existing system) into an impaired water body that is impaired for a constituent that exists in the new discharge at a concentration greater than the criteria used to establish the impairment of the water body.

NOTE: ALL THE FOLLOWING TEXT IN SECTION K THAT IS HIGHLIGHTED YELLOW IS NEW PROPOSED LANGUAGE ADDED TO THE DRAFT PERMIT THAT WAS ISSUED ON JUNE 6, 2014.

K. Summaries of Applicable Total Maximum Daily Loads (TMDLs) with Waste Load Allocations (WLAs) to Water Purveyors

A review of Regional Water Board TMDLs found that, as of the adoption date of this Order, only the Los Angeles Regional Water Board and the San Diego Regional Water Board have TMDLs that may indirectly imply that WLAs are applicable to the discharges from drinking water systems regulated under this General Permit. None of these TMDLs established WLAs that apply exclusively to discharges from drinking water systems. Instead, the WLAs apply to general categories of discharges (e.g., “other NPDES dischargers”) that include discharges from drinking water systems. These TMDLs and WLAs are applicable to the discharges from drinking water systems authorized under this Order and are therefore summarized below.

The State Water Board is required to ensure that the effluent limits in this permit are “consistent with the assumptions and requirements of any available waste load allocation for the discharge.” (40 C.F.R. § 122.44(d)(1)(vii)(B).) Although these WLAs apply to the discharges that are authorized under this Order, none of the TMDLs or supporting staff reports indicates that the discharges from drinking water systems authorized under this Order are significant sources of the relevant pollutants. Based on the data that is currently available, and due to the high quality and intermittent and

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short-term nature of the discharges from drinking water systems authorized under this Order, it is unlikely that these discharges contribute to the impairment of the TMDL-related water bodies. Therefore, it is consistent with the assumptions and requirements of the WLAs in these TMDLs for this Order to not include any TMDL-specific requirements.

This Order requires sampling of discharges in these watersheds as part of the application for coverage. If a Regional Water Board determines that any of these TMDLs, or any newly approved TMDLs, establish WLAs that should be implemented through TMDL-specific permit requirements for the discharges from drinking water systems that are authorized under this Order, the Regional Water Board may issue permit(s) for those discharges. Alternatively, if further TMDLs are adopted that address pollutants that are likely to be in discharges from drinking water systems, and allocate waste loads specifically to water purveyors regulated under this Order, the State Water Board will may consider additional adding TMDL-specific permit requirements to Appendix G of this Order in a subsequent permit amendment or renewal.

The following summaries provides general information regarding the TMDLs adopted by U.S. EPA or the Regional Water Boards for the Los Angeles and San Diego regions that are applicable to the discharges from drinking water systems authorized under this Order. These TMDLs have been approved by the State Water Board, and/or the U.S. EPA under Clean Water Act section 303(c).

Los Angeles Water Board

The following is a listing of TMDLs in the Los Angeles region that have waste load allocations for general NPDES discharge categories, followed by a general description. Further information on the listed TMDLs can be found at the following websites:

http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/
or
http://epa.gov/region09/water/tmdl/final.html

1. **Total Maximum Daily Load for Nitrogen, Phosphorus, Mercury, Trash, Organochlorine Pesticides and Polychlorinated Biphenyls (PCBs) in the Los Angeles Area Lakes**

   U.S. EPA established TMDLs in the following nine lakes in the Los Angeles region, for the following pollutants:

   - Peck Road Park Lake: nitrogen, phosphorus, chlordane, DDT, dieldrin, PCBs, trash
   - Lincoln Park Lake: nitrogen, phosphorus, trash
   - Echo Park Lake: nitrogen, phosphorus, chlordane, dieldrin, PCBs, trash
   - Lake Calabasas: nitrogen, phosphorus
   - El Dorado Park Lakes: nitrogen, phosphorus, mercury
   - Legg Lakes (North, Center and Legg): nitrogen, phosphorus
   - Puddingstone Reservoir: nitrogen, phosphorus, chlordane, DDT, PCBs,

mercury, dieldrin
- Santa Fe Dam Park: nitrogen, phosphorus
- Lake Sherwood: mercury

The NPDES permits in the watersheds draining to the impaired lakes include municipal separate storm sewer system (MS4) permits, a California Department of Transportation (Caltrans) stormwater permit, general construction stormwater permits, general industrial stormwater permits, and a general NPDES permit. Other than the MS4 and Caltrans stormwater permits, there are no major individual NPDES permits in the watersheds draining to the impaired lakes. Sources of pollutants include discharges of potable water used to maintain lake levels. These types of discharges are not authorized by this Order.

TMDL Waterbody	Pollutant
Peck Rd Park Lake	Total Nitrogen
Peck Rd Park Lake	Total Phosphorus
Lincoln Lake and Lake Calabasas,	Total Nitrogen Total Phosphorus
Echo Lake	Total Nitrogen Total Phosphorus
El Dorado Park Lake	Total Nitrogen Total Phosphorus Mercury
Santa Fe Dam Park Lake	Total Nitrogen Total Phosphorus

2. Total Maximum Daily Load for Chloride in the Upper Santa Clara River

Chloride levels in Reach 3 of the Santa Clara River exceed the water quality objective (WQO) of 80 mg/L for chloride in Reach 3 established in the Water Quality Control Plan, Los Angeles Region (Basin Plan). U.S. EPA established a TMDL for Reach 3. There are two major point sources that discharge into Reach 3, the Santa Paula and Fillmore Water Reclamation Plants. Minor point source discharges to Reach 3 include:

- storm water regulated under the NPDES municipal stormwater permit
- runoff from construction sites regulated under the statewide construction general NPDES permit,
- storm water regulated under the CalTrans statewide NPDES permit,

- runoff from industrial sites regulated under the statewide industrial facility general NPDES permit, and
- dewatering operations regulated under NPDES permits

In addition, elevated chloride concentrations are causing impairments of the water quality objective of 100 mg/L in Reach 5 (EPA 303(d) list Reach 7) and Reach 6 (EPA 303(d) list Reach 8) of the Santa Clara River (SCR). These reaches were on the 1998 and 2002 Clean Water Act (CWA) 303(d) lists of impaired water bodies as impaired due to chloride. The objectives for these reaches were set to protect all beneficial uses; agricultural beneficial uses have been determined to be most sensitive, and not currently attained at the downstream end of Reach 5 (EPA 303(d) list Reach 7) and Reach 6 (EPA 303(d) list Reach 8) in the Upper Santa Clara River (USCR). Irrigation of salt sensitive crops such as avocados, strawberries, and nursery crops with water containing elevated levels of chloride results in reduced crop yields. Chloride levels in groundwater in Piru Basin underlying the reach downstream of Reach 5 are also rising.

TMDL Waterbody	Pollutant
Upper Santa Clara River Reach 3	Chloride
Upper Santa Clara River (Reaches 4B, 5 and 6)	Chloride

3. Total Maximum Daily Load for Bacteria in the Santa Monica Bay

Many of the beaches along Santa Monica Bay (SMB) were listed on the California's 1998 section 303(d) List, due to impairments for coliform or for beach closures associated with bacteria generally. The Los Angeles Regional Board adopted TMDLs to address bacteriological water quality impairments for 44 beaches along Santa Monica Bay located in Los Angeles County, California. WLA(s) are expressed as the number of sample days at a shoreline monitoring site that may exceed the following single sample numeric targets:

- Total coliform density shall not exceed 10,000/100ml.
- Fecal coliform density shall not exceed 400/100ml
- Enterococcus density shall not exceed 104/100ml
- Total coliform density shall not exceed 1000/100 ml if the ratio of fecal-to-total coliform exceeds 0.1.

With the exception of isolated sewage spills, storm water runoff conveyed by storm drains and creeks is the primary source of elevated bacterial indicator densities to the SMB beaches during wet weather. Waste load allocations are expressed as

allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection. All responsible jurisdictions and responsible agencies (local agencies that are responsible for discharges from a publicly owned treatment works to the SMB watershed or directly to the Bay, permittees or co-permittees on a municipal storm water permit, the California Department of Transportation, and other agencies that have jurisdiction over a beach adjacent to SMB) within a subwatershed are jointly responsible for complying with established allowable number of exceedance days.

TMDL Waterbody	**Pollutant**
Santa Monica Bay	Total Coliform

4. Total Maximum Daily Load for Nutrients in the Los Angeles River

Reaches of the Los Angeles River and its tributaries were listed as impaired for nitrogen compounds (ammonia, nitrate, and nitrate) and related effects such as algae, pH, odor, and scum on the 2002 303(d) list. These reaches were listed because numeric and narrative water quality objectives for nitrogen compounds and related effects were exceeded, thereby impairing warm, freshwater, and wildlife habitats, and recreation beneficial uses.

The principal source of nitrogen compounds to the Los Angeles River is discharges from the Donald C. Tillman Water Reclamation Plant (WRP), the Los Angeles-Glendale WRP, and the Burbank WRP. During dry weather period, the major POTWs contribute 84.1% of the total dry weather nitrogen load. Urban runoff, storm water, and groundwater discharge may also contribute nitrate loads. Further evaluation of these sources is set forth in the Implementation Plan

Concentration based WLAs for nitrogen compounds are allocated to minor point sources enrolled under NPDES or WDR permits including but not limited to Tapia Water Reclamation Plant (WRP), Whittier Narrows WRP, Los Angeles Zoo WRP, industrial and construction storm water, and municipal storm water and urban runoff from municipal separate storm sewer systems (MS4s). The WLA(s) are listed by receiving water and established as the applicable one-hour and thirty-day average effluent limitations at the point of discharge.

TMDL Waterbody	Pollutant
Los Angeles River above LA-Glendale WRP	Ammonia
Los Angeles River above LA-Glendale WRP	Ammonia
Los Angeles River below LA-Glendale WRP	Ammonia
Los Angeles River below LA-Glendale WRP	Ammonia
Los Angeles River tributaries	Ammonia
Los Angeles River tributaries	Ammonia
Los Angeles River	Nitrate-nitrogen
Los Angeles River	Nitrite-nitrogen
Los Angeles River	nitrate-nitrogen + nitrite nitrogen

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5. Total Maximum Daily Load for Nutrients in the Santa Clara River

Discharge of wastes containing nitrite, nitrate and ammonia to the Santa Clara River causes exceedances of water quality objectives for ammonia, nitrate and nitrite established in the Basin Plan. The Santa Clara River is listed as impaired by ammonia in Reach 3 and by nitrate plus nitrite in Reach 7 on the 2002 303(d) list of impaired water bodies. Reach 8 of the Santa Clara River is included on the State Monitoring List for organic enrichment/dissolved oxygen, which may be caused by excessive nitrogen. Nitrate and nitrate are biostimulatory substances that can cause eutrophic effects such as low dissolved oxygen and algae growth. Excessive ammonia can cause aquatic life toxicity.

The principal source of ammonia, nitrite, and nitrate to the Santa Clara River is discharges from the Saugus and Valencia Water Reclamation Plants (WRPs) and the Fillmore and Santa Paula Publicly Owned Treatment Works (POTWs). Agricultural runoff, storm water discharge and groundwater discharge may also contribute nitrate loads. Further evaluation of these sources is set forth in the Implementation Plan.

Concentration-based waste loads are allocated to major point sources of ammonia and nitrate+nitrite in Reach 3, which include the Fillmore and Santa Paula POTWs; concentration-based waste loads are allocated to major point sources of ammonia and nitrite+nitrate in Reaches 7 and 8, which include the Valencia and Saugus WRPs. Concentration-based waste loads are also allocated to municipal, industrial and construction storm water sources regulated under NPDES permits and minor discharges enrolled under NPDES or WDR permits. The allocations for minor point sources are based on the water quality objectives for ammonia, nitrite, nitrate and nitrite plus nitrate. The WLAs are established as one-hour and thirty day average concentrations.

TMDL Waterbody	Pollutant
Santa Clara River (Reach 7)	Ammonia as Nitrogen
Santa Clara River (Reach 7)	Ammonia as Nitrogen
Santa Clara River	Reach 7: Nitrate plus Nitrite as Nitrogen
Santa Clara River	Reach 3: Ammonia as Nitrogen
Santa Clara River	Reach 3: Ammonia as Nitrogen
Santa Clara River	Reach 3: Nitrate plus Nitrite as Nitrogen

6. Total Maximum Daily Load for Bacteria in the Marina del Rey Mothers Beach and Back Basins

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at Marina del Rey Harbor (MdRH) Mothers' Beach and back basins. Dry-weather urban runoff and storm water conveyed by storm drains are the primary sources of elevated bacterial indicator densities to MdRH Mothers' Beach and back basins during dry and wet-weather. As of December 2002, there were seven dischargers located within the Marina del Rey watershed. These dischargers were issued general NPDES permits, general industrial and/or general construction storm water permits. The bacteria loads associated with these discharges are largely unknown, since most do not monitor for bacteria. However, these discharges are not expected to be a significant source of bacteria.

The Los Angeles County MS4 and CalTrans storm water permittees and co-permittees are assigned waste load allocations (WLAs) expressed as the number of daily or weekly sample days that may exceed the single sample targets identified under "Numeric Target" at a monitoring site. Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection.

According to the TMDL, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

TMDL Waterbody	Pollutant
Marina Del Rey Mothers Beach and Back Basins	Total Coliform

7. Total Maximum Daily Load for Bacteria in the Los Angeles Harbor

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use of Inner Cabrillo Beach and the potential REC-1 uses of the Main Ship Channel in the Los Angeles Harbor.

Dry-weather urban runoff and storm water conveyed by storm drains are major sources of elevated bacterial indicator densities to Inner Cabrillo Beach and the Main Ship Channel during dry and wet-weather. As of March 2004, there are 15 active individual and 15 active general, NPDES permits for discharges to the Inner or Outer Los Angeles Harbor including the Terminal Island Treatment Plant. While the fecal coliform counts in the wastewater field indicate a contribution of bacteria to the Harbor by the Terminal Treatment Plant, the wastewater field is sufficiently diluted and the bacterial densities are so much lower in the Harbor than the high bacterial densities and exceedences at the sites at Cabrillo Beach and in the Main Ship Channel that it appears that the Treatment Plant is not a significant source of bacteria to the Beach or to the Ship Channel.

Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection. According to the TMDL, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

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TMDL Waterbody	Pollutant
Los Angeles Harbor	Total Coliform

8. Total Maximum Daily Load for Bacteria in Malibu Creek and Lagoon

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at Malibu Creek, Lagoon, and adjacent beach. Fecal coliform bateria may be introduced from a variety of sources including storm water runoff, dry-weather runoff, onsite wastewater treatment systems, and animal wastes. Waste Load Allocations (WLAs) are expressed as the number of daily sample days that may exceed the single sample limits as identified under "Numeric Target." WLAs are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection.

The responsible jurisdictions and responsible agencies are the County of Los Angeles, County of Ventura, the cities of Malibu, Calabasas, Agoura Hills, Hidden Hills, Simi Valley, Westlake Village, and Thousand Oaks; Caltrans, and the California Department of Parks and Recreation. The responsible jurisdictions and responsible agencies include the permittees and co-permittees of the municipal storm water (MS4) permits for Los Angeles County and Ventura County, and Caltrans. In addition, according to the TMDL, discharges from Tapia WWRF and effluent irrigation, and general construction storm water permits are not expected to be a significant source of bacteria.

TMDL Waterbody	Pollutant
Malibu Creek Lagoon	Total Coliform
Malibu Creek	E. coli

9. Total Maximum Daily Load for Metals in the Los Angeles River

Segments of the Los Angeles River and its tributaries are on the Clean Water Act section 303(d) list of impaired waterbodies for copper, cadmium, lead, zinc, aluminum and selenium. The metals subject to this TMDL are toxic pollutants, and the existing water quality objectives for the metals reflect national policy that the discharge of toxic pollutants in toxic amounts be prohibited. When one of the metals subject to this TMDL is present at levels exceeding the existing numeric objectives, then the receiving water is toxic. The beneficial uses impaired by metals in the Los Angeles River and its tributaries are those associated with aquatic life and water supply, including wildlife habitat, rare, threatened or endangered species, warm freshwater habitat, wetlands, and groundwater recharge.

There are significant differences in the sources of metals loadings during dry weather and wet weather. During dry weather, most of the metals loadings are in the dissolved form. The three major publicly owned treatment works (POTWs) that discharge to the river (Tillman WRP, LA-Glendale WRP, and Burbank WRP) constitute the majority of the flow and metals loadings during dry weather. The storm drains also contribute a large percentage of the loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. The remaining portion of the dry weather flow and metals loadings represents a combination of tributary flows, groundwater discharge, and flows from other permitted NPDES discharges within the watershed.

TMDLs are developed for reaches on the 303(d) list and for reaches where recent data indicate additional impairments. Addressing the impairing metals throughout the Los Angeles River watershed will ensure that the metals do not contribute to an impairment elsewhere in the watershed. Metals allocations are therefore developed for upstream reaches and tributaries that drain to impaired reaches. These TMDLs address wet- and dry-weather discharges of copper, lead, zinc and selenium and wet-weather discharges of cadmium.

Impairments related to cadmium only occur during wet weather. Impairments related to selenium are confined to Reach 6 and its tributaries. Dry-weather impairments related to zinc only occur in Rio Hondo Reach 1. The aluminum listing was based on water quality objectives set to support the municipal water supply beneficial use (MUN). MUN is a conditional use in the Los Angeles River watershed. The United States Environmental Protection Agency (USEPA) has determined that TMDLs are not required for impairments of conditional uses.

TMDL Waterbody	Pollutant (total recoverable)
Los Angeles River: Reach 1	Copper
	Lead
Compton Creek	Copper
	Lead
Rio Hondo Reach 1:	Copper
	Lead
	Zinc
Los Angeles River Reach 2 and Arroyo Seco:	Copper
	Lead
Los Angeles River Burbank Western Channel (above WRP):	Copper
Los Angeles River Burbank Western Channel (above WRP):	Lead

TMDL Waterbody	Pollutant (total recoverable)
Los Angeles River Burbank Western Channel (below WRP)	Copper
	Lead
Los Angeles River Reach 3 above LA- Glendale WRP and Verdugo	Copper
	Lead
Los Angeles River Reach 3 below LA- Glendale WRP	Copper
	Lead
Los Angeles River Reach 4	Copper
	Lead
Los Angeles River Reach 5,6 and Bell Creek	Copper
Los Angeles River Reach 5,6 and Bell Creek	Lead
Los Angeles River Reach 5,6 and Bell Creek	Selenium

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TMDL Waterbody	Pollutant (total recoverable)
Los Angeles River	Cadmium
	Copper
	Lead
	Zinc

10. Total Maximum Daily Load for Metals in Ballona Creek

Ballona Creek is on Clean Water Act Section 303(d) list of impaired waterbodies for dissolved copper, dissolved lead, total selenium, and dissolved zinc and Sepulveda Canyon Channel is 303(d) listed for lead. TMDLs are developed for reaches on the 303(d) list and metal allocations are developed for tributaries that drain to impaired reaches. This TMDL address dry- and wet-weather discharges of copper, lead, selenium and zinc in Ballona Creek and Sepulveda Canyon Channel.

There are significant differences in the sources of copper, lead, selenium and zinc loadings during dry weather and wet weather. During dry weather, most of the metals loadings are in the dissolved form. Storm drains convey a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. During dry years, dryweather loadings account for 25-35% of the annual metals loadings. Additional sources of dry weather flow and metals loading include groundwater discharge and flows from other permitted NPDES discharges within the watershed. During wet weather, most of the metals loadings in Ballona Creek are in the particulate form and are associated with wet-weather storm water flows.

Concentration-based dry- and wet-weather wasteload allocations are assigned to the minor NPDES permits and general non-storm water NPDES permits that discharge to Ballona Creek or its tributaries.

TMDL Waterbody	Pollutant (total recoverable)
Ballona Creek	Copper
	Lead
	Zinc

11. Total Maximum Daily Load for Toxic Pollutants in the Ballona Creek Estuary

Ballona Creek Estuary (Estuary) is on the Clean Water Act Section 303(d) list of impaired water bodies for cadmium, copper, lead, silver, zinc, chlordane, DDT, PCBs, PAHs and toxicity in sediments. Urban storm water has been recognized as a substantial source of metals. Numerous researchers have documented that the most prevalent metals in urban storm water (i.e., copper, lead, zinc, and to a lesser degree cadmium) are consistently associated with suspended solids. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in estuarine sediments where they may pose a risk of toxicity.

TMDLs are developed for cadmium, copper, lead, silver, zinc, chlordane, DDT, and PCBs within the sediments of the Ballona Creek Estuary. WLAs are assigned to point sources for the Ballona Creek watershed. A grouped mass-based waste load allocation is developed for the storm water permittees (Los Angeles County MS4, Caltrans, General Construction and General Industrial permittees) by subtracting the load allocations from the total loading capacity.

Sediment based waste load allocations are assigned to minor NPDES permits and general non-storm water NPDES permits that discharge to Ballona Creek or its tributaries. The Los Angeles Water Board implements an approach for compliance for these waste load allocations by establishing a total suspended solids (TSS) effluent limitation together with a concentration-based limit for the each specific TMDL pollutant.

TMDL Waterbody	Pollutant
Ballona Creek Estuary	TSS
	Cadmium
	Copper
	Lead
	Silver
	Zinc
	Chlordane
	DDTs
	DDD
	Total PCBs

12. Total Maximum Daily Load for Toxicity in Calleguas Creek

Discharge of wastes containing chlorpyrifos, diazinon, other pesticides and/or other toxicants to Calleguas Creek, its tributaries and Mugu Lagoon cause exceedances of water quality objectives for toxicity established in the Basin Plan. Source analysis determined that agricultural and urban uses are the largest sources of chlorpyrifos and diazinon in the watershed.

A wasteload of 1.0 TUc is allocated to the major point sources (POTWs) discharging to the Calleguas Creek Watershed. Minor sources include NPDES permittees other than wastewater treatment plants, and urban storm water co-permittees (MS4s) discharging to the Calleguas Creek watershed.

A WLA of 1.0 TUc is allocated to minor point sources. In addition, WLAs for acute and chronic toxicity for diazinon and chloropyrifos are allocated to the minor point sources.

TMDL Waterbody	Pollutant
Calleguas Creek	Chronic Toxicity Unit (TU_c)
	Chlorpyrifos
	Diazinion

13. Total Maximum Daily Load for Organochlorine (OC) Pesticides and Polychlorinated Biphenyls (PCBs) in Calleguas Creek

Eleven of fourteen reaches in the Calleguas Creek Watershed (CCW) were identified on the 2002 303(d) list of water-quality limited segments as impaired due to elevated levels of organochlorine (OC) pesticides and/or polychlorinated biphenyls (PCBs) in water, sediment and/or fish tissue. Additionally, Mugu Lagoon was listed as impaired for sedimentation/siltation. OC pesticides and PCBs can bioaccumulate in fish tissue and cause toxicity to aquatic life in estuarine and inland waters. Siltation may transport OC Pesticides and PCBs to surface waters and impair aquatic life and wildlife habitats.

Monitoring data from major NPDES discharges and land use runoff were analyzed to estimate the magnitude of OC pesticides and PCBs loads to Calleguas Creek, its tributaries and Mugu Lagoon. The largest source of OC pesticides in the listed waters is agricultural runoff. Most PCB residues are due to past use of PCBs as coolants and lubricants in transformers, capacitors, and other electrical equipment. Atmospheric deposition is also a potential source of PCBs. Urban runoff and POTWs are minor sources of OC pesticides and PCBs.

TMDL Waterbody	Pollutant
Calleguas Creek	Chlordane
	4,4-DDD
Calleguas Creek	4,4-DDE
	4,4-DDT
	Dieldrin

TMDL Waterbody	Pollutant
Calleguas Creek	PCBs
	Toxaphene

14. Total Maximum Daily Load for Toxics in the Marina del Rey Harbor

The back basins of Marina del Rey Harbor are on the Clean Water Act Section 303(d) list of impaired water bodies for chlordane, copper, lead, zinc, PCBs, DDT, dieldrin, sediment toxicity and a fish consumption advisory. Review of available data during the development of this TMDL indicated that dieldrin and DDT are no longer causes of impairment. The following designated beneficial uses are impaired by chlordane, copper, lead, zinc, PCBs, and toxicity: water contact recreation (REC1); marine habitat (MAR); wildlife habitat (WILD); commercial and sport fishing (COMM); and shellfish harvesting (SHELL).

Urban storm water has been recognized as a substantial source of metals. Numerous researchers have documented that the most prevalent metals in urban storm water (i.e., copper, lead, and zinc) are consistently associated with suspended solids. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in marine sediments where they may pose a risk of toxicity. Similar to metals, the majority of organic constituents in storm water are associated with particulates.

Waste load allocations (WLA) are assigned to point sources for the Marina del Rey watershed. A grouped mass-based waste load allocation is developed for the storm water permittees (Los Angeles County MS4, Caltrans, General Construction and General Industrial) by subtracting the load allocations from the total loading capacity. Sediment concentration-based waste load allocations are developed for other point sources in the watershed.

TMDL Waterbody	Pollutant
Marina del Rey Harbor	TSS
	Cadmium
	Copper
	Lead
	Silver
	Zinc
	Chlordane
	DDTs
	DDD
	Total PCBs

15. Total Maximum Daily Load for Bacteria in Ballona Creek, the Ballona Estuary, and the Sepulveda Channel

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use designated for Ballona Estuary and Sepulveda Channel, limited water contact recreation (LREC) designated for Ballona Creek Reach 2, and non-contact recreation (REC-2) beneficial uses of Ballona Creek Reach 1.

The major contributors of flows and associated bacteria loading to Ballona Creek and Estuary, are dry- and wet-weather urban runoff discharges from the storm water conveyance system. Run-off to Ballona Creek is regulated as a point source under the Los Angeles County MS4 Permit, the Caltrans Storm Water Permit, and the General Construction and Industrial Storm Water Permits. In addition to these regulated point sources, the Ballona Estuary receives input from the Del Rey Lagoon and Ballona Wetlands through connecting tide gates.

The Los Angeles County MS4 and Caltrans storm water permittees and copermittees are assigned waste load allocations (WLAs) expressed as the number of daily or weekly sample days that may exceed the single sample targets equal to the TMDLs established for the impaired reaches.

Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection. According to the TMDL, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

TMDL Waterbody	Pollutant
Ballona Creek, Ballona Estuary and Sepulveda Channel	Total Coliform
	E. coli
	E. coli

16. Total Maximum Daily Load for Metals in the Calleguas Creek Watershed

Three of fourteen reaches in the Calleguas Creek Watershed (CCW) including Revolon Slough, Lower Calleguas Creek – Reach 2, and Mugu Lagoon are identified on the 2002 Clean Water Act Section 303(d) list of water-quality limited segments as impaired due to elevated levels of metals and selenium in water. The 303(d) listings, which were approved by the State Water Resources Control Board in February 2003, require the development of Total Maximum Daily Loads (TMDLs) to establish the maximum amount of pollutants a water body can receive without exceeding water quality standards.

Significant sources of metals and selenium include urban runoff, agricultural runoff, groundwater seepage, and POTW effluent. For mercury, open space was also a significant source. Sources were also analyzed as a function of wet and dry weather.

Higher loads were delivered during wet weather for all constituents, due to the association between metals and particulate matter.

In the case of copper, nickel, and selenium, waste load allocations (WLAs) were developed for both wet and dry-weather. The dry-weather WLAs apply to days when flows in the stream are less than the 86th percentile flow rate for each reach. The wet-weather WLAs apply to days when flows in the stream exceed the 86th percentile flow rate for each reach. Annual mass loads of mercury in suspended sediment were developed according to low, medium, and high annual flow categories. Final WLAs were established for POTWs, permitted storm water dischargers, and for all other NPDES dischargers.

TMDL Waterbody	Pollutant (total recoverable)
Calleguas Creek Reach 1: Calleguas Creek	Copper
	Nickel
Calleguas Creek Reach 2:	Copper
	Nickel
Calleguas Creek Reach 3:	Copper
	Nickel
Calleguas Creek Reach 4:	Copper
	Nickel
	Selenium
Calleguas Creek Reach 5:	Copper

TMDL Waterbody	Pollutant (total recoverable)
	Nickel
Calleguas Creek Reach 5	Selenium
Calleguas Creek Reach 9:	Copper
	Nickel
Calleguas Creek Reach 10:	Copper
	Nickel
Calleguas Creek Reach 11	Copper
	Nickel
Calleguas Creek Reach 12	Copper
	Nickel
Calleguas Creek Reach 13	Copper
	Nickel

17. Total Maximum Daily Load for Salts in the Calleguas Creek Watershed

Eleven of fourteen reaches in the Calleguas Creek Watershed (CCW) are identified on the 2002 Clean Water Act Section 303(d) list of water quality limited segments as impaired due to elevated levels of boron, chloride, sulfate, or total dissolved solids (TDS) (these constitutions are commonly referred to as salts). Sources of salts in the watershed include water supply (water imported from the State Water Project or Freeman Diversion and deep aquifer groundwater pumping), water softeners that discharge to publicly owned treatment works (POTWs), POTW treatment chemicals, atmospheric deposition, pesticides and fertilizers, and indoor water use (chemicals, cleansers, food, etc.). Salts that are transported during dry weather to the surface water are quantified via the following mechanisms: groundwater pumping, groundwater exfiltration, POTWs, dry weather urban and agricultural runoff. Wet weather loadings from each of these sources have the potential to be significant, but tend to be lower in concentration and do not occur during the critical conditions for salts. Wet weather loads are significant from the perspective of transporting stranded salts off the watershed.

The TMDL includes WLAs for five POTWs, permitted storm water dischargers, and all other NPDES dischargers. Concentration-based WLAs are assigned to all other NPDES dischargers based on the Basin Plan objectives.

TMDL Waterbody	Pollutant
Calleguas Creek	Chloride
	Total Dissolved Solids (TDS)
	Sulfate
	Boron

18. Total Maximum Daily Load for Bacteria in the Harbor Beaches of Ventura County

Elevated bacteria indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at Kiddie Beach and Hobie Beach. Kiddie and Hobie Beach are referenced in the Staff Report as the Harbor Beaches of Ventura County. Bacteria sources in the Harbor Beaches of Ventura County include anthropogenic and non-anthropogenic sources and point and non-point sources. Each of these sources contributes to the elevated levels of bacteria indicator densities at the Harbor Beaches of Ventura County during dry- and wet-weather.

WLAs are expressed as allowable exceedance days. According to the TMDL, discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

TMDL Waterbody	Pollutant
Misc Ventura Coastal	Total Coliform

19. Total Maximum Daily Load for OC Pesticides, Polycyclic Aromatic Hydrocarbons (PAHs), Polychlorinated Biphenyls (PCB), and Metals in the Colorado Lagoon

Colorado Lagoon is identified on the 1998, 2002, and 2006 Clean Water Act Section 303(d) lists of water quality limited segments as impaired due to elevated levels of OC pesticides, PCBs, sediment toxicity, PAHs, and metals in fish tissue and sediment. The point sources of OC pesticides, PCBs, PAHs, and metals discharged to Colorado Lagoon are urban runoff and storm water discharges from MS4s and the California Department of Transportation (Caltrans).

Mass-based WLAs for MS4 permittees including the City of Long Beach, Los Angeles County Flood Control District, and Caltrans are allocated to the five major storm drain outfalls that currently discharge to the lagoon. Concentration-based WLAs for sediment are also assigned to these mentioned permittees. For all other point sources such as minor NPDES permits, other storm water and non-storm water permittees, sediment concentration-based WLAs are also assigned.

TMDL Water Body	Pollutant
Colorado Lagoon	Chlordane
	Dieldrin
	Lead
	Zinc
	PAHs
	PCBs
	DDT

20. Total Maximum Daily Load for Bacteria in the Santa Clara River

Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use designated for the Santa Clara River (SCR) Estuary and Reaches 3, 5, 6, and 7. Recreating in waters with elevated bacterial indicator densities has long been associated with adverse human health effects. The significant contributors of bacteria loading to the SCR and Estuary are dry- and wet-weather urban runoff discharges from the storm water conveyance system.

General NPDES permits, individual NPDES permits, the Statewide Industrial Stormwater General Permit, the Statewide Construction Activity Stormwater General Permit, and the Statewide Stormwater Permit for Caltrans Activities are assigned WLAs of zero (0) allowable exceedance days of the single sample targets for both dry and wet weather and no exceedances of the geometric mean targets.

Discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria.

TMDL Waterbody	Pollutant
Santa Clara River	Total Coliform
	E. coli

21. Total Maximum Daily Load for Toxics in Machado Lake

Machado Lake is identified on the 1998, 2002, 2006, and 2008 Federal Clean Water Act Section 303(d) lists of impaired water bodies due to chlordane, DDT, dieldrin, Chem A, and PCBs in fish tissue. Chem A (the abbreviation for 'chemical group A') is a suite of bio-accumulative pesticides that includes chlordane and dieldrin. The 1998 303(d) listing (and subsequent listings) for Chem A was predominately based on fish tissue concentrations of chlordane and dieldrin; there was only minimal detection of other Chem A pollutants in 1983 and 1984. Chlordane and dieldrin have been recently detected in fish tissue, while other Chem A pollutants have not been detected in 25 years. Therefore, this TMDL only addresses the Chem A pollutants (chlordane and dieldrin) that are causing impairment.

Because of potential harm to human health and the environment, the use of these pollutants has been banned for many years; however, the physiochemical properties of the pollutants cause them to persist in the environment. These pollutants, bound to soil particles, are easily transported with surface runoff to water bodies. Contaminated sediments accumulate in the receiving water bodies and aquatic organisms are exposed to the toxic pollutants. Sediment toxicity has been documented at Machado Lake, and it is likely that pesticides and PCBs contribute to the toxic condition of the sediments. Moreover, all of these pollutants biomagnify as they move up the food chain, thereby increasing concentrations in higher trophic-lever aquatic organisms and wildlife.

Watershed	Type of Pollutant
Machado Lake	Total PCBs
	DDT (all congeners)
	DDE (all congeners)
	DDD (all congeners)

Watershed	Type of Pollutant
	Total DDT
	Chlordane
	Dieldrin

22. Total Maximum Daily Load for Bacteria in the Los Angeles River

General NPDES permits, individual NPDES permits, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, and WDR permittees in the Los Angeles River Watershed are assigned WLAs of zero (0) days of allowable exceedances of the single sample target for both dry and wet weather.

Discharges from general NPDES permits, general industrial storm water permits and general construction storm water permits are not expected to be a significant source of bacteria. Therefore, the WLAs for these discharges are zero (0) days of allowable exceedances for all three time periods and for single sample limits.

TMDL Waterbody	Type of Pollutant
Los Angeles River	E. coli

23. Total Maximum Daily Load for Metals and Toxics in the Los Angeles and Long Beach Harbors

The waters of Dominguez Channel and the Greater Los Angeles and Long Beach Harbor area are impaired by heavy metals and organic pollutants. These water bodies are included on the State's Clean Water Act 303(d) impaired waters list for one or more of the following pollutants: cadmium, chromium, copper, mercury, lead, zinc, chlordane, dieldrin, toxaphene, DDT, PCBs, certain PAH compounds, benthic community effects and toxicity. These impairments exist in one or more environmental media—water, sediment, or tissue. Impairments in fish tissue are for DDT, PCBs, toxaphene, chlordane and dieldrin.

Beneficial uses designated in these waters to protect aquatic life include the marine habitat use (MAR) and rare, threatened or endangered species habitat use (RARE). In addition, the estuaries (EST) are recognized as areas for spawning, reproduction and/or early development (SPWN), migration of aquatic organisms (MIGR), and wildlife habitat (WILD). Dominguez Channel also has an existing designated use of warm freshwater habitat (WARM) and the Los Angeles River Estuary has the designated use of wetland habitat (WET). Beneficial uses associated with human use of these waters include recreational use for water contact (REC1), non-contact water recreation (REC2), industrial service supply (IND), navigation (NAV), commercial and sport fishing (COMM), and shellfish harvesting (SHELL).

TMDL Waterbody	**Pollutant (total recoverable)**
Dominguez Channel and Torrance Lateral	Copper
	Lead
Dominguez Channel and Torrance Lateral	Zinc
Dominguez Channel	Toxicity
Dominguez Channel Estuary and Greater Harbor Waters	Copper
	Lead

TMDL Waterbody	Pollutant (total recoverable)
	Zinc
	4-4'-DDT
	Total PCBs
Dominguez Channel Estuary	PAHs
	Chlordane
	Dieldrin

24. Total Maximum Daily Load for Algae, Eutrophic Conditions and Nutrients in the Ventura River and its Tributaries

The Ventura River Estuary and Reaches 1 and 2 are on the Clean Water Act (CWA) section 303(d) list as impaired for algae and eutrophic conditions. San Antonio Creek and Cañada Larga are on the CWA section 303(d) list as impaired for nitrogen and dissolved oxygen, respectively. Recent data confirm these impairments and demonstrate additional impairments for low dissolved oxygen in the Estuary, San Antonio Creek, and Reaches 1-4. The algae and nutrient related impairments are caused by excessive loading of nutrients, particularly nitrogen and phosphorus, to Ventura River and its tributaries. The water quality impairments due to eutrophication and increased nutrient loading occur during the dry season when algae growth primarily occurs. For purposes related to this TMDL, the dry season is defined as occurring from May 1 to September 30.

Waste load allocations addressing point and non-point sources of nutrients are assigned to discharges to the Ventura River watershed.

TMDL Waterbody	Pollutant
Ventura River	Total Nitrogen
Ventura River	Total Phosphorus

25. Total Maximum Daily Load for Metals in the San Gabriel River

Segments of the San Gabriel River and its tributaries are on the Clean Water Act section 303(d) list of impaired water bodies for copper, lead, zinc, and selenium. The constituents subject to this TMDL are toxic pollutants, and the existing water quality objectives for these constituents reflect national policy that the discharge of toxic pollutants in toxic amounts be prohibited. When one of the constituents subject to this TMDL is present at levels exceeding the existing numeric objectives, then the receiving water is toxic. The beneficial uses impaired by metals and selenium in the San Gabriel River and its tributaries are those associated with aquatic life and water supply, including wildlife habitat, rare, threatened or endangered species, warm freshwater habitat, wetlands, and groundwater recharge.

TMDLs are developed for reaches on the 303(d) list and for reaches where recent data indicate additional impairments. Addressing the impairing metals and selenium throughout the San Gabriel River watershed will ensure that they do not contribute to impairments elsewhere in the watershed. Metals and selenium allocations are therefore developed for upstream reaches and tributaries that drain to impaired reaches.

These TMDLs address dry-weather impairments of copper in the estuary and selenium in San Jose Creek Reach 1 and wet-weather impairments of lead in San Gabriel River Reach 2 and copper, lead, and zinc in Coyote Creek.

TMDL Waterbody	Type of Pollutant
San Gabriel River	San Gabriel River Reach 1: Copper
San Gabriel River	Coyote Creek: Lead

San Gabriel River	Coyote Creek: Copper
San Gabriel River	Coyote Creek: Zinc
San Gabriel River	San Gabriel River Estuary: Copper
San Gabriel River	San Jose Creek Reach 1, Reach 2: Selenium
San Gabriel River	San Gabriel River Reach 2: Lead

26. Total Maximum Daily Load for Metals in the Los Cerritos Channel

Los Cerritos Channel was included on the 1998, 2002 and 2006 California 303(d) lists as an impaired water body for copper, zinc, and lead. (Regional Board, 1998 and California State Water Resources Control Board, 2002 and 2006.)

The NPDES permits in the Los Cerritos Channel Freshwater Watershed include municipal separate storm sewer system (MS4) permits, the California Department of Transportation (Caltrans) storm water permit, general construction stormwater permits, general industrial storm water permits, minor NPDES permits, and general NPDES permits.

Concentration based waste load allocations are established for minor NPDES permits and general non-storm water permits that discharge to the Los Cerritos Channel to ensure that these discharges do not contribute to exceedences of the California Toxic Rule criteria. The waste load allocation for these metals are based on dry and wet weather flows.

TMDL Water Body	**Pollutant (total recoverable)**
Los Cerritos Channel	**Copper**
	Lead
	Zinc

27. Total Maximum Daily Load for Indicator Bacteria in the Long Beach City Beaches and Los Angeles River Estuary

General NPDES permits, individual NPDES permits, the Statewide Industrial Storm Water General Permit, the Statewide Construction Activity Storm Water General Permit, the Statewide General Waste Discharge Requirements for Sanitary Systems, and the Vessel General Permit in the Long Beach City Beaches Watershed are assigned WLAs of zero (0) days of allowable exceedances for all time periods for the single sample targets and no exceedances of the 30-day geometric mean targets because they are not expected to be a significant source of indicator bacteria.

TMDL Water Body	Pollutant
Long Beach City Beaches and the Los Angeles River Estuary	Total Coliform

San Diego Regional Board TMDLs

The following is a listing of TMDLs in the San Diego region that have waste load allocation for general NPDES discharge categories, followed by a general description. Further information on the listed TMDLs can be found at the following website:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/tmdls/index.shtml

28. Total Maximum Daily Load for Metals in Chollas Creek

Chollas Creek was placed on the Clean Water Act (CWA) section 303(d) List of Water Quality Limited Segments (List of Water Quality Limited Segments) in 1996 for the metals copper, lead, and zinc. Storm water samples from Chollas Creek collected between 1994 and 2003 periodically exceeded California Toxics Rule (CTR) water quality criteria for copper, lead, and zinc, dissolved copper, lead and zinc concentrations in Chollas Creek violate numeric water quality criteria for copper, lead, and zinc promulgated in the California Toxics Rule, and the narrative objective for toxicity. Concentrations of these metals in Chollas Creek threaten and impair the designated beneficial uses of warm freshwater habitat (WARM), and wildlife habitat (WILD). For Chollas Creek, essentially all metals sources (point and nonpoint) are discharged through municipal separate storm sewer systems (MS4) that are regulated under waste discharge requirements (WDRs), NPDES Permit. The point

source discharges that could affect Chollas Creek are the MS4 discharges, storm water discharges from industrial sites, and discharges of extracted groundwater. All point source discharges to Chollas Creek will be required to achieve this WLA.

This TMDL establishes concentration-based WLAs set equal to 90 percent of the numeric water quality objectives for copper, lead, and zinc, as defined in the California Toxics Rule. Because the concentration of these metals resulting in toxic effects varies significantly with hardness, the resulting WLAs are hardness dependent.

TMDL Water body	Pollutant
Chollas Creek	Copper
Chollas Creek	Lead
Chollas Creek	Zinc

29. Total Maximum Daily Load for Total Nitrogen and Total Phosphorus in Rainbow Creek

Nitrate, total nitrogen, and total phosphorus concentrations in Rainbow Creek exceed the inorganic chemicals nitrate and biostimulatory substances water quality objectives. These exceedances threaten to unreasonably impair the municipal supply (MUN), warm freshwater habitat (WARM), cold freshwater habitat (COLD), and wildlife habitat (WILD) beneficial uses of Rainbow Creek. Excessive nutrient levels in Rainbow Creek promote the growth of algae in localized areas, creating a nuisance condition, that unreasonably interferes with aesthetics and contact and non-contact water recreation (REC1, REC2) and threatens to impair WARM, COLD and WILD beneficial uses. State highways, agricultural fields and orchards, commercial nurseries, residential and urban areas, and septic tank disposal systems contribute to increased nutrient levels in Rainbow Creek as a result of storm water runoff, irrigation return flows, and ground water contributions to the creek.

WLAs for the discharge of total nitrogen and total phosphorus into Rainbow Creek were established. Identified dischargers of total nitrogen and total phosphorus loading include Caltrans, County of San Diego and nonpoint sources. The TMDL provides WLAs of 2 percent of the total annual TMDL for both total nitrogen and total phosphorus for additional point sources, however the TMDL Implementation Action Plan does not provide for the assignment of WLAs to unidentified point source discharges, effectively resulting in the prohibition of discharges of total nitrogen and total phosphorus into Rainbow Creek.

TMDL Waterbody	Type of Pollutant
Rainbow Creek	Total Nitrogen
Rainbow Creek	Total Phosphorus

30. Total Maximum Daily Load Indicator Bacteria in Twenty Beaches and Creeks in the San Diego Region for Direct Discharges Only

Bacteria densities in the Pacific Ocean at various beach and coastal creek mouth segments (referred to hereafter as "beaches") exceed water quality objectives (WQOs) for indicator bacteria. Bacteria densities in ocean water at these beaches unreason ably impair and threaten to impair the water quality needed to support the contact water recreation (REC-1) designated beneficial use. Bacteria densities in the waters of Aliso Creek, San Juan Creek, Tecolote Creek, Forrester Creek, the (lower) San Diego River, and Chollas Creek exceed WQOs for indicator bacteria. Bacteria densities in these creeks unreasonably impair and threaten to impair the water quality needed to support REC-1. The federal Clean Water Act requires the establishment of Total Maximum Daily Loads (TMDLs) for pollutants that exceed the WQOs needed to support designated beneficial uses, i.e., that cause or contribute to exceedances of state "water quality standards".

Unidentified point sources have not been assigned WLAs, which is equivalent to being assigned a WLA of zero. No discharges of bacteria are expected or allowed from unidentified point sources under the dry or wet weather TMDLs.

TMDL Water Body	Pollutant
San Joaquin Hills Hydrologic Subarea & Laguna Hills Hydrologic Subarea	Total Coliform
Aliso Hydrologic Subarea	Total Coliform
Dana Point Hydrologic Subarea	Total Coliform

TMDL Water Body	Pollutant
Lower San Juan Hydrologic Subarea	Total Coliform
San Clemente Hydrologic Subarea	Total Coliform
San Luis Rey Hydrologic Unit	Total Coliform
San Marcos Hydrologic Area	Total Coliform
San Deiguito Hydrologic Unit	Total Coliform
Miramar Reservoir Hydrologic Area	Total Coliform
Scripps Hydrologic Area	Total Coliform
Tecolote Hydrologic Area	Total Coliform
Mission San Diego Hydrologic Subarea & Santee Hydrologic Subarea	Total Coliform
Chollas Hydrologic Subarea	Total Coliform

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants discharged into waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards, and 40 C.F.R. section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of receiving waters.

A. Technology-Based Effluent Limitations

CWA section 301(b) and 40 C.F.R. section 122.44 require that permits include conditions meeting technology-based requirements at a minimum and any more stringent effluent limitations necessary to meet water quality standards. The CWA requires U.S. EPA to develop effluent limitations guidelines (ELGs), and standards representing application of best practicable treatment control technology (BPT), best available technology economically achievable (BAT), best conventional pollutant control technology (BCT), and best available demonstrated control technology for new sources (NSPS). CWA section 402(a)(1) and 40 C.F.R. section 125.3 authorize the use of Best Professional Judgment to derive technology-based effluent limitations on a case-by-case basis when ELGs are unavailable.

This Order does not establish technology-based effluent limitations because U.S. EPA has not established ELGs for the types of discharges this Order authorizes. Moreover, data necessary to develop technology-based effluent limitations on a case-by-case basis using Best Professional Judgment are unavailable. The technology-based effluent limitations in Regional Water Board Basin Plans do not apply because this Order does not cover wastewater treatment facility discharges.

B. Water Quality Based Effluent Limitations

1. Scope and Authority

This Order contains water quality-based effluent limitations (WQBELs) that implement water quality objectives and criteria that protect beneficial uses. CWA section 301(b) and 40 C.F.R. § 122.44(d) require that permits include limitations more stringent than federal technology-based requirements where necessary to achieve applicable water quality standards. According to 40 C.F.R. section 122.44(d)(1)(i), permits must include effluent limitations for all pollutants that are or may be discharged at levels that have a reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective, WQBELs must be established using (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality

criterion, such as a proposed state criterion or policy interpreting a narrative criterion, supplemented with relevant information (40 C.F.R. § 122.44[d][1][vi]). The process for determining reasonable potential and calculating WQBELs is intended to achieve applicable water quality objectives and criteria, and to protect designated beneficial uses of receiving waters.

2. Applicable Objectives and Criteria

This Order authorizes discharges to inland surface waters, enclosed bays, estuaries and the ocean, statewide. The water quality objectives and criteria applicable to these receiving waters are contained in the corresponding Basin Plan(s), other water quality control plans, the CTR, and the Ocean Plan.

a. Regional Boards Basin Plans Objectives. Basin Plans specifies various narrative and numeric water quality objectives, including the maximum contaminant levels (MCLs) in California Code of Regulations, title 22. Typical narrative objectives most relevant to this Order are listed below:

i. Toxicity. The toxicity objective typically states, "All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms." U.S. EPA water quality criteria were used to translate this objective with respect to chlorine. U.S. EPA's recommended 1-hour average acute criterion for chlorine is 0.019 mg/L and its 4-day average chronic criterion is 0.011 mg/L (the acute or chronic criteria are not to be exceeded more than once every three years on average in any single location).

ii. pH. The pH objective typically states, "The pH shall not to be depressed below 6.5 nor raised above 8.5. This encompasses the pH range usually found in waters. Controllable water quality factors shall not cause changes greater than 0.5 units in normal ambient pH levels."

iii. Sediment. The sediment objective typically states, "The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses."

iv. Settleable Material. The settleable material objective typically states, "Waters shall not contain substances in concentrations that result in the deposition of material that cause nuisance or adversely affect beneficial uses."

v. Suspended Material. The suspended material objective typically states, "Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses."

vi. Turbidity. The turbidity objective typically states, "Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10 percent in areas where natural turbidity is greater than 50 NTU."

b. California Toxic Rule (CTR) Criteria. The CTR specifies numeric aquatic life and human health criteria for numerous priority pollutants. Some human health criteria are for consumption of "water and organisms" and others are for consumption of "organisms only." The criteria applicable to "water and organisms" apply to many receiving waters subject to this Order because they are potential drinking water sources with the municipal and domestic supply (MUN) beneficial use. In accordance with Resolution 2014-XXXX-XXX-DWQ, this Order grants a SIP exception to the CTR criteria for a number of priority pollutants on the basis that these discharges are less than significant with mitigation, and that mandated activities to protect public safety and health is held paramount.

c. Ocean Plan Water Quality Objectives. The Ocean Plan specifies in Table 1 of the Ocean Plan, numeric water quality objectives for the protection of Marine Aquatic Life and Human Health (Carcinogens and non-carcinogens) for numerous priority pollutants. In accordance with Resolution 2014-XXXX-XXX-DWQ, this Order grants an exception to the Ocean Plan water quality objectives for a number of priority pollutants on the basis that these discharges are less than significant with mitigation, and that mandated activities to protect public safety and health is held paramount.

d. Sediment Quality Objectives. The *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* contains a narrative water quality objective: "Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities in bays and estuaries of California." This objective is to be implemented by integrating three lines of evidence: sediment toxicity, benthic community condition, and sediment chemistry. The policy requires that if the Water Board determines that a discharge has reasonable potential to cause or contribute to an exceedance of this objective, it is to impose the objective as a receiving water limit.

3. Need for Water Quality Based Effluent Limitations (Reasonable Potential Analysis)

Assessing whether a pollutant has reasonable potential to exceed a water quality objective or criterion is the fundamental step in determining whether a water quality based effluent limitation is required. As explained below, this Order finds reasonable potential for toxicity (chlorine), sediment, settleable material, suspended material, and turbidity.

a. Analysis for Numeric Objectives and Promulgated Criteria. SIP section 1.3 sets forth the method used for this Order for assessing whether a pollutant has reasonable potential to exceed a numeric water quality objective or promulgated criterion. The analysis begins with identifying the maximum effluent concentration

(MEC) observed for each pollutant based on available effluent concentration data and the ambient background concentration (B). SIP section 1.4.3 states that ambient background concentrations are either the maximum ambient concentration observed or, for water quality objectives intended to protect human health, the arithmetic mean of observed concentrations. There are three triggers in determining reasonable potential:

- Trigger 1 is activated if the maximum effluent concentration is greater than or equal to the lowest applicable water quality objective (MEC $\geq$ water quality objective).

- Trigger 2 is activated if the ambient background concentration observed in the receiving water is greater than the water quality objective (B > water quality objective) *and* the pollutant is detected in any effluent sample.

- Trigger 3 is activated if a review of other information indicates that a WQBEL is needed to protect beneficial uses.

The Ocean Plan also has a method for assessing reasonable potential as described in Appendix V of the Ocean Plan.

These discharges are required to comply with MCLs per DPH's regulations and therefore for pollutants that have MCLs more stringent than the CTR or Ocean Plan water quality objectives, this Order finds those priority pollutants do not have reasonable potential to exceed a water quality objective. However for the remaining priority pollutants for which the MCL is not the most stringent applicable water quality objective, an exception to those objectives has been granted through Resolution 2014-XXXX-DWQ.

b. Analysis for Narrative Objectives. This Order finds reasonable potential for the following pollutants based on available information:

i. Toxicity (Chlorine). This Order translates the narrative toxicity objective with respect to chlorine by using U.S. EPA's water quality criteria for chlorine. Water distribution systems are usually chlorinated to meet the minimum total chlorine residual requirements in California Code of Regulations title 22. According to the most recent Annual Consumer Confidence Reports from various water agencies, the typical average total chlorine residual concentration in a distribution system is about 2.0 mg/L, which is roughly 100 times U.S. EPA's acute water quality criterion of 0.019 mg/L. However, chlorine in water discharges can dissipate from volatilization and reaction with dirt and organic matter on streets and storm drain systems. Based on the analysis in IV.B.4, below, reasonable potential for toxicity exists only for superchlorinated waters and other chlorinated waters that are in closer proximity to receiving waters (within 300 feet).

ii. Sediment, Settleable Material, Suspended Material, and Turbidity. Various discharges may contain sediment. Sediment accumulates at the dead ends of distribution systems during periods of low water demand. The

sediment within a system must be flushed periodically. Raw water may contain sediment due to naturally occurring minerals and organic debris. Trench dewatering can result in relatively high sediment loads, depending on soil type, flow rate and duration, and excavation size. Rehabilitation of inactive wells may result in sediment discharges, and discharges from new well development may also have high sediment loads. After a well is drilled, drilling mud, cuttings, and loose sediment must be removed from the bottom of the well and around the screen.

Discharges can also contribute to sedimentation and erosion within receiving waters when discharge flows and volumes are high. Such discharges can dislodge sediment and transport it to receiving waters, or destabilize and erode shorelines or other natural receiving water features.

c. **Analysis for Sediment Quality.** Pollutants in some receiving water sediments may be present in quantities that alone or in combination are toxic to benthic communities. Efforts are underway to identify stressors causing such conditions. Owing to the relative clean nature of potable water, it is unlikely that these discharges would contribute to sediment toxicity. However, to date there is no evidence either way; therefore, the State Water Board cannot draw a definitive conclusion about reasonable potential for these discharges to cause or contribute to exceedances of the sediment quality objectives.

4. WQBELs

This Order contains WQBELs for pollutants with reasonable potential (i.e., chlorine, sediment, settleable material, suspended material, and turbidity). Regulations at 40 C.F.R. section 122.44(k)(3) require numeric WQBELs unless numeric WQBELs are infeasible. This Order contains numeric chlorine and turbidity WQBELs and narrative WQBELs for sediment, settleable material, and suspended material, through BMPs as set forth in Provision VIII.C.2 of this Order. Narrative WQBELs are appropriate because there is no readily available means to translate the sediment, settleable material, and suspended material objectives into numeric WQBELs appropriate for the many receiving waters that could be affected by the discharges covered by this Order.

All 126 priority pollutants have also been considered as well as the pollutants with Ocean Plan water quality objectives. The pollutants with MCLs as the most stringent water quality objective have shown no reasonable potential because these discharges are already required to comply with MCLs per DPH's regulations. For the remaining pollutants a categorical SIP and an Ocean Plan exception has been granted so no need for WQBELs for these pollutants. In addition this Order imposes implementation of BMPs for all discharges as an effluent limitation.

This Order imposes numeric WQBELs for total residual chlorine and turbidity because it is feasible to calculate numeric WQBELs for these pollutants. Also, field

test kits are readily available to measure them, so it is feasible to collect representative total residual chlorine and turbidity data.

The total chlorine residual WQBEL is 0.019 mg/L based on U.S. EPA's acute water quality criterion for chlorine, which is expressed as a one-hour average. The numeric WQBEL for total residual chlorine is applicable to the following discharges: (1) superchlorinated discharge, and (2) chlorinated discharges located within 300 feet of a receiving water body. These discharges pose a reasonable potential to cause exceedance of water quality objective for toxicity in the receiving water due to the elevated residual chlorine concentrations found in super-chlorinated water and proximity to receiving waters.

The Turbidity WQBEL is set at 10 NTU as a daily average for discharges to inland surface waters, enclosed bays and estuaries, and at 225 NTU for discharges to the Ocean based on Regional Boards' Basin Plans and the State Water Board's Ocean Plan water quality objectives.

According to a controlled field study conducted by East Bay Municipal Utilities District (EBMUD), when dechlorination BMPs are properly implemented, the total chlorine residual concentration in chlorinated discharges is fully neutralized within 200 feet to concentrations below a minimum level of 0.1 mg/L (Tikkanen et. al, 2001, *Guidance Manual for Disposal of Chlorinated Water*). The study analyzed samples from nine fire hydrants discharging at varying flow rates and treated with dechlorination BMPs within the EBMUD jurisdiction. Similarly, the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) analyzed samples from ten fire hydrants discharging at varying flow rates and treated with dechlorination BMPs in the Cities of Palo Alto, San Jose and Sunnyvale. Based on the SCVURPPP study, eight of the discharge events monitored achieved full neutralization (to concentrations below 0.1 mg/L) by 160 feet. The two remaining discharge events spiked above the minimum level of 0.1 mg/L, but ultimately achieved full neutralization within 425 feet. The spike in concentration was suspected to be due to turbidity interference.

Based on these data, the State Water Board determines that discharges where dechlorination BMPs have been properly implemented that are more than 300 feet from a receiving water body do not pose a reasonable potential to exceed the applicable total residual chlorine water quality objective. Thus, the numeric WQBEL is not applicable to such discharges.

C. Discharges Not Authorized By This Order

1. Discharges other than those required to enroll per section I of this Order or discharges other than those authorized in the Notice of Applicability issued by the Deputy Director of Water Quality.

2. Discharges to a water of the U.S. with a total maximum daily load (TMDL) ~~that prescribes a waste load allocation~~ where the Regional Water Board finds that additional permit requirements are necessary to address waste load allocations for pollutants in a specific discharge from a specific drinking water systems~~to a water purveyor, as listed in Attachment G of this Order, where the Deputy Director of Water Quality or regional water board Executive Officer does not determine that the requirements of this Order are consistent with the assumptions and requirements of the waste load and allocation and are sufficient for the water purveyor to comply with its waste load allocations or other TMDL requirements imposed directly on the water purveyor~~.

3. Discharges of new drinking water systems (not an expansion of an existing system) into an impaired water body that is impaired for a constituent that exists in the new discharge at a concentration greater than the criteria used to establish the impairment of the water body.

4. Direct discharges into areas designated by the State Water Board as Areas of Special Biological Significance (ASBS).

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations require compliance with federal and State water quality standards in accordance with the CWA and regulations adopted thereunder, and are based on narrative and numeric water quality objectives in the Regional Water Boards' Basin Plans and State Water Board's Ocean Plan.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E) of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program of this Order.

A. Effluent Monitoring

1. Pursuant to the requirements of 40 CFR 122.44(i)(2), reporting of effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the implemented BMPs and treatment process (where applicable), and to assess the impacts of the discharge on the receiving water.

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2. Effluent limitations have been established in this Order for chlorine residual and turbidity. Monitoring has been established in this Order to determine compliance with the effluent limitations.

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B. Receiving Water Monitoring

1. Surface Water

a. Receiving water monitoring is necessary to assess compliance with receiving water limitations as a result of a direct discharge that is not in compliance with this Order, and to assess the impacts of the non-compliant discharge on the receiving water.

b. This General Order requires Dischargers to maintain a log of the receiving water conditions during non-compliant discharge events, giving attention to floating or suspended matter; trash, discoloration; bottom deposits; aquatic life; visible films, sheens, or coatings; fungi, slimes, or objectionable growths; and potential nuisance conditions.

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C. Other Monitoring Requirements

1. Post-Discharge Report. This General Order requires Dischargers to submit a post-discharge report after each non-compliant discharge that has an adverse effect or impact on beneficial uses of the receiving water.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

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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 D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42.

40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR 123.25(a) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

a. The reopener provisions allow the State Water Board to reopen this Order in accordance with 40 CFR §122.62.

b. Total Residual Chlorine. The State Water Board is developing a draft chlorine policy, which when adopted is intended to establish consistent standards and implementation procedures for regulating chlorine statewide. This reopener allows the State Water Board to reopen this Order to include a revised reporting level to determine compliance with effluent limitations for total residual chlorine if a statewide policy for total residual chlorine is adopted during the term of this Order.

2. Implementation of Best Management Plans

a. Best Management Practice (BMP) Plan. Water purveyors may have numerous intentional and unintentional releases of water to surface waters and surface water drainage courses due to many factors, including system failures, pressure releases, and pipeline/tank flushing and dewatering. For the purposes of this Order, these multiple discharges shall be considered a project. Water purveyors covered by this Order may include irrigation districts, water districts, and water agencies that use the drinking water system for the primary use of delivering safe drinking water to its customers. Water purveyors with more than one discharge point shall identify and report representative monitoring locations in accordance with the requirements of Attachment E. This provision is based on CWA section 304(e) and 40 C.F.R. section 122.44(k), which authorize the Regional Water Board to require implementation of BMPs when necessary to achieve effluent limitations and standards. The BMPs serve as narrative WQBELs for toxicity from chlorine, sediment, settleable material, suspended material, and turbidity. The BMPs are necessary to prevent toxicity from total chlorine residual and control sedimentation and erosion in receiving waters.

b. BMP Iterative Approach

Where a discharge does not achieve compliance with the requirements of this Order, the Discharger shall determine the source of non-compliance, and develop and implement new or revised BMPs as necessary. As part of this process, the Discharger shall validate the effectiveness of any new or revised BMPs to achieve the requirements of this Order. Corrective actions to address all non-compliant discharges shall be reported to the State Water Board in the annual report, as required in the Monitoring and Reporting Program (Attachment E) of this Order. A log of additional or revised BMPs implemented to address non-compliance shall be made available upon request by staff of the State and/or Regional Water Board.

VIII. PUBLIC PARTICIPATION

The State Water Board adopted waste discharge requirements that serve as this general NPDES permit for low threat discharges from drinking water systems on September ~~August~~ XX, 2014. As a step in the Board adoption process, the State Water Board staff developed a draft Order. The State Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The State Water Board has notified interested agencies, parties, and persons of its intent to consider adoption of this general Order for low threat discharges from drinking water systems and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided to interested parties through specific mailings, distribution through the Water Board Lyris Email System and through publication in the following newspapers for the following communities:

- Inter-City Express - Alameda County
- Tahoe Daily Tribune - Alpine County
- Fresno Bee - Fresno County
- Imperial Valley Press - Imperial County
- Los Angeles Daily Journal - LA County
- Orange County Recorder - Orange County
- Daily Recorder - Sacramento County
- San Diego Commerce - San Diego County
- New Times - San Luis Obispo County
- Record Searchlight - Shasta County
- Sonoma County Herald - Sonoma County

B. Public Comments

A draft Order was issued for public comment and review on June 6, 2014. Interested persons were invited to submit written comments concerning the draft Order. The State Water Board considered comments that were submitted either in person or by email or standard mail, in accordance with the public notice issued for this Order.

For State Water Board staff and the State Water Board to be fully responsive and consider public comments, all comments were required to be submitted to the State Water Board by noon on August 19~~July 8~~, 2014. The State Water Board heard public comments at a Public Hearing held on August ~~July 1~~5, 2014.

C. Public Hearing

The State Water Board held a public hearing on the draft Order during its regular Board meeting on the following date and time and at the following location:

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Date: August 5, ~~15 July~~ 2014
Time: 9:00 a.m.
Location: California Environmental Protection Agency Headquarters Office
1001 I Street, 2nd Floor
Sacramento, CA 95814

Interested persons were invited to attend. At the public hearing, the State Water Board heard testimony, if any, pertinent to the subject discharges, and this Order. Oral testimony was heard; however, for accuracy of the record, important testimony was required to be submitted in writing.

All pertinent dates, documents and agendas were kept updated and accessible on the NPDES Program Page of the State Water Board website at the following web address: http://www.waterboards.ca.gov/water_issues/programs/npdes/.

D. Waste Discharge Requirements

This Order serves as statewide Waste Discharge Requirements (WDRs) pursuant to California Water Code, article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA), and California Water Code chapter 5.5, division 7 (commencing with § 13370). This Order shall serve as a statewide general NPDES permit for point source discharges from single or multiple discharge points to surface waters, storm drains, and other storm water conveyances leading to waters of the U.S.

Due to the drought conditions and the State of California water conservation goals, the State Water Board encourages water purveyors with a discharge authorized under this Order to place the discharge water to multiple uses or a beneficial reuse. The multiple use or beneficial reuse of the discharges authorized under this Order are not required to obtain coverage under waste discharge requirements if the discharge is collected and reused for landscape irrigation or other uses in a manner that augments the existing supply, or if the discharge is directly or indirectly discharged to:

- Storm water capture basin(s),
- Low impact development features
- Other groundwater-recharge system(s), or

Discharges from drinking water systems to land that do not drain to waters of the U.S. do not need authorization to discharge under an NPDES permit. Although discharges to groundwater may require waste discharge requirements issued by the State and/or Regional Water Boards, as an incentive to promote multiple uses of potable and treated drinking water, the State Water Board will not require waste discharge requirements or monitoring for such discharges from water systems regulated under this Order that are beneficially reused. A water purveyor must estimate and report in its annual report, the quantity of water that would otherwise have been discharged but is used multiple times or is beneficially reused for this provision to apply.

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E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding this Order must register on the Drinking Water Systems Discharge Permit lyris listing at http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml, by selecting 'Water Quality Topics', then selecting 'Drinking Water Systems Discharges'.

F. Additional Information

Requests for additional information or questions regarding this Order should be directed to Ms. Diana Messina, staff of the State Water Board, at diana.messina@waterboards.ca.gov.

ATTACHMENT G – Water Bodies with Total Maximum Daily Loads (TMDLs) and Wasteload Allocations (WLAs) to Water Purveyors

NOTE: THE FOLLOWING HIGHLIGHTED TEXT IN THIS ATTACHMENT IS NEW PROPOSED LANGUAGE ADDED TO THE DRAFT PERMIT ISSUED ON JUNE 6, 2014.

As of the adoption date of this Order, no TMDLs have established WLAs that apply exclusively to discharges from drinking water systems regulated under this Order. Due to the nature of the discharges authorized under this Order, it is unlikely that these discharges contribute to the impairment of the TMDL-related water bodies; therefore existing TMDL-related requirements that include WLAs to general categories of discharges are not applicable.

This Attachment is reserved for the State Water Board to include additional permit requirements in a subsequent permit renewal to implement future TMDLs that:

1) address pollutants likely to be in discharges from drinking water systems, and

2) allocate waste loads specifically to water purveyors regulated under this Order.

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ATTACHMENT H - MAP OF THE REGIONAL WATER QUALITY CONTROL BOARDS

To find the Regional Water Board for a particular location, click on the map or enter a street address at the following website:*http://www.waterboards.ca.gov/waterboards_map.shtml#rwqcbs*

Or click on the map below:

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