



Los Angeles Regional Water Quality Control Board

**Revised
Notice of Public Meeting
Thursday, November 8, 2012
8:00 a.m.**

Revised Meeting Location Change:
**Metropolitan Water District of Southern California (Board Room)
700 North Alameda Street
Los Angeles, California 90071**

Agenda

The Los Angeles Regional Board strives to conduct an accessible, orderly, and fair meeting. The Chair of the Board will conduct the meeting and establish appropriate rules and time limitations for each agenda item. The Board will only act on items designated as action items. Action items on the agenda are staff proposals, and may be modified by the Board as a result of public comment or Board member input. Additional information about Board meeting procedures is included after the last agenda item.

Generally, the Board accepts oral comments at the meeting on agenda items and accepts written materials regarding agenda items in advance of the meeting. For some items requiring public hearings, written materials and oral comments will be accepted only according to the procedures set forth in a previously issued public notice for the particular agenda item. To ensure a fair hearing and that the Board Members have an opportunity to fully study and consider written material, unless stated otherwise, written materials must be provided to the Executive Officer ***not later than 5:00 p.m. on October 29, 2012. Please consult the agenda item description because certain items may have an earlier deadline for written submissions. If you are considering submitting written materials, please consult the notes at the end of the agenda. Failure to follow the required procedures may result in your materials being excluded from the hearing record; however, failure to timely submit written materials does not preclude a person from testifying before the Board.***

INTRODUCTORY ITEMS

1. **Roll Call.**
2. **Order of Agenda.** Note that the agenda items are numbered for identification purposes only and may not necessarily be considered in this order.
3. **Approval of draft meeting minutes for the September 14, 2012, and October 4-5, 2012 Board meetings.** [Ronji Moffett, (213) 576-6612]

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

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4. **Board Member Communications.**
 - 4.a. Ex Parte Disclosure. Board Members will identify any discussions they may have had requiring disclosure pursuant to Government Code section 11430.40.
 - 4.b. Board Member Reports. The Board Members may discuss communications, correspondence, or other items of general interest relating to matters within the Board's jurisdiction.
5. **Update from State Board.** [Fran Spivy-Weber, (916) 341-5607]

UNCONTESTED ACTION ITEMS

(Items marked with an asterisk are expected to be routine and noncontroversial. The Board will be asked to approve these items at one time without discussion. Any Board member or person may request that an item be removed from the uncontested calendar. Items removed from the Consent calendar will be heard at a future meeting.)

Waste Discharge Requirements that Serve as NPDES Permits Amendment-

- *6. Consideration of tentative amendment to the Waste Discharge Requirements for TFX Aviation, Inc. (Former Terlair Site), Newbury Park; NPDES No. CA0064599. (Comment submittal deadline was September 27, 2012) [Rosario Aston, (213) 576-6653]

Amendment and Time Schedule Order-

- *7. Consideration of tentative amendment to the Waste Discharge Requirements and tentative Time Schedule Order for Donald T. Sterling Corporation (Sterling Ambassador Towers) Los Angeles; NPDES No. CA0053091 (Comment submittal deadline was October 4, 2012) [Rosario Aston, (213) 576-6653]

- 7.1 Waste Discharge Requirements
- 7.2 Time Schedule Order

Non-NPDES Waste Discharge Requirements Revision-

- *8. Montebello Land and Water Inert Waste Landfill, Montebello; Order No. 97-066, File No. 70-029. (Comment submittal deadline was September 18, 2012) [Enrique Casas, (213) 620-2299]

CONTESTED ACTION ITEMS

NPDES Permit for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach Renewal-

9. Continuation of public hearing for consideration of the revised tentative National Pollutant Discharge Elimination System (NPDES) Permit for Municipal Separate Storm Sewer System (MS4) discharges within the Coastal Watersheds of Los Angeles County, with the exception of discharges originating from the City of Long Beach, NPDES No. CAS004001 (Revised Tentative Order). No new written materials may be submitted. Parties and interested persons will have the opportunity to address the Regional Board

on the Revised Tentative Order as provided in the Notice of Opportunity for Public Comment and Notice of Adoption Meeting dated October 18, 2012. The Board will accept oral comments only with respect to the revisions made since June 6, 2012, as reflected in track changes format in the Revised Tentative Order circulated on October 18, 2012. The Regional Board may adopt, modify, or deny the Revised Tentative Order, or continue the hearing to a later Board meeting. (*Written comments were due by noon on July 23, 2012.*) [Ivar Ridgeway, (213) 620-2150]

CLOSED SESSION

10. As authorized by Government Code section 11126, the Regional Board will be meeting in closed session. Closed session items are not open to the public. Items the Board may discuss include the following: [Jennifer Fordyce (JF) (916) 324-6682; Frances McChesney (FM), (916) 341-5174; Nicole Johnson (NJ) (916) 322-4142]
 - 10.1 *State Department of Finance, State Water Resources Control Board and Los Angeles Regional Water Quality Control Board v. Commission on State Mandates*, Los Angeles County Superior Court Case No. BS130730. [Challenging the Commission's decision that portions of the LA MS4 permit created unfunded state mandates]. (JF)
 - 10.2 *In re: Halaco Engineering Company*, United States Bankruptcy Court Central District of California, Northern Division, No. ND-02-1255 RR [Regarding a CDO and CAO at the Oxnard Property]. (JF)
 - 10.3 *In re: Los Angeles Region Water Permit – Ventura County*, Commission on State Mandate Test Claim No. 110-TC-01 [Regarding a test claim filed by Ventura County Watershed Protection District and the County of Ventura alleging that portions of Order No. R4-2010-0108 created an unfunded state mandate]. (JF)
 - 10.4 *In re: Petition of City of Redondo Beach for Review of Administrative Civil Liability Order No. R4-2008-0058-M, SWRCB/OCC File A-2124* [Challenging assessment of mandatory minimum penalties for violations of Order Nos. 99-057 and R4-2005-0016]. (FM)
 - 10.5 *In re: Petition of Signal Hill, Downey, et al, for Review of Order No. R4-2009-0130, SWRCB/OCC File A-2071* [Challenging the incorporation into the MS4 Permit of the Waste Load Allocations from the Los Angeles River Watershed Trash TMDL.] (JF)
 - 10.6 *In re: Kinder Morgan, Inc., Chevron Corp., et al for Review of Revised Cleanup and Abatement Order No. R4-2008-0006, SWRCB/OCC File A-2085* [Challenging the revised cleanup goals in the order]. (FM)
 - 10.7 *In re: Upper Santa Clara River Chloride Total Maximum Daily Load Requirements Imposed by the Los Angeles Regional Water Quality Control Board in Resolution R40-2008-0012*. Commission on State Mandates Test Claim No. 10-TC-09 [Regarding a test claim filed by the Santa Clarita Valley Sanitation District of Los Angeles County alleging that portions of Resolution R4-2008-0012 created an unfunded state mandate]. (JF)
 - 10.8 *Joan C. Lavine v. State Water Resources Control Board and Los Angeles Regional Board*, Los Angeles County Superior Court Case No. BS128989 [Challenging the Basin Plan Amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
 - 10.9 *Charles Conway et al. v. State Water Resources Control Board and Los Angeles Regional Water Quality Control Board*, Ventura County Superior Court Case No.

- 56-2011-00399391-CU-WM-VTA [Challenging the McGrath Lake TMDL for polychlorinated biphenyls (PCBs), pesticides, and sediment toxicity]. (JF)
- 10.10 *In re: Petition of Santa Monica Baykeeper and Heal the Bay, SWRCB/OCC File A-2175* [Challenging the Memorandum of Understanding between the City of Malibu, the Los Angeles Regional Board, and the State Water Resources Control Board regarding phased implementation of the Basin Plan amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
- 10.11 *Green Acres, LLC v. Los Angeles regional Water Quality Control Board and State Water Resources Control Board*, Los Angeles County Superior Court Case No. BS138872 [Challenging the Basin Plan Amendment prohibiting on-site wastewater disposal systems in the Malibu Civic Center area]. (FM)
- 10.12 *Valetor, Inc. et al. v. Los Angeles Regional Water Quality Control Board*, Los Angeles County Superior Court Case No. BS138361 [Challenging Cleanup and Abatement Order No. R4-2011-0183 and associated Notice of Violation] (NJ)
- 10.13 Consultation with counsel about:
- (a) A judicial or administrative adjudicatory proceeding that has been formally initiated to which the Regional Board is a party;
 - (b) A matter that, based on existing facts and circumstances, presents significant exposure to litigation against the Regional Board; or
 - (c) A matter which, based on existing facts and circumstances, the Regional Board is deciding whether to initiate litigation. (JF/FM/NJ)
- 10.14 Consideration of the appointment, employment, or evaluation of performance about a public employee. (JF/FM/NJ)
11. **Adjournment of current meeting.** The next regular meeting of the Board will be held on December 6, 2012 at City of Simi Valley Council Chambers, 2929 Tapo Canyon Road, Simi Valley, CA 93063.

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Ex Parte Communications: An ex parte communication is a communication to a board member from any person, about a pending matter, that occurs in the absence of other parties and without notice and opportunity for them to respond. The California Government Code prohibits the board members from engaging in ex parte communications during permitting, enforcement, and other "quasi-adjudicatory" matters. The Regional Board discourages ex parte communications during rulemaking and other "quasi-legislative" proceedings. The ex parte rules are intended to provide fairness, and to ensure that the board's decisions are transparent, based on the evidence in the administrative record, and that evidence is used only if stakeholders have had the opportunity to hear and respond to it. Ex parte rules do not prevent anyone from providing information to the water boards or requesting that the water boards take a particular action. They simply require that the information come into the record through proper channels during a duly noticed, public meeting. A board member who has engaged or been engaged in a prohibited ex parte communication will be required to publicly disclose the communication on the record and may be disqualified from participating in the proceeding. For more information, please look at the ex parte questions and answers document found at www.waterboards.ca.gov/laws_regulations/docs/exparte.pdf

Procedures: The Regional Board follows procedures established by the State Water Resources Control Board. These procedures are established in regulations commencing with

section 647 of title 23 of the California Code of Regulations. The Chair may establish specific procedures for each item, and consistent with section 648, subdivision (d) of title 23 of the California Code of Regulations may waive nonstatutory provisions of the regulations. Generally, all witnesses testifying before the Regional Board must affirm the truth of their testimony and are subject to questioning by the Board Members. The Board does not, generally, require the designation of parties, the prior identification of witnesses, or the cross examination of witnesses. Generally, speakers are allowed three minutes for comments. Any requests for an alternate hearing process, such as requesting additional time to make a presentation, should be made to the Executive Officer in advance of the meeting, and under no circumstances later than 5:00 p.m. on the Thursday preceding the Board meeting. The provisions of this paragraph shall be deemed superseded to the extent that they are contradicted by a hearing notice specific to a particular agenda item.

Written Submissions: Written materials (whether hand-delivered, mailed, e-mailed, or facsimiled) *must be received prior to the relevant deadline* established in the agenda and public notice for an item. If the submitted material is more than 10 pages or contains foldouts, color graphics, maps, or similar items, 12 copies must be submitted prior to the relevant deadline.

Failure to comply with requirements for written submissions is grounds for the Chair to refuse to admit the proposed written comment or exhibit into evidence. (Cal. Code Regs. tit. 23, § 648.4(e).) The Chair may refuse to admit written testimony into evidence unless the proponent can demonstrate why he or she was unable to submit the material on time or that compliance with the deadline would otherwise create a hardship. In an adjudicatory matter, where there is a showing of prejudice to any party or the Board from admission of the written testimony, the Chair may refuse to admit it.

Administrative Record: Material presented to the Board as part of testimony that is to be made part of the record must be left with the Board. This includes photographs, slides, charts, diagrams, etc. All Board files pertaining to the items on this Agenda are hereby made a part of the record submitted to the Regional Board by staff for its consideration prior to action on the related items.

Accessibility: Individuals requiring special accommodations or language needs should contact Dolores Renick at (213) 576-6629 or drenick@waterboards.ca.gov at least ten working days prior to the meeting. TTY/TDD Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

Availability of Complete Agenda Package: A copy of the complete agenda package is available for examination at the Regional Board Office during regular working hours (8:00 a.m. to 5:00 p.m. Monday through Friday) beginning 10 days before the Board meeting. Questions about specific items on the agenda should be directed to the staff person whose name is listed with the item.

Continuance of Items: The Board will endeavor to consider all matters listed on this agenda. However, time may not allow the Board to hear all matters listed. Matters not heard at this meeting may be carried over to the next Board meeting or to a future Board meeting. Parties will be notified in writing of the rescheduling of their item. Please contact the Regional Board staff to find out about rescheduled items.

Challenging Regional Board Actions: Pursuant to Water Code section 13320, any aggrieved person may file a petition to seek review by the State Water Resources Control Board of most actions taken by the Regional Board. A petition must be filed within 30 days of the action. Petitions must be sent to State Water Resources Control Board, Office of Chief Counsel; ATTN: Phil Wyels, Assistant Chief Counsel; 1001 "I" Street, 22nd Floor; Sacramento, CA 95814.

**Change Sheet for the 2nd Revised Tentative NPDES Permit for Municipal Separate Storm Sewer System
 (MS4) Discharges within the Coastal Watersheds of Los Angeles County,
 Except those Discharges Originating from the City of Long Beach MS4**

Page #	Section	Added or Deleted Text (additions are underlined, deletions are strikethrough)	Reason for Change
CHANGES to ORDER NO. R4-2012-XXX			
2	Order	Change the contact information in Table 2. Facility Information for the City of Arcadia to the following: 11800 Goldring Road Arcadia, CA 91066 Vanessa Hevener, Environmental Services Officer vhevener@ci.arcadia.ca.us (626) 305-5327 (626) 359-7028 fax	The contact person has changed.
8	Order	Change the contact information in Table 2. Facility Information for the City of Westlake Village to the following: Joe Bellomo, Stormwater Program Manager (805) 279-6856 jbellomo@willdan.com	A certification authorization form was submitted.
79	Order	Replace language in vi.(3)(b) to read: Ensure there is no application of pesticides or fertilizers (1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA, (2) within 48 hours of a ½-inch rain event, or (3) when water is flowing off the area where the application is to occur. This requirement does not apply to the application of aquatic pesticides or pesticides	Language included for consistency between LACFCD section and Public Agency section language.

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		which require water for activation.	
82-83	Order	Language in x.(2) changed to read: The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). <u>Outside contractors can self-certify, providing they certify they have received all applicable training required in the Order and have documentation to that effect.</u>	Language included for consistency between LACFCD section and Public Agency section language.
129	Order	Language in e.iii. changed to read: Each Permittee shall ensure the implementation and maintenance of activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) <u>or an equivalent set of BMPs</u> when such activities...	Language revised for consistency between LACFCD section and Public Agency section language.
138	Order	Language in j.i.(3) changed to read: Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than three days <u>one week</u>) are not subject to the notification provisions. Appropriate BMPs to reduce the threat to water quality shall be implemented.	Language revised for consistency between LACFCD section and Public Agency section language.
CHANGES to ATTACHMENT A – DEFINITIONS			
A-4	Attachment A - Definitions	Change title of definition to read “Construction <u>Activity</u> ”	Language revised to be consistent with definition
CHANGES to ATTACHMENT E – MONITORING AND REPORTING PROGRAM			
E-9	Attachment E – MRP	For the Santa Clara River Nitrogen Compounds TMDL add “ <u>March 2006</u> ” to Date of Final Plan column and “ <u>Has not been approved.</u> ” to Regional Water Board Approval Date column.	The monitoring plan was submitted.

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E-12	Attachment E – MRP	For the Los Angeles River Nitrogen Compounds and Related Effects TMDL add “ <u>March 23, 2005</u> ” to Date of Final Plan column and “ <u>Has not been approved.</u> ” to Regional Water Board Approval Date column.	The monitoring plan was submitted.
CHANGES to ATTACHMENT F – FACT SHEET			
F-6	Attachment F – Fact Sheet	Insert “approx.. 3672.9” for the total area in square miles	Information was missing
CHANGES to ATTACHMENT H – BIORETENTION/ BIOFILTRATION DESIGN CRITERIA			
H-2	Attachment H	Add the following language to the end of part 4.f: <u>California is in the process of adopting its 2012 update to the Uniform Plumbing Code that incorporates the IAPMO Green Plumbing and Mechanical Code Supplement. If the State of California update incorporates the IAPMO Green Plumbing and Mechanical Code Supplement, Permittees are not adopt a model ordinance addressing the potential use of harvested rainwater for non-potable uses including toilet flushing, laundry, and cooling water makeup water.</u>	State of California is in the process of updating the Uniform Plumbing Code.
CHANGES to ATTACHMENT K – PERMITTEES AND TMDLS MATRIX			
K-4 through K-10, and K-18	Attachment K – Permittees and TMDLs Matrix	The following language will be added as a Footnote to the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL in Tables K-4, K-5, K-6, K-7, and K-13: <u>The requirements of this Order to implement the obligations of this TMDL do not apply to a Permittee to the extent that it is determined that the Permittee has been released from that obligation pursuant to the Amended Consent Decree entered in <i>United States v. Montrose Chemical Corp.</i>, Case No. 90-3122 AAH (JRx).</u>	Language was requested by the County of Los Angeles and LACFCD.
CHANGES to ATTACHMENT M – TMDL PROVISIONS FOR SANTA MONICA BAY WATERSHED MANAGEMENT AREA			
M-1	Attachment	Substitute the following language at part A.3:	To clarify the geometric

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	M – TMDLs in the SMB WMA	Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each individual monitoring location, <u>calculated as defined in the revised Santa Monica Bay Beaches Bacteria TMDL</u> , no later than July 15, 2021.	mean requirements.
M-10	Attachment M – TMDLs in the SMB WMA	In Table M-3: delete row SMB 5-2	Monitoring location SMB 5-2 is not subject to the antidegradation implementation provision in the TMDL.
M-14	Attachment M – TMDLs in the SMB WMA	Substitute the following language at part A.4.h: Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, <u>calculated as defined in the revised Santa Monica Bay Beaches Bacteria TMDL</u> , no later than July 15, 2021:	To clarify the geometric mean requirements.
M-16 and M-17	Attachment M – TMDLs in the SMB WMA	Substitute the following language at parts D.1.b.ii and D.1.b.iv: Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location, <u>calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL</u> , no later than July 15, 2021.	To clarify the geometric mean requirements.
M-18	Attachment M – TMDLs in the SMB WMA	Substitute the following language at part D.1.c.v: Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for discharges to Malibu Lagoon, <u>calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL</u> , no later than July 15, 2021:	To clarify the geometric mean requirements.

M-19	Attachment M – TMDLs in the SMB WMA	<p>Substitute the following language at part D.1.c.vii:</p> <p>Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for discharges to Malibu Creek and its tributaries, <u>calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL</u>, no later than July 15, 2021:</p>	To clarify the geometric mean requirements.
M-23 and M-24	Attachment M – TMDLs in the SMB WMA	<p>Substitute the following language at parts E.3.b.ii and E.3.b.iv:</p> <p>Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location, <u>calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL</u>, no later than July 15, 2021.</p>	To clarify the geometric mean requirements.
M-27	Attachment M – TMDLs in the SMB WMA	<p>Substitute the following language at part E.3.c.vii</p> <p>Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary, <u>calculated as defined in the revised TMDL</u>, no later than July 15, 2021:</p>	To clarify the geometric mean requirements.
M-28	Attachment M – TMDLs in the SMB WMA	<p>Substitute the following language at part E.3.c.ix</p> <p>Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel, <u>calculated as defined in</u></p>	To clarify the geometric mean requirements.

		<u>the revised TMDL</u> , no later than July 15, 2021:	
M-28	Attachment M – TMDLs in the SMB WMA	Substitute the following language at part E.3.c.ix Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitation for discharges to Ballona Creek Reach 1, <u>calculated as defined in the revised TMDL</u> , no later than July 15, 2021:	To clarify the geometric mean requirements.
M-31	Attachment M – TMDLs in the SMB WMA	Substitute the following language at part F.1.c: Permittees shall comply with the following year-round geometric mean final water quality-based effluent limitations for each monitoring location, <u>calculated as defined in the revised Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL</u> , no later than July 15, 2021.	To clarify the geometric mean requirements.
M-33	Attachment M – TMDLs in the SMB WMA	Substitute the following language at part F.1.d.vi: Upon the effective date of the revised Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following year-round geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F, <u>calculated as defined in the revised Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL</u> , no later than July 15, 2021:	To clarify the geometric mean requirements.
CHANGES to RESPONSE TO COMMENTS ON TENTATIVE ORDER			
D-3	WMP Matrix	Revise last sentence in response to Inglewood and La Verne regarding reopener to read: The tentative order has been revised to include a re-opener prior to the final compliance deadlines, if practicable, that would allow an action based, BMP compliance demonstration approach with regard to final QBELs for storm water discharges based on the Regional Board’s <u>evaluation of whether Watershed Management Programs in Part VI.C. have</u>	To be consistent with reopener provision in the Order

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		<u>resulted in attainment of interim WQBELs for storm water and review of relevant research on storm water quality and the efficacy and reliability of storm water control technologies and the effectiveness of the approach in achieving interim WQBELs.</u>	
D-4	WMP Matrix	In the second paragraph, delete the first “For water body-pollutant combinations not addressed by a TMDL,”	Correct a typographical error as the clause is repeated twice
D-6	WMP Matrix	Revise the response to the City of La Verne as follows: The tentative order has been revised to clarify that Permittees are required to continue to implement <u>watershed control measures</u> in their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv), <u>continue to implement watershed control measures to eliminate non-storm water discharges through the MS4 that are a source of pollutants to receiving waters consistent with CWA section 402(p)(3)(B)(ii), and implement watershed control measures, where possible from existing TMDL implementation plans, to ensure that MS4 discharges sufficient to achieve compliance with interim and final trash WQBELs and all other final WQBELs and receiving water limitations applicable to the Permittee(s) pursuant to Part VI.E. and set forth in Attachments L-R in satisfaction of by the applicable compliance deadlines occurring prior to approval of the a Watershed Management Program.</u>	To be consistent with language in the Order
D-14	WMP Matrix	Revise the last response to the City of Santa Monica Detailed to read: “Table 9 has been revised to state, “upon approval of final plan by Regional Water Board Executive Officer. ”	To be consistent with language in the Order
D-27	WMP Matrix	Revise the first response to the County of Los Angeles to read: The tentative order has been revised to clarify that Permittees electing to develop a WMP are required to continue to implement <u>watershed control measures in</u> their existing storm water management programs, including actions within each of the six categories of	To be consistent with language in the Order

		<p>minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv), continue to implement watershed control measures to eliminate non-storm water discharges through the MS4 that are a source of pollutants to receiving waters consistent with CWA section 402(p)(3)(B)(ii), as well as and implement watershed control measures, where possible from existing TMDL implementation plans, to ensure that MS4 discharges achieve compliance with interim and final trash WQBELs and all other final WQBELs and RWL receiving water limitations pursuant to Part VI.E. and set forth in Attachments L-R with compliance deadlines occurring prior to approval of the a Watershed Management Program by the Regional Water Board Executive Officer.</p>	
D-27 to D-28	WMP Matrix	<p>Replace the last response to the County of Los Angeles to read:</p> <p>The tentative order has been revised to state that implementation of the WMP shall begin upon approval of the final plan by the Regional Water Board Executive Officer.</p>	To be consistent with language in the Order
D-29	WMP Matrix	<p>Replace the first sentence of the response to LACFCD to read:</p> <p>Part VI.E. of the tentative order has been revised to state that “Where necessary to achieve applicable WQBELs and receiving water limitations, structural storm water BMPs should be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm at a minimum. Structural storm water BMPs or systems of BMPs should be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm, where feasible and necessary to achieve applicable WQBELs and receiving water limitations...”</p>	To be consistent with the language in the Order
F-12 to F-13	TMDL General Matrix	<p>Revise the last sentence of the response to LA Permit Group, La Verne, and Pomona to read:</p> <p>Further, the permit has been revised to include a provision in Part VI.A.7.a under causes for modification to support a reopener of the permit to include provisions or modifications to WQBELs in Part VI.E. and Attachments L-R of the permit prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration</p>	To be consistent with the language in the Order

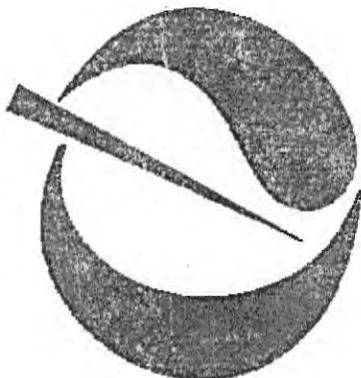
		<p>approach with regard to final WQBELs for storm water discharges based on the Regional Board's <u>evaluation of whether Watershed Management Programs in Part VI.C. have resulted in attainment of interim WQBELs for storm water and review of relevant research on storm water quality and the efficacy and reliability of storm water control technologies and the effectiveness of Watershed Management Programs in achieving interim WQBELs.</u></p>	
F-69	TMDL General Matrix	<p>Revise the last sentence of the response to the LACFCD and County of Los Angeles to read:</p> <p>The tentative permit has been revised to <u>include a provision to allow provide</u> for review <u>prior to two years before</u> the final compliance deadlines to evaluate whether a BMP based approach to final WQBELs is supportable.</p>	To be consistent with the language in the Order
G-5 and G-6	TMDL Specific Matrix	<p>Change the Regional Water Board's response to LACFCD comment 76 to indicate that the change requested by LACFCD was made to Attachment K, Table K-1 as follows:</p> <p><u>LACFCD was removed as a Permittee under the Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL.</u></p>	The TMDL is outside the LACFCD service area.
G-26 to G-27	TMDL Specific Matrix	<p>Revise the fourth sentence of the second response to the City of Los Angeles to read:</p> <p>If an action based compliance approach is effective in achieving compliance with interim effluent limitations for storm water during this permit term, the tentative order has been revised to include an additional cause for modification in Part VI.A.7.a. that would allow modifications to Part VI.E. and Attachments L-R to allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's <u>evaluation of whether Watershed Management Programs in Part VI.C. have resulted in attainment of interim WQBELs for storm water and review of relevant research on storm water quality and the efficacy and reliability of storm water control technologies.</u></p>	To be consistent with the language in the Order

Change Sheet
 November 8, 2012
 California Regional Water Quality Control Board, Los Angeles Region

G-31 to G-32	TMDL Specific Matrix	<p>Revise the last sentence of the new provision in the response to the City of Pomona to read:</p> <p>The CBRP may be developed in lieu of the Watershed Management Program for <u>MS4 discharges of bacteria within the Middle Santa Ana River Watershed.</u></p>	To be consistent with the language in the Order
G-35 to G-36	TMDL Specific Matrix	<p>Revise the last sentence of the second response to the City of Claremont to read:</p> <p>If an action based compliance approach through implementation of a CBRP is effective in achieving compliance with interim effluent limitations for storm water, the tentative order has been revised to include an additional cause for modification in Part VI.A.7.a. that would allow modifications to Part VI.E. and Attachments L-R to allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's <u>evaluation of whether Watershed Management Programs have resulted in attainment of interim WQBELs for storm water and review of relevant research on storm water quality and the efficacy and reliability of storm water control technologies.</u></p>	To be consistent with the language in the Order
H-37 to H-38	General and Misc. Matrix	<p>Replace the entire response to the last comment by the County of Los Angeles regarding Part VI.A.11 and VI.A.12 as follows:</p> <p><u>Part VI.A.12 is routinely required in NPDES permits issued by the Board. This provision is also appropriate as oily material should not be discharged from the MS4 to receiving waters. Unless covered by the exemption for emergency fire-fighting activities, such discharges are not authorized in this Order.</u></p> <p><u>The Board agrees that Part VI.A.11. is not applicable to this MS4 permit and should be deleted.</u></p>	To be consistent with the language of the Order
H-38	General and Misc. Matrix	<p>Replace the entire response to the first comment by the City of Torrance regarding Part VI.A.11 as follows:</p>	To be consistent with the language of the Order

Change Sheet
 November 8, 2012
 California Regional Water Quality Control Board, Los Angeles Region

		<u>The Board agrees that Part VI.A.11 should be deleted.</u>	
H-46	General and Misc. Matrix	<p>Replace the entire response to MWD as follows:</p> <p>Definitions of potable water and raw water have been added to Attachment A – Definitions. A definition of potable water distribution systems releases was also added, but later revised and re-termed “drinking water supplier distribution systems releases” based on further comments by MWD.</p>	To be consistent with the language in Attachment A - Definitions

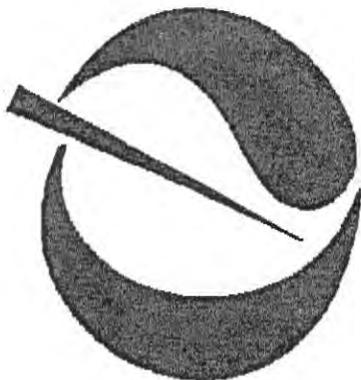


State of California
 Environmental Protection Agency
 State Water Resources Control Board
 Los Angeles Regional Water Quality Control Board

SIGN-IN SHEET

Board Meeting
 November 8, 2012

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
JOE BELLINO	Citrus & Agoura Hills & Westlake Villages LA Permit Group 31200 Oak Crest Dr Westlake Village	jbellino@willdsw.com	
KEN BRADBURY	Montebello Land & Water Co 344 E. Madison Ave, Montebello CA 90640	ken@mtblw.com	
TRACY EGOSUE	ELG / County of Los Angeles	tracy@egosue-law.com	
GARY HILDBRAND	County of Los Angeles / Flood Control		
JR RANELLS	City of La Verne	jranelle@ci.la-verne.ca.us	
ARACELY LASSO	County of Los Angeles / Flood Control District	alasso@dpw.lacounty.gov	
KIRSTEN JAMES	Heal the Bay	kjames@healthebay.org	
GLADIS DERAS	City of Pico Rivera	gderase@pico-rivera.org	

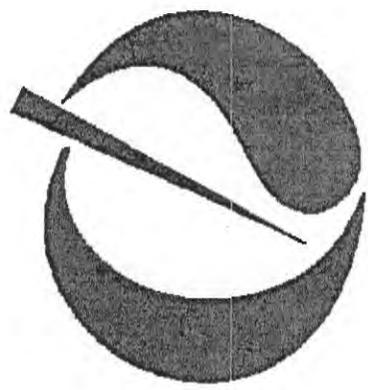


State of California
 Environmental Protection Agency
 State Water Resources Control Board
 Los Angeles Regional Water Quality Control Board

SIGN-IN SHEET

Board Meeting
 November 8, 2012

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Claudia Arellano	City of Vernon 7305 Santa Fe Ave, Vernon 90051	carellano@ci.vernon.ca.us	
RAFAEL CASILLAS	CITY OF DUARTE 1600 HUNTINGTON, DUARTE CA 91010	rcasillas@ accessduarte.com	
JERRY BURKE	CITY OF GLENDALE, 116 E. FOOTHILL BLVD 91741	JBURKE@CI.GLENDALE.CA.US	
Jim THORSEN	CITY OF MALIBU		
JOAN HOUSE	" " "		
Gerald Greene	CWE	ggreene@cwecorp.com	
Lauren Langer	Malibu	llanger@ocal.gov	
Cindy LIN	USEPA 600 Wishore Blvd, Suite 1460 CA, CA	lin.cindy@epa.gov	

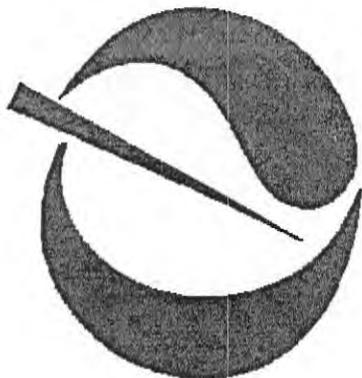


State of California
 Environmental Protection Agency
 State Water Resources Control Board
 Los Angeles Regional Water Quality Control Board

SIGN-IN SHEET

Board Meeting
 November 8, 2012

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
BARMESMUR RAI	CITY OF INGLEWOOD	brai@cityofinglwood.org	
Mike Shay	City of Richland Beach	Mike.shay@richland.org	
Frank Wu	County of LA	fwu@dpw.lacounty.gov	
Elroy Kiepler	Rosemead, Paramount La Canada Flintridge	ekiepler@willdan.com	
Oliver Cramer	Santa Clarita	ocramer@ santa-clarita.com	
Stephen Millard	Upper San Gabriel Valley MWD	stephen.millard1@verizon.net	
Julie Carver	City of Pomona	Julie.Carver@pomona.ca.us	
Jewel DeGuzman	Generation Water	jewel@generationwater.org	

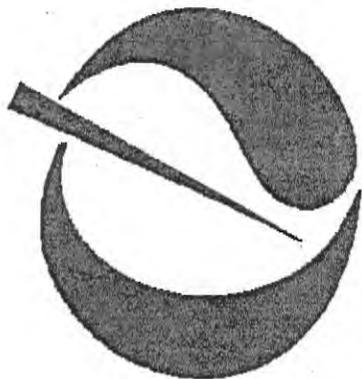


State of California
 Environmental Protection Agency
 State Water Resources Control Board
 Los Angeles Regional Water Quality Control Board

SIGN-IN SHEET

Board Meeting
 November 8, 2012

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
John Hunter	JCHA	562 802 7880	
Richard Watson	RWA	949 -855-6272	
Daniel Cullum	MWD	760 213-217-5507	
VAIKKO ALLEN	CONTECH ENGINEERED SOLUTIONS	710-850-1736	
Susan Reyes	Senator Ed Hernandez		
Leslie Tamminen	Seventh Generation Advisors	310 7803344	
Bernardo Triguera	City of Bellflower	562-804-1424	
Esther Kim	UC Berkeley	ekim@berkeley.edu	



State of California
 Environmental Protection Agency
 State Water Resources Control Board
 Los Angeles Regional Water Quality Control Board

SIGN-IN SHEET

Board Meeting
 November 8, 2012

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Janet Bell	jbell@metkhaor.com	—	—
Ricardo Moreno	SOCAL Edison. ricardo.moreno@sce.com	—	—
Rita Danha	Mojeres de la Tierra	rita.mercedes.davin@gmail.	
Lauren Amimoto	lamiimoto@cityofinglewood.	org 310-412-5192	X
Andy Lipkis	TreePeople	aldie@treepeople.org	
Latoya Cyrus	City of San Dimas		
Clayton Yoshida	clayton.yoshida@ladwp.com		—

(1)

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/9/12

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. LA. SW Permit
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: Gerhardt Hubner
 Representing Self
 Representing: Ventura Countywide Stormwater

Unless exempted by the Board, comments are limited to three (3) minutes.

Program

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

Elected official

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: KEN MANNING
 Representing Self
 Representing: San Gabriel Valley

Water Quality Authority

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

(3)

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: SUSAN REYES
 Representing Self
 Representing: Senator Ed Hernandez

Elected official

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

RB-AR20987

(3)
Elected

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: LOUIS AGUINAGA, MAYOR OF SOUTH EL MONTE
 Representing Self
 Representing: CITY OF SOUTH EL MONTE

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

(3)
Elected
Official

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11-8-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: Patricia Elkins
 Representing Self
 Representing: Mayor Jim Dear

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

RB-AR20988

Elected

SPEAKER REQUEST CARD

Date: 11-8-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: STEVE MANDOKI, CITY MANAGER
 Representing Self
 Representing: CITY OF LAUNDALE

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

(4)
USEPA

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: John Kemmerer
 Representing Self
 Representing: US EPA

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/6/2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Joe Bellano, Heather Merenda, Heather Maloney, John Dettle
 Representing Self
 Representing: LA Permil Group

Unless exempted by the Board, comments are limited to three (3) minutes.

(5)(B)

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: LAUREN LANGER / Jim THORSEN / JOANNE HOUSE
 Representing Self
 Representing: CITY OF MALIBU

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11-8-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No.
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No.
- I oppose Agenda Item No.

Name: Ran TAHIR

Representing Self
 Representing: MULTIPLE CITIES

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 8NOV12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No.
- I oppose Agenda Item No.

Name: Richard WATSON

Representing Self
 Representing: City of Signal Hill

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No.
- I oppose Agenda Item No.

Name: Mike Shanley & KATHLEEN MCGOWAN

Representing Self

Representing: Juris 5863 Redondo Beach, Manhattan Bch
Hermosa Beach & TORRANCE

Unless exempted by the Board, comments are limited to three (3) minutes.

10 min allocated

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

(5)(F)

SPEAKER REQUEST CARD

Date: 11/8/12

** 40 minutes granted*

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9 (MS4)
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No.
- I oppose Agenda Item No.

Name: Kirsten James, Steve Fleishli, Liz Crosson

Representing Self

Representing: Heal the Bay, NRDC, LA Waterkeeper

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

RB-AR20992

Los Angeles Regional Water Quality Control Board

Gail Farber
Director of Public Work
Gary Hildebrand
Tracy Egoscue

SPEAKER REQUEST CARD

Date: 11/9/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: CDS Angeles County / CA County Flood Control
 Representing Self
 Representing: _____ District

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

5 (H)

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: Nov. 8, 2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: Shahram Kharaghani
 Representing Self
 Representing: City of Los Angeles

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda-Item.No. _____

Name: Andy Lipkis

Representing Self

Representing: Tree People

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

(5)(I)

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Ran Bay City of Marina

Representing Self

Representing: City of Marina

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: John Hunter
 Representing Self
 Representing: Downey, Norwalk, South Gate, Montebello Park

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

(505) (20)

SPEAKER REQUEST CARD

Date: 11/8/2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Dr. JASON WEN
 Representing Self
 Representing: City of Downey

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: November 8

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Mark Gold

- Representing Self
- Representing: _____

Unless exempted by the Board, comments are limited to three (3) minutes.

(5)(1)

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9 (ms4)
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: David Nahai

- Representing Self
- Representing: _____

Unless exempted by the Board, comments are limited to three (3) minutes.

(I)

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/28/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: James Alamillo

- Representing Self
- Representing: _____

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

5 (I)

SPEAKER REQUEST CARD

Date: 11/8

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 8? MS4P
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- Request change to RAA
- I support Agenda Item No. _____
 - I oppose Agenda Item No. _____

Name: Gerald Greene

- Representing Self
- Representing: _____

Unless exempted by the Board, comments are limited to three (3) minutes.

5 (I)

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/2011

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. _____
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: ANDRE MONETTE

 Representing Self
 Representing: CITY OF CLERMONT

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

5 (I)

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Vivian Castro

 Representing Self
 Representing: city of calina

Unless exempted by the Board, comments are limited to three (3) minutes.

(I)

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11-8-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Patricia Elkins

- Representing Self
- Representing: self - public comment (2 minutes or less)

Unless exempted by the Board, comments are limited to three (3) minutes.

5 (I)

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Ricardo Moreno

- Representing Self
- Representing: Southern California Edison

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

RB-AR20999
5 (1)

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: Meg McWade
 Representing Self
 Representing: City of Pomona

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. _____
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: KARIN FLORES
 Representing Self
 Representing: FRIENDS OF THE LA RIVER

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Elroy Kiepke
 Representing Self
 Representing: Paramount, Resimend and La Canada Flintridge

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11-8-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9 (MS4)
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Joe Geever
 Representing Self
 Representing: Sarbrider Foundation

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: JERRY BURKE

- Representing Self
- Representing: _____

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

(6) ~~_____~~ ~~_____~~

SPEAKER REQUEST CARD

Date: Nov. 8, 2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
- I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: Jewel DeGuzman

- Representing Self
- Representing: Generation Water

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

RB-AR21002
(e)

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/08/12

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 9 (MS4 PERMIT)
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: LESLIE TAMMINEN
 Representing Self
 Representing: SEVENTH GENERATION ADVISORS

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

(A)

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

8 Minutes

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. Item 9 MS4 PERMIT
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: MARK COREY
 Representing Self
 Representing: BIA of Southern California / CONSTRUCTION Industry COALITION on WATER QUALITY

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

(6) RB-AR21003

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 9
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: Joyce Clark / Dan Guillary
 Representing Self
 Representing: MWD

Unless exempted by the Board, comments are limited to three (3) minutes.

State of California
Environmental Protection Agency
Water Resources Control Board

Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/8/12

I wish to speak during the Board Meeting:

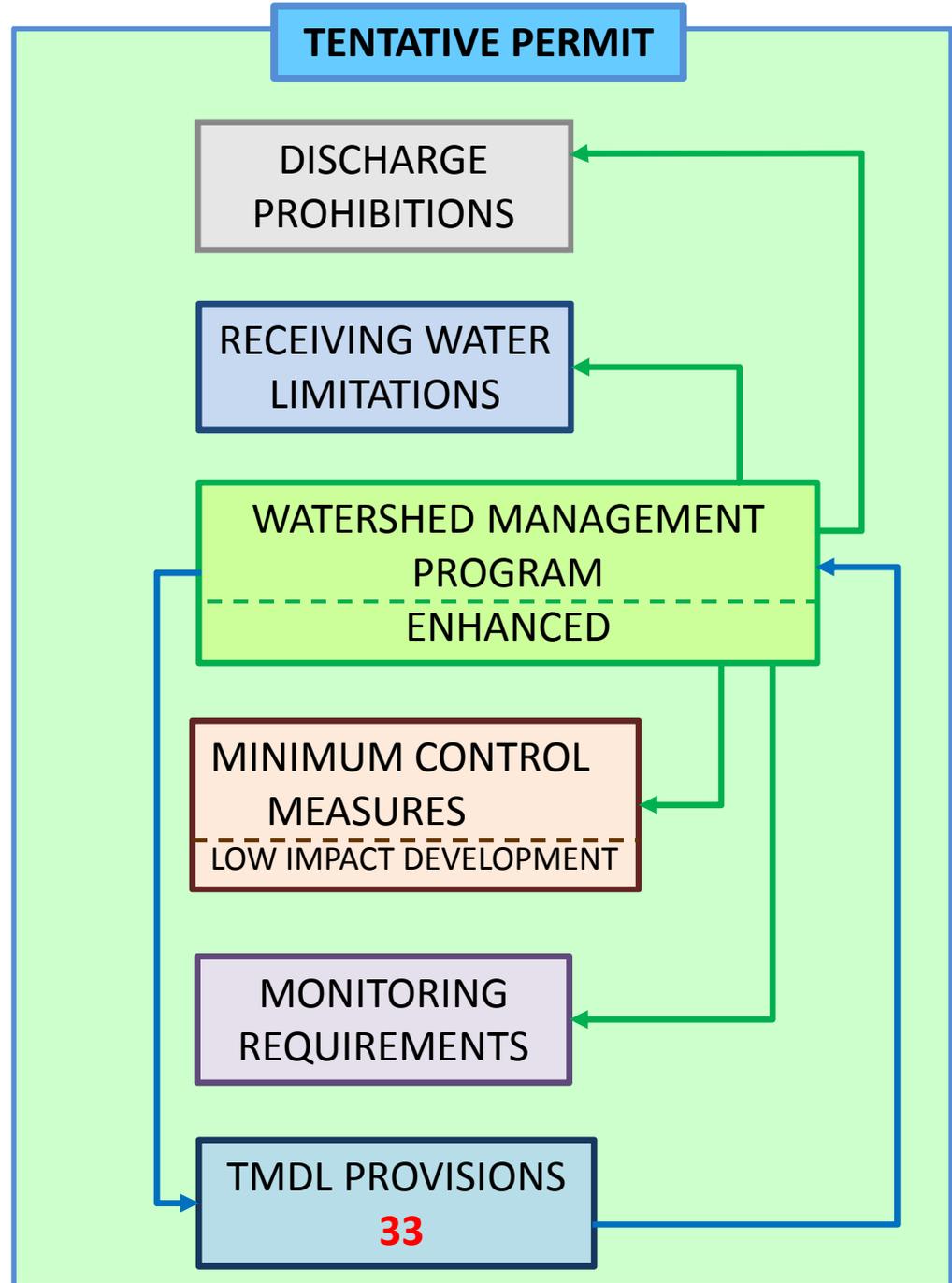
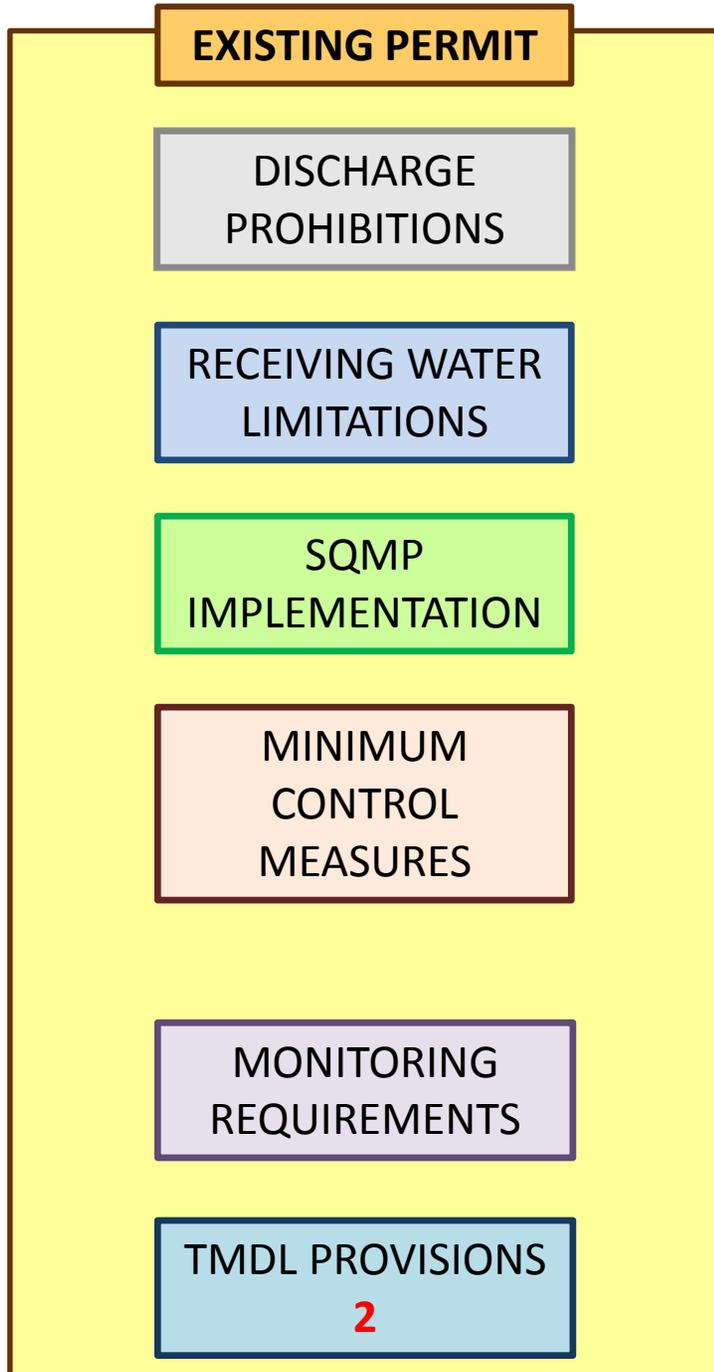
- I wish to speak on Agenda Item No. 9 (MS4)
 I wish to speak during Public Forum on a non-agenda item.

I do not wish to speak but I do want to express the following position:

- I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: Jason Weiner
 Representing Self
 Representing: Wishoyo Foundation and its
Ventura Coastkeeper Program

Unless exempted by the Board, comments are limited to three (3) minutes.



MS 4 Permit Themes

- Water Quality Focused
 - Implements 33 TMDLs
 - Clear Compliance Determination
 - Pollution Prevention (Low Impact Development)
- Watershed Management
 - Sound Science
 - Flexibility to Prioritize Core Requirements
 - Fosters Collaboration
 - Cost Effective
- Multi-Beneficial Uses
 - Sustainability
 - Habitat
 - Recreation

STATE WATER RESOURCES CONTROL BOARD

Office of Research, Planning and Performance (ORPP)



CALIFORNIA

Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

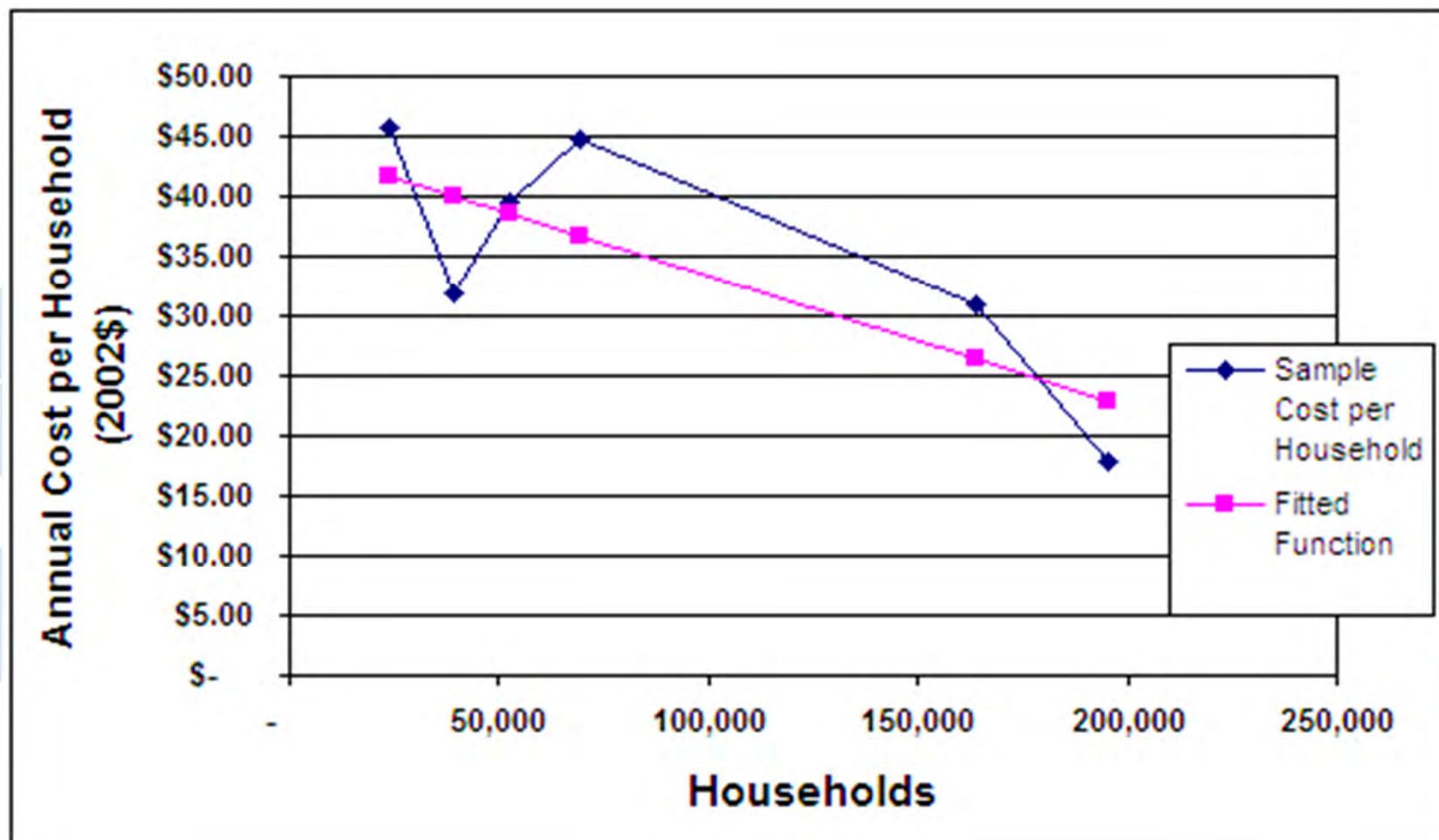
Los Angeles County MS4 Permit Cost Considerations

LA Co MS4 Permit Cost Considerations

- CSUS, Dept of Civil Engineering, 2005,
 - Six CA Cities
 - Encinitas, San Diego Co, small, coastal, tourism
 - Fremont, Bay Area, integrated countywide program
 - Santa Clarita, LA Co, tourism, industrial
 - Corona, Riverside Co, industrial
 - Sacramento, pumped stormwater, large city
 - Fresno-Clovis, 65-90% infiltration, fully integrated multi-city program
 - \$18-\$46 per household annually (2002\$)

LA Co MS4 Permit Cost Considerations

- CSUS, Dept of Civil Engineering, 2005,
 - Six CA Cities: Cost per household annually (2002\$)
 - Encinitas: \$46
 - Fremont: \$45
 - Santa Clarita: \$39
 - Corona: \$32
 - Sacramento: \$29
 - Fresno-Clovis: \$18



LA Co MS4 Permit Cost Considerations

- Size Matters

 - Economies of Size and Scale

 - Costs per unit decrease as size increases

- Cooperation with Other Cities/County

- Terrain

 - Inland, Coastal, Mountain, Slope, Soil

- Land Use

 - Industrial, Residential, Commercial, Open Space

LA Co MS4 Permit Cost Considerations

- Population Density
- Climate and Weather
- Cost Reporting Procedures
 - Evaluate BMPs
 - Define Cost Categories
 - Develop Cost Allocation Rules
 - Comprehensive Annual Financial Report
 - Update Annually Across All Entities

**NPDES Permit for MS4 Discharges within the
Coastal Watersheds of Los Angeles County,
with the exception of Long Beach**

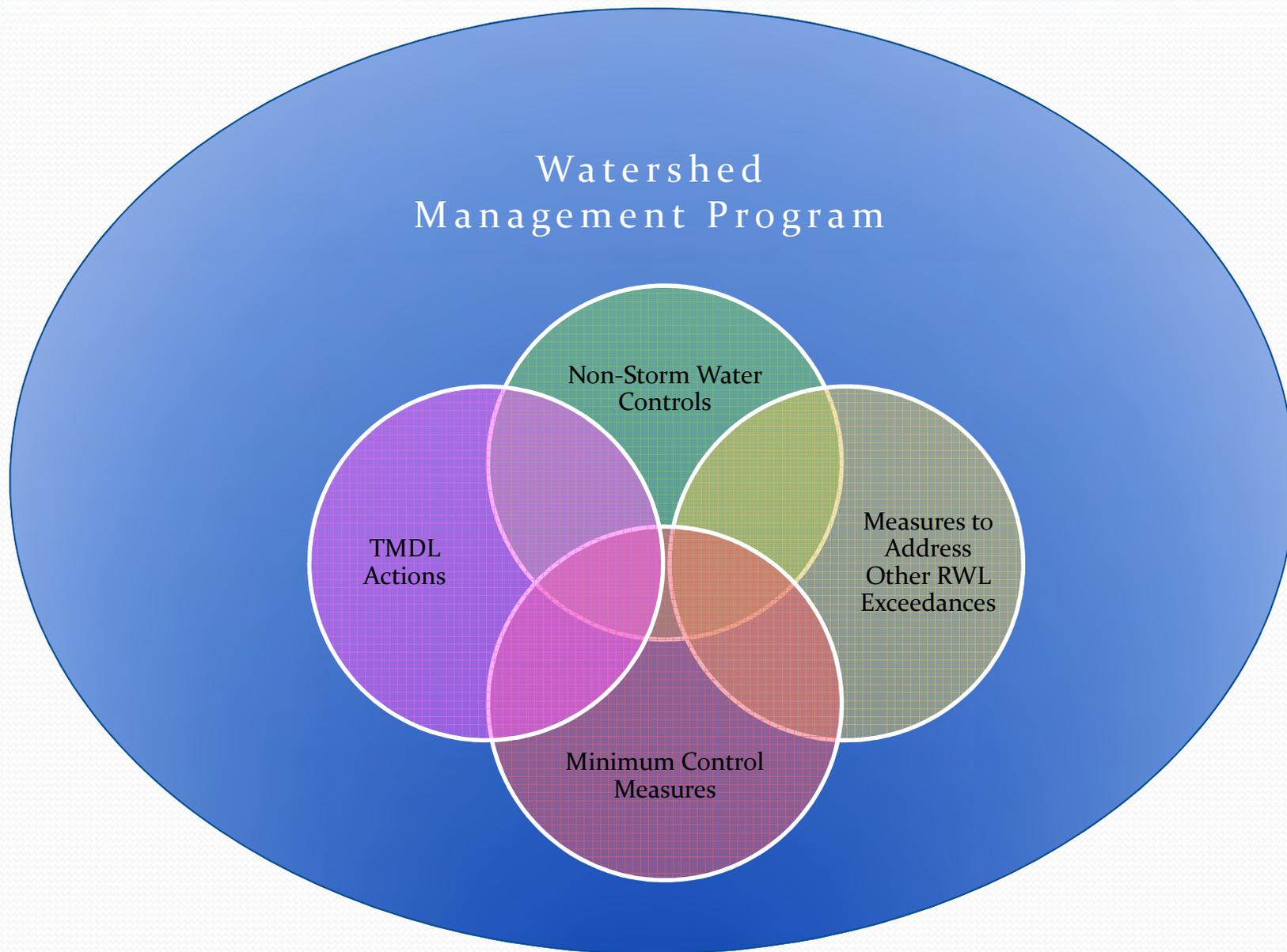
Continuation of Public Hearing
LA Regional Water Quality Control Board
November 8, 2012

Revisions to Tentative Order

- Areas of Revision in Response to Comments
 - Watershed Management Program
 - TMDL Provisions
 - Standard Provisions – Reopener and Modification
 - Monitoring Program
 - Non-Storm Water Discharge Prohibition
 - Storm Water Management Program - Minimum Control Measures

Watershed Management Programs

- Organizing framework for permit provisions
- Water quality priorities are driver
 - TMDL requirements
 - Section 303(d) listed water quality impairments
 - Exceedances of receiving water limitations
- Allows flexibility to customize some core permit requirements/sequence implementation actions to meet TMDL compliance deadlines and address exceedances of RWLs



Watershed Management Program (WMP)

- Addition of Enhanced Watershed Management Program (EWMP) option
- Timing, process and submittal requirements for WMP and EWMP
- Compliance mechanism for Receiving Water Limitations not addressed by a TMDL
- Additional criteria for Reasonable Assurance Analysis
- Timing and implementation of compliance mechanism

Enhanced Watershed Management Program

- Addition of opportunity to implement enhanced watershed programs with longer planning horizon
 - Collaborative effort among permittees and other partners
 - Implementation of multi-benefit regional projects to control MS4 discharges by retaining the 85th percentile, 24-hour event
 - Other benefits including water supply enhancement
 - Longer planning and implementation horizon needed

Timing/Process - WMP and EWMP Submittal and Approval

- Watershed Management Programs
 - 18 months with early actions (i.e. LID ordinance, green streets policy)
 - 12 months without early actions
- Enhanced Watershed Management Programs
 - 30 months conditional upon:
 - Executed MOU
 - Early actions (LID ordinances, green streets policies, pilot project*)
 - Interim milestones, including workplan and monitoring program in 18 months
- Stakeholder involvement through TAC from month 6 through approval
- Approval by Regional Water Board or Executive Officer on behalf of Board

Compliance with Receiving Water Limitations (RWL) through a WMP

- Tentative Order: Linked to TMDL provisions - Achieve compliance with RWLs for specific water body-pollutant combinations as outlined in TMDL provisions, pursuant to applicable compliance schedules
- Revised Tentative Order: Compliance mechanism for Receiving Water Limitations not addressed by a TMDL

Receiving Water Limitations, Non-TMDL Waters and the WMP

303(d) listed Pollutants in same “class” as those in existing TMDL

- Demonstrate that Watershed Control Measures to achieve TMDL provisions will adequately address pollutant, using the same interim and final requirements and deadlines as in the TMDL
- Pollutant would be included in the Reasonable Assurance Analysis

303(d) listed Pollutants in different “class” from those in existing TMDL

- Identify Watershed Control Measures to adequately address MS4 contributions of pollutant
- Include water body-pollutant combination in Reasonable Assurance Analysis
- Establish enforceable numeric milestones and deadlines to address MS4 contributions of pollutant

Receiving Water Limitations, Non-TMDL Waters and the WMP

- Pollutants for which there are exceedances of RWLs, but that are not 303(d) listed as impaired
 - Assess pollutant contributions from MS₄ discharges/sources of pollutants in MS₄ discharges based on data collected pursuant to MRP
 - Identify Watershed Control Measures to address MS₄ pollutant contributions during adaptive management process for WMP
 - Included in updated reasonable assurance analysis
 - Establish enforceable milestones and deadlines

Additional conditions for compliance mechanism

- Not applicable to final WQBELs that have passed or will pass prior to approval of WMP or EWMP (e.g. dry weather beaches bacteria TMDLs)
- Not applicable to interim or final trash WQBELs (currently compliance strategies continue to apply)

Additional conditions for RWL compliance mechanism

- Where final dates for achieving RWL not addressed by a TMDL are beyond permit term:
 - EWMP where retention of 85th percentile event is planned: Continue to target implementation of watershed control measures, while implementing multi-benefit regional projects
 - WMP or EWMP where retention of 85th percentile is infeasible and water body is listed as impaired by pollutant:
 - Initiate development of stakeholder proposed TMDL upon approval of WMP/EWMP
 - Any extension of compliance mechanism to be consistent with TMDL implementation schedule
 - Water body is not impaired by pollutant, but exceedances of RWLs are identified:
 - Modify WMP/EWMP to address pollutant

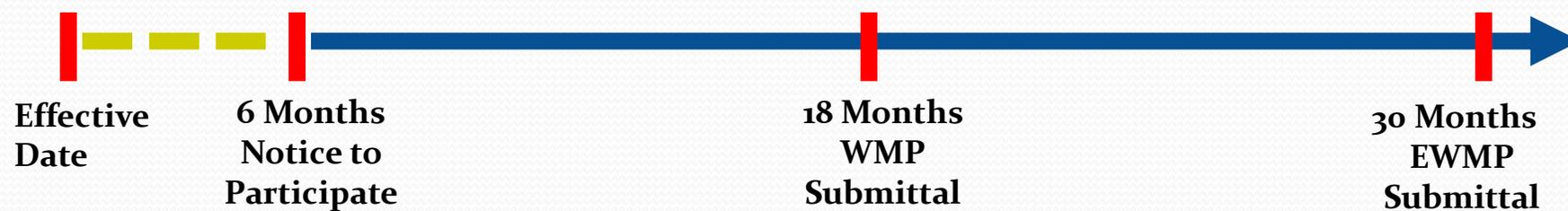
Reasonable Assurance Analysis

- Scope: Address all interim WQBELs and all receiving water limitations included in the WMP or EWMP
- Objective: To demonstrate the ability of WMPs and EWMPs to ensure that MS4 discharges achieve applicable WQBELs and do not cause or contribute to exceedances of Receiving Water Limitations
- Additional Criteria Included:
 - Peer reviewed model in the public domain
 - Data period – 10 years
 - BMP performance data from peer reviewed sources

WMP Compliance Determination Timing and Conditions

- Prior to Approval:
 - Provides timely notice of intent to develop a WMP or EWMP
 - Meets all interim and final deadlines for development of WMP or EWMP
 - Targets implementation of watershed control measures in existing programs
 - Receives final approval of its WMP or EWMP within 28 or 40 months
- After Approval:
 - Permittee is implementing all elements of approved WMP/EWMP in accordance with approved schedule
- If milestones are not met, compliance determination based on numeric effluent limitations and receiving water limitations provisions in Part V.A.

Compliance Mechanism



Methods for Demonstrating Compliance with WQBELs

- In case of Enhanced Watershed Management Program – Addition of retention of 85th percentile, 24-hour event for drainage area tributary to receiving water based on an approved EWMP

Compliance with Final Water Quality Based Effluent Limitations

- New causes for reopening permit:
 - Upon reconsideration of a TMDL (revisions to wasteload allocations and/or program of implementation, including implementation schedule)
 - Prior to final compliance deadlines, to consider application of action-based, BMP compliance demonstration approach to final WQBELs for storm water discharges
 - Where an evaluation of WMPs provides evidence that storm water control technologies can achieve final WQBELs*

Receiving Water Limitations (RWLs)

- Language based on State Water Board precedential order, Order WQ 99-05; same as 2001 Permit and 2010 Ventura MS4 Permit
- Reopener provision in consideration of any State Water Board action regarding the precedential language of Order WQ 99-05

Monitoring and Reporting Program - Objectives

- 40 CFR §§ 122.26(d)(2)(iii)(D), 122.41(h), 122.42(c) – Requires monitoring program for representative data collection, and reporting
- Primary Objectives
 - Assess chemical, physical, and biological impacts of MS4 discharges on receiving waters
 - Assess compliance with receiving water limitations and WQBELs established to implement TMDL WLAs
 - Characterize pollutant loads in MS4 discharges
 - Identify sources of pollutants in MS4 discharges
 - Measure and improve the effectiveness of pollutant controls implemented under the permit

Monitoring and Reporting Program Revised Tentative

- Added screening for full suite of pollutants
- Ability to customize under Watershed Management Program
- Fine-tuned toxicity approach
- Pyrethroid special study removed

Monitoring and Reporting Program [2nd Revised Tentative]

- Requires sufficient justification for alternative approaches
- Conveys that the primary objective of monitoring program customization is for outfall monitoring due to cost considerations
- Outfall monitoring locations shall be representative of land uses in Permittees' jurisdictions

Middle Santa Ana River Watershed

- Middle Santa Ana River Watershed Bacterial Indicator TMDLs, adopted by Santa Ana Regional Water Board, effective May 16, 2007.
- Discharges of bacteria by Cities of Claremont and Pomona through MS4s, may be regulated by Santa Ana Regional Board:
 - Pursuant to a designation agreement between this Regional Board and Santa Ana Regional Board under Water Code section 13228;
 - By an NPDES permit issued by Santa Ana Regional Board that regulates the discharges for compliance with the bacterial TMDLs and related receiving water limitations.
- Comprehensive Bacteria Reduction Plan (CBRP) can serve as WMP to address discharges of bacteria in the MSAR Watershed

Bacteria TMDL Reconsiderations [2nd Revised Tentative]

- Five Bacteria TMDLs adopted on June 7, 2012, revise WQBELs and receiving water limitations.
- TMDLs not yet approved by State Board, OAL, and EPA.
- Revised WQBELs and receiving water limitations in the TMDLs will automatically be included in the permit on the effective date of the revised TMDLs.

Non-Storm Water Discharge Prohibitions [2nd Revised Tentative]

- Conditionally Exempt Essential Non-Storm Water Discharges
 - Revised “Potable Water Sources” to “Drinking Water Supplier Distribution System Releases”
 - Clarifies intent to conditionally exempt both *potable water* and *raw water* discharges from drinking water supplier distribution systems

LACFCD:

Specific MCM Requirements

- Permit may contain separate storm water management programs for particular permittees (40 CFR § 122.26(d)(2)(iv))
- LACFCD not subject to requirements related to some categories minimum control measures in Part VI.D. due to limited land use authority
 - Industrial/Commercial Facilities Program
 - Planning and Land Development Program
 - Development Construction Program
- LACFCD remains subject to Public Information and Participation Program, Public Agency Activities Programs, and Illicit Discharge Detection and Elimination Program

Minimum Control Measure - New Development and Redevelopment Revisions

- LID Hierarchy Revised (Regional Groundwater Replenishment Requirements Moved to Standalone Section) [Pg. 103 of Order]
 - Linked to replenishing groundwater supplies with a designated beneficial use.
- Regional Storm Water Mitigation Program Created [Pg. 105 of Order]
 - Requires the retention of the runoff from the 85th Percentile Storm
- Technical Infeasibility Infiltration Criteria Revised from 0.15” to 0.3” [Pg. 105 of Order]
- 2009 Los Angeles County LID Manual Hydromodification Requirements Added as an Additional Alternative [Pg. 105 of Order]
- Flexibility to Use Updated Erosion Potential Equations [Pg. 108 of Order]

Minimum Control Measures - Timing of Implementation

- Implementation of New or Enhanced Requirements Revised From 30 Days After Order Effective Date to 6 Months After Order Effective Date.
- Permittees Participating in a WMP or EWMP Continue Implementation of Existing Provisions until approval of WMP.

MS 4 Permit Themes

- Water Quality Focused
 - Implements 33 TMDLs
 - Clear Compliance Determination
 - Pollution Prevention (Low Impact Development)
- Watershed Management
 - Sound Science
 - Flexibility to Prioritize Core Requirements
 - Fosters Collaboration
 - Cost Effective
- Multi-Beneficial Uses
 - Sustainability
 - Habitat
 - Recreation



MS4 Permit Adoption Hearing

*Parkway Infiltration Swale
11th St & Hope St - Los Angeles*

Leading the Way to a Clean, Green and Sustainable City

Shahram Kharaghani, PhD, PE, BCEE
Stormwater Program Manager
Bureau of Sanitation, Watershed Protection Division

November 8, 2012



City of Los Angeles has been proactively implementing solutions for 10 years and prior to the start of this Permit renewal process

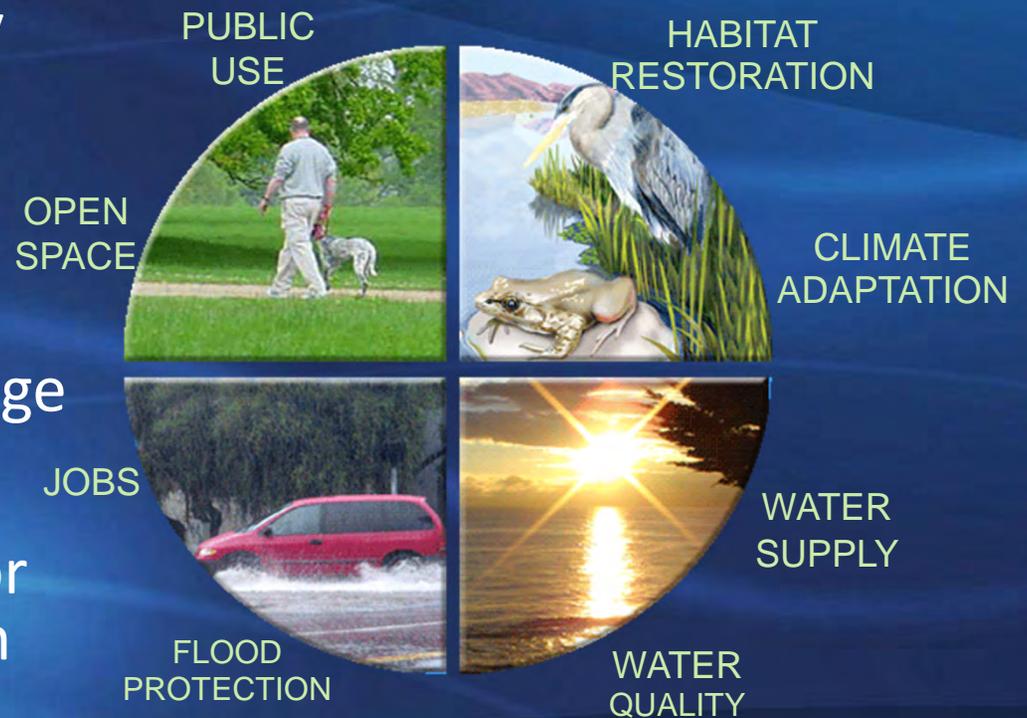


El Pueblo de la Reina de Los Ángeles

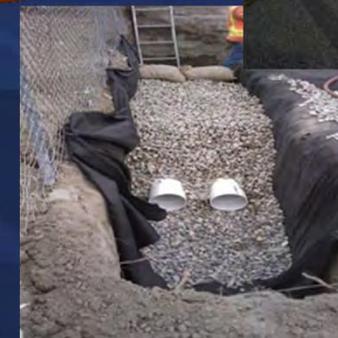
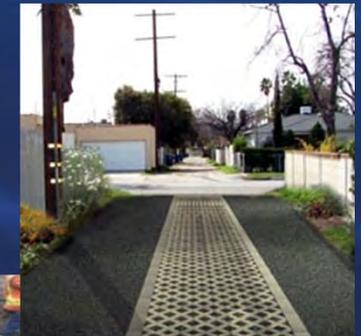
Green Infrastructure & Watershed Management

● Solutions and Benefits

- Improve water quality
- Increase water supply
- Reduce flooding
- Save on energy use
- Adapt to climate change
- Enhance wildlife
- Provide open space for habitat and recreation

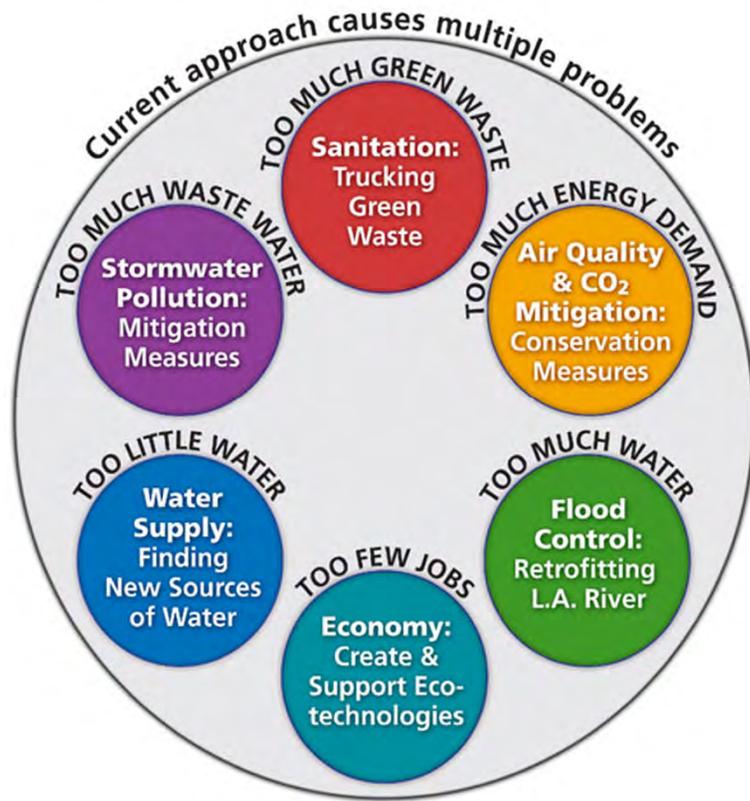


Water Integrated Resources Plan



Shift to Integrated Management

LOS ANGELES PAST



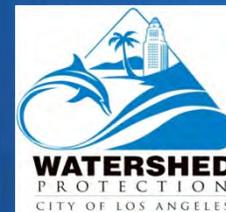
Dis-integrated approach wastes resources, duplicates efforts and imposes unsustainable practices.

LOS ANGELES PRESENT



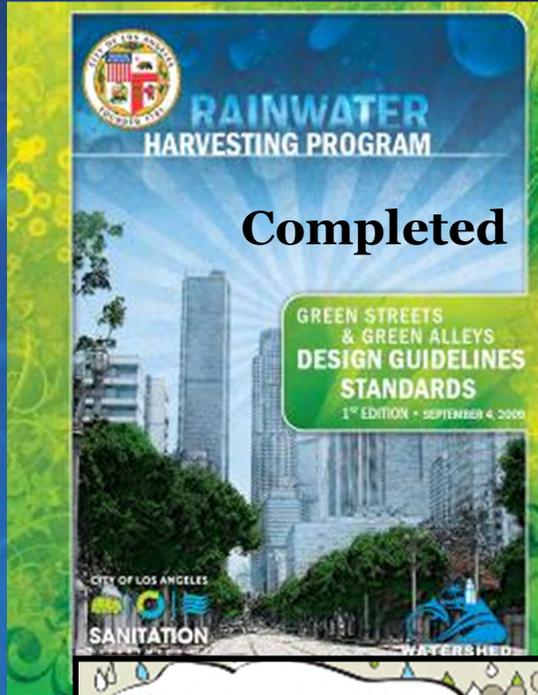
Integrated approach also creates jobs and liberates funds for emerging green technologies.

Green Initiatives



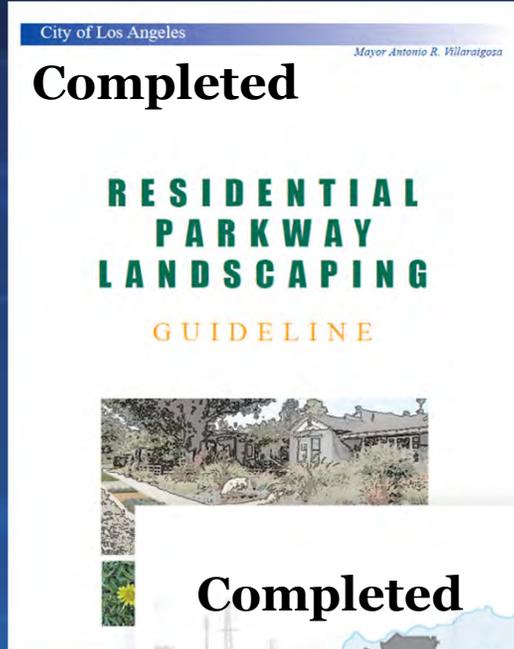
- **Manuals** – guidance standards
- **Green Streets** - Converting public right-of-way or parkway to open space for multi-benefit uses
- **Green Standards** – institutionalizes, applies to public and private
- **LID** – land developments and re-developments
- **Rainwater Harvesting** – capture and use
- **Water Quality Matrix** – Approved by Health Department
- **Stream Protection** – Natural cleaning

Green Infrastructures Manuals



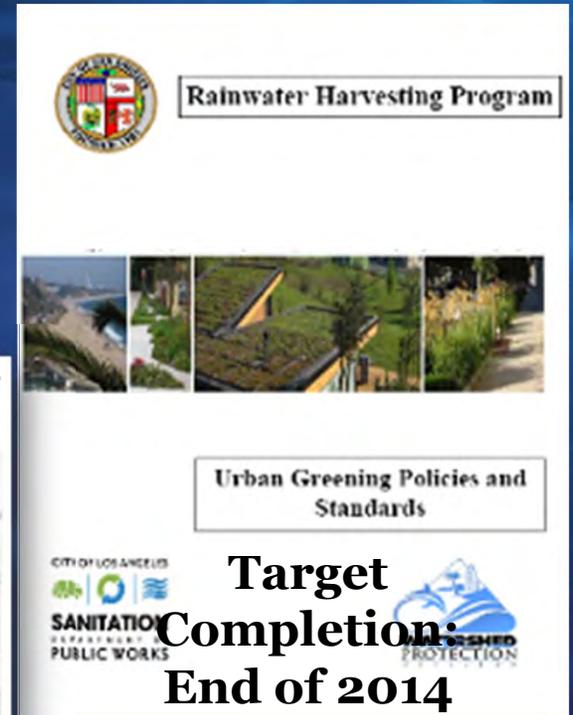
Completed

GREEN STREETS & GREEN ALLEYS DESIGN GUIDELINES STANDARDS
1ST EDITION - SEPTEMBER 4, 2009



Completed

RESIDENTIAL PARKWAY LANDSCAPING GUIDELINE



Rainwater Harvesting Program



Urban Greening Policies and Standards

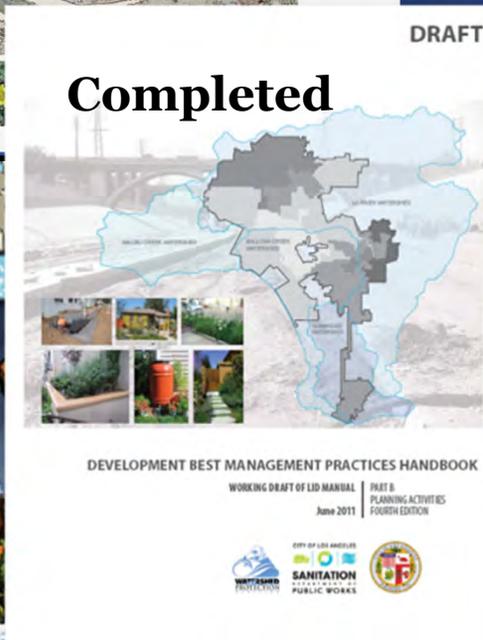
Target Completion: End of 2014



Completed

City of Los Angeles Rainwater Harvesting Program

A Homeowner's "How-To" Guide



DRAFT

Completed

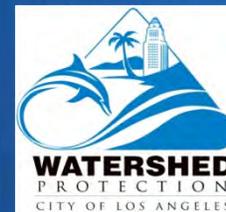
DEVELOPMENT BEST MANAGEMENT PRACTICES HANDBOOK

WORKING DRAFT OF LID MANUAL | PART B PLANNING ACTIVITIES
June 2011 | FOURTH EDITION



Green Streets

CITY OF LOS ANGELES
SANITATION
DEPARTMENT OF
PUBLIC WORKS



A Green Street is designed with a landscape system to capture and infiltrate or filter stormwater runoff through a natural system.

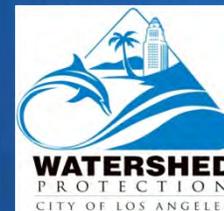


Oros Street in Elysian Valley



**11th & Hope Streets in
Downtown Los Angeles**

Green Streets Standard Plans



- S-480-0: General requirements for Green Streets
- S-481-0: Parkway swale in major/secondary highways
- S-482-0: Parkway swale in local/collector streets
- S-483-0: Parkway swale with no street parking
- S-484-0: Vegetated Stormwater Curb Extension (VSCE)
- S-485-0: Interlocking pavers for vehicular alleys
- S-486-0: Interlocking pavers for pedestrian alleys

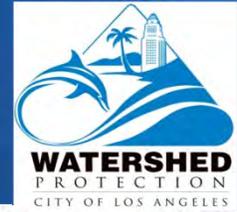


*Riverdale Ave –
Vegetated Stormwater Curb Extension (VSCE)*



Hope St – Parkway Swale

Low Impact Development (LID)



*Cisterns -
Lowe's*



*Porous Pavement -
Rio del Los Angeles
State Park
(aka: Taylor Yard)*



*Planter Boxes - Versailles
Luxury Apartments
Oxford St, Los Angeles*



Infiltration - Costco



*Bioretention - Sam's Club
Parking Lot*



*Parkway Infiltration Swale
11th St & Hope St - Los Angeles*

Rainwater Harvesting Program



Rain Barrel and Rain Gardens

- Implemented Pilot Rainwater Harvesting Program (600 barrels and “rain gardens”)
- Followed by distributing up to 1,000 rain barrels to residences
- City and community groups implementing “rain garden” program for the San Fernando Valley and South Los Angeles, with plans for City-wide implementation.



Rain Barrel and Rain Gardens Example



Rainwater Harvesting, Stormwater, and Urban Runoff Standards and Uses Guidelines



COUNTY OF LOS ANGELES Public Health **LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH**

Guidelines for Harvesting Rainwater, Stormwater, & Urban Runoff for Outdoor Non-Potable Uses
September 2011

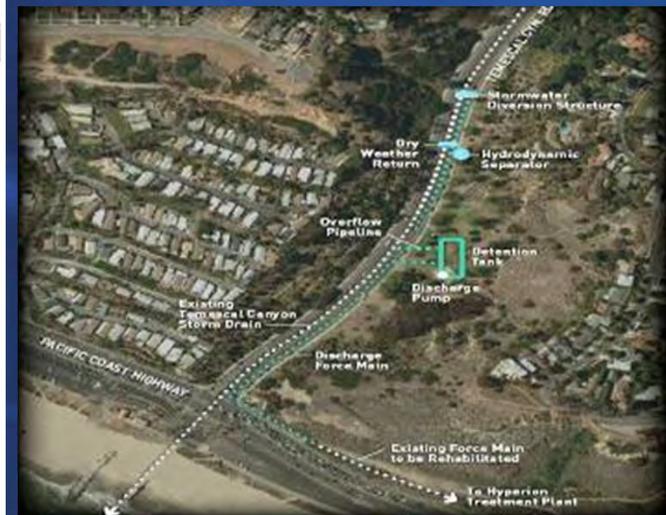
Requirements	Use
<ul style="list-style-type: none"> Rain barrels must have a screened inflow opening, a spigot and/or hose bib, and an overflow pipe or equivalent. Rain barrels shall be labeled to indicate non-potable water use only. The system may not be connected to indoor/outdoor municipal potable plumbing, and shall not be pressurized or sprayed. The system must be installed in accordance with the rain barrel manufacturer's installation instructions, and installation requirements of local agencies. 	<p>Landscape irrigation</p> <p>Car washing</p>



Rainwater Harvesting Program



Urban Greening Policies and Standards

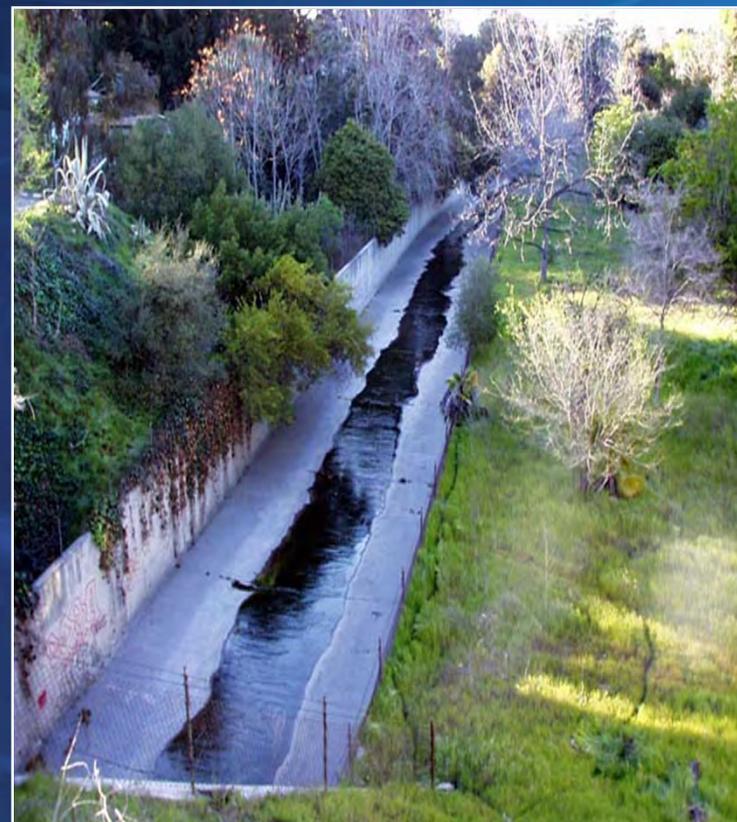


Temescal Canyon Park Rainwater Capture and Use

Stream Protection

- Stream protection initiative.
- Establish policy to protect and restore natural conditions of streams.
- Promote environmental friendly building of developments.
- GIS Mapping of natural streams underway. Identification zones will be determined based on mapping.

CITY OF LOS ANGELES

SANITATION
DEPARTMENT OF
PUBLIC WORKS

Green Streets

Oros Street – LA's First Green Street
private and public runoff

Riverdale Avenue – Green Streets Program
Demonstrate and monitor Green Streets

Elmer Avenue – Water Augmentation Study
Combined distributed and regional solution

South Park – Ultra-urban Application
Hope Street and Grand Ave.



Capt



Elmer Green Street

CITY OF LOS ANGELES

SANITATION
DEPARTMENT OF
PUBLIC WORKS



Before

After

Construction



After



Riverdale Green Street

CITY OF LOS ANGELES
SANITATION
DEPARTMENT OF
PUBLIC WORKS



Before



After



Construction

Garvanza Park Rainwater Capture Project



Before



During Construction



After

South Los Angeles Wetlands Park Project



Before



After



Westside Park Rainwater Capture



Before

After



Penmar Park Rainwater Capture Project



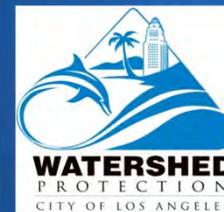
Before



During Construction



Other Completed Projects



Oros Green Street Rain Gardens

Before



After



Imperial Highway Median Greening



North Atwater Stream Restoration and Park Expansion



Grand Ave Tree Wells



Westminster Dog Park Biofiltration

Los Angeles Zoo Green Parking Lot - Vegetated bio-swale



Future Projects

Humboldt Ave Neighborhood Greenway



PHASE I: CONCEPT PLAN
IMPLEMENTATION PLAN - PROJECT # 17/CD 1 - COUNCIL MEMBER REYES

Strathern Wetlands Park



Albion Dairy River Park

Verdugo Hills Golf Course Rain Water Capture



LA River Natural Park



Machado Lake Ecosystem Rehabilitation Project



Echo Park Lake Rehabilitation

Proposition O

- City of Los Angeles \$500 million Clean Water Bond (2004)
- 27 water quality, water conservation, habitat protection, and open space projects



Low Flow Diversions

Improved Water Quality at Beaches
 (Beach Grades have moved from F / D 's to A/B's)
 Increased habitat protection
 Increased open space

Example Projects



Multiple Benefits
Leveraging Resources

Leveraging Resources

- Green Infrastructure allows for integrated funding and multiple benefits
 - Water Quality Compliance (Prop O) & TMDL funding
 - Street improvements funding
 - Water funding
 - Park funding
 - other



Elmer Avenue Green Street

💧 Leveraging Funding Resources



Multiple Sources of Funding:

- U.S. Bureau of Reclamation \$0.33 M
- State Water Resources \$0.86 M
- City LA Sanitation \$0.08 M
- City LA Stormwater \$0.30 M
- Local Water Agencies \$0.81 M
(LA Water & Power, Metropolitan Water District of Southern California, Water Replenishment District of Southern California, City of Santa Monica)
- LA Street Services Doing Construction

Many Project Supporters:

- Council for Water Health (NGO)
- Tree People (NGO)
- Urban Semillas (NGO)
- Local Neighborhood Council
- Area Residents & Businesses

Garvanza Rainwater Park



💧 Leveraging Funding Resources



Multiple Sources of Funding:

- State Water Resources \$1.00 M
- City LA Sanitation \$2.55 M
- City LA Stormwater \$0.10 M
- LA Water & Power \$0.24 M

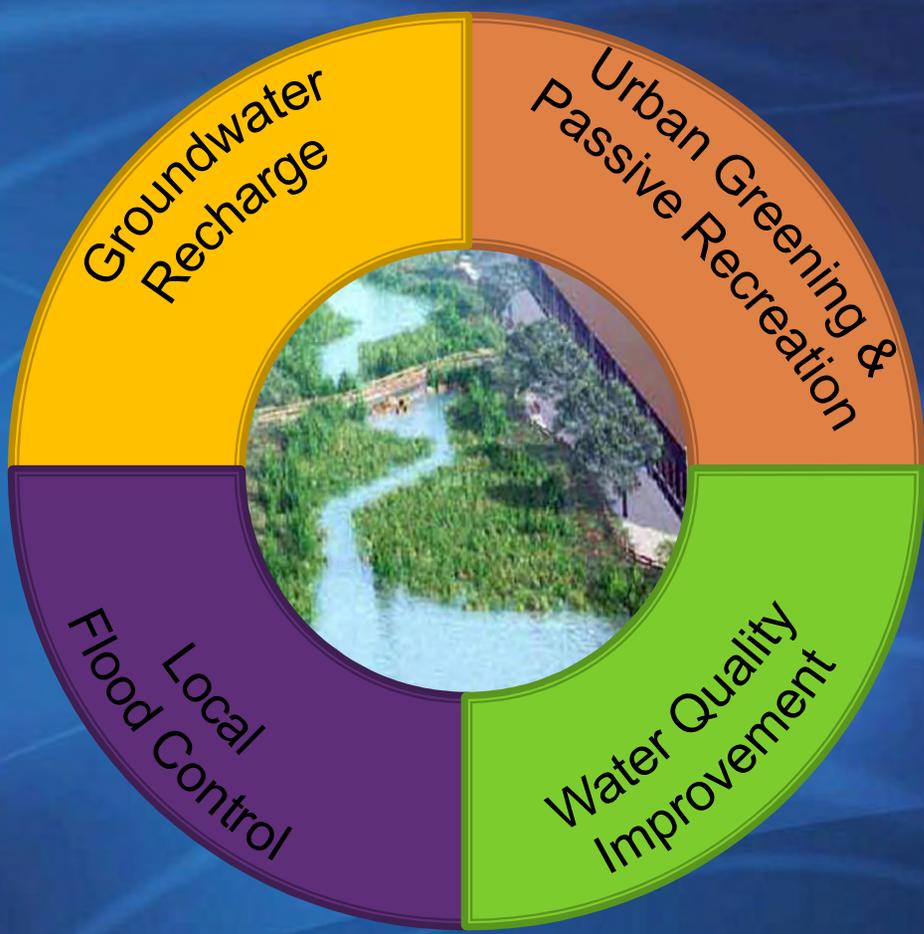
Many Project Supporters:

- USEPA
- Los Angeles Regional Water Quality Control Board
- North East Trees (NGO)
- Local Neighborhood Schools
- Local Neighborhood Council
- Area Residents & Businesses

South Los Angeles Wetlands Park



💧 Leveraging Funding Resources



Means Multiple Sources of Funding:

- U.S. EPA Brownfield \$ 0.20 M
- State Water Resources \$ 6.60 M
- Metropolitan Transportation Agency \$ 0.97 M
- City LA Sanitation \$ 3.74 M
- City LA Clean Water Bond \$13.36 M
- City LA Park Bond \$ 1.50 M

And Many Project Supporters:

- USEPA
- Los Angeles Regional Water Quality Control Board
- Local Neighborhood Schools
- Local Neighborhood Council
- Area Residents & Businesses

City of LA Strongly Supports the WMPs and Enhanced WMPs

- Integrates water supply and water quality issues that are vital for our Region
- Focuses resources on highest priorities in watershed, consistent with recent guidance from USEPA that identifies the need to prioritize stormwater investments
- Provides for an efficient and effective approach to addressing water quality issues
- Encourages the various MS4 Permittees to collaborate and work together

City of LA Strongly Supports the WMPs and Enhanced WMPs (con't)

- Customizes program elements to make the focus protection of beneficial uses in receiving waters
- Provides consistency with the numerous TMDL implementation plans that address water quality issues at the watershed scale
- If AB 2554 is approved by voters, complements the funding framework required by the measure

Watershed Stakeholders will Work Together to Develop WMPs

- Technical Tools to Ensure Scientific Rigor
 - Reasonable Assurance Analysis based on modeling
 - TAC to ensure progress and provide guidance
- Process will be Transparent and Inclusive
 - Include NGOs and Regional Board Staff in WMP development
 - Build partnerships to ensure support and success for implementation of the WMPs



↓
EO/Regional Board
Approval

Process to Develop WMPs and Enhanced WMPs Based on the Same Rigor

- Both processes include the same level of
 - Technical rigor
 - Inclusive public participation
 - Technical Advisory Committee
 - Approval Process
- Support the Tentative Order that recognizes both processes have the same standards, flexibility, and compliance approach

WMPs and TMDL Development

- Revised TO includes new requirement for a TMDL to be in place for 303(d) listed pollutant-waterbody combinations
- WMPs can be a source of information and stakeholder input for a TMDL
- WMPs and EWMPs actions may also remove the impairment, eliminating the need for additional regulatory actions

City of LA Strongly Supports A Flexible Monitoring Program

- Provides opportunity for Permittees to develop more efficient approaches while still meeting the same monitoring objectives
- Provides the necessary flexibility to support and inform the WMPs
- Opportunity where real cost-savings can be realized without modifying goals or water quality outcomes

Time Considerations: Memorandum of Agreements

- Necessary to memorialize process for development of WMPs
- MOAs will need to be approved by governing body (e.g., City Councils) of each Permittee
- 12-18 month process, even with compressed schedule for MOA development



Time Considerations: Project Implementation Timeline



Funding Considerations

- Potential for funding to support stormwater programs through AB 2554 funding measure
- After results of measure are known, Permit and WMPs will need to consider implications of those results

Summary

1. Support WMPs and EWMPs as currently in permit

- Same standards have to be met
- Same technical rigor
- Same technical advisory requirement
- Same inclusive public participation
- Same approval process

(Current Permit recognizes this)

2. Request a review of implications of funding measure results (AB2554)



Shahram Kharaghani, PhD, PE,
BCEE

LA Sanitation - City of Los Angeles
1149 South Broadway, 9th floor
Los Angeles, CA 90015
213-485-0587
Shahram.Kharaghani@lacity.org



Additional Information: www.lacity.org
www.lacitysan.org
www.lastormwater.org

Our Mission:
“Protect Public Health and the Environment”



(Mark Boster / Los Angeles Times)



What's Not In Dispute

- Local waterways are important to the local and state economy.
- Stormwater is the #1 cause of surface water quality problems in the Los Angeles Region.
- Polluted stormwater poses risks to public health and the ecology of local water ways.
- There have been thousands of exceedances of water quality standards in local receiving waters since 2001.
- Hundreds of millions of dollars in public funds have been raised to help the cities address these problems.



What's Not In Dispute

- Cities have had 22 years to meet water quality standards (12 under current permit).
- Most cities have never acknowledged that they contribute to exceedances of water quality standards.
- Very few cities have submitted RWL reports to address exceedances of water quality standards.
- The Regional Board has rarely undertaken enforcement of the current permit – even where public health is at risk.
- This permit could influence storm water regulations statewide.



Refuting Cities' Comments

- Cities are not the victims – the millions of people who use and enjoy the waters are.
- There are other mechanisms to address these challenges (e.g. time schedule orders).
- Cities have been required to meet these standards for at least 12 years.
- Proposed approach reverses regulatory burdens.



Efforts Toward Resolution

- Negotiations in the spirit of the Trash TMDL approach
- Sought to incentivize stormwater capture and reuse by embracing regional solutions and enhanced watershed planning
- Numerous meetings
- Significant compromise on the table
- Ultimately unsuccessful
- Current draft largely reflects discharger proposals



The Proposed WMP/EWMP Approach

The proposed WMP/EWMP approach is impractical and illegal

- Proposes safe harbors where none previously existed, including during plan development.
- Violates Anti-Backsliding Requirements
 - During plan development
 - Where no TMDLs
 - For CTR pollutants
- Violates Antidegradation Requirements
 - Where no TMDLs exist, allows lowering of water quality while WMPs are being developed and implemented.
- Is Inconsistent with the assumptions and requirements of TMDLs.
- Requires intensive staff resources.



Anti-Backsliding

Anti-Backsliding:

“when a permit is renewed or reissued, interim effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit.”

40 C.F.R. 122.44(l)(1)



Anti-Backsliding

- The RWL provisions have been in effect since 2001.
- Staff acknowledges that the 2001 Permit did not contain a safe harbor for receiving water violations and that the 9th Circuit decision did not change that.
- EPA Region 3 Letter – additional time to comply violates anti-backsliding provision.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION III
 1650 Arch Street
 Philadelphia, Pennsylvania 19103-2029

AUG 08 2012

Mr. Jay Sakai, Director
 Water Management Administration
 Maryland Department of the Environment
 1800 Washington Boulevard
 Baltimore, Maryland 21230

“Backsliding is prohibited in NPDES permits. . . .
 Allowing additional time to complete a task that was
 required by the previous permit constitutes a less
 stringent condition and violates the prohibition
 against anti-backsliding.”

referenced permit pursuant to 40 C.F.R. §§ 123.44(b)(1) and (c)(1) and Section III.A of the MOA. As further explained herein, EPA believes that several substantive requirements for MS4 permits, as required by the federal Clean Water Act, 33 U.S.C. §§ 1251 *et seq.* (CWA), and its implementing regulations, have not been incorporated into the Prince George’s County permit.

EPA’s objection to the draft permit and identification of revisions needed before EPA can remove the objection, *see* 40 C.F.R. § 123.44(b)(2)(ii), are described below:

1. Water Quality Standards

Federal regulations require that all NPDES permits contain limitations to control discharges which may cause, have the reasonable potential to cause or contribute to an excursion above water quality standards. 40 C.F.R. §122.44(d)(1)(i). Part VI of the draft Prince George’s County permit (Enforcement and Penalties) contains general language

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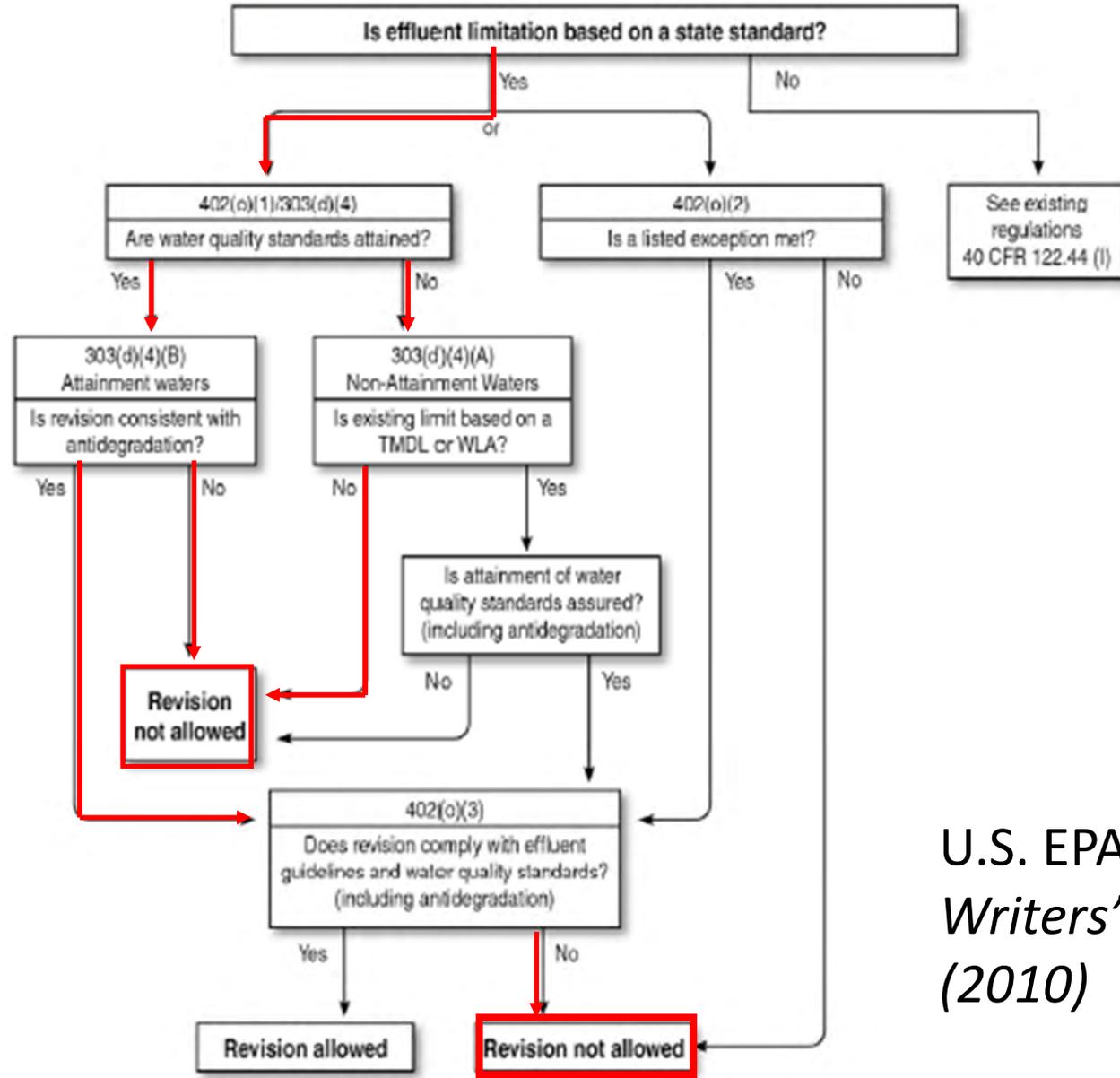


Violates Anti-Backsliding

- Provides a safe harbor for receiving water limits that are exceeded *during* plan development (page 53, subparagraph d).
 - This provides additional time (up to 3 years) to comply with provisions that have been in effect since 2001.
- Provides a safe harbor *after* plan development for pollutants lacking TMDLs (page 52-53, subparagraph b).
 - These pollutants have been subject to the RWLs since 2001 and the additional time otherwise justified by a TMDL is not applicable.
- Provides a safe harbor for CTR pollutants.
 - Deadline for CTR compliance was at latest 2010.
- EPA Established TMDLs
 - No timeline in the TMDL but proposal gives more time for dischargers to comply with water quality standards.



Exhibit 7-2 Application of anti-backsliding requirements



U.S. EPA *Permit Writers' Manual (2010)*



If Not an Effluent Limit...

Anti-Backsliding:

“when a permit is renewed or reissued, interim effluent limitations, *standards*, or *conditions* must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit.”

40 C.F.R. 122.44(l)(1)



Antidegradation Policy

Protects existing uses and water quality necessary to support existing uses, or, for “high quality” waters, protects water quality better than necessary for “fishable/swimmable” uses.

Water quality may only be lowered in certain limited circumstances. In no case may water quality be lowered to a level which would interfere with existing or designated uses.

See, State Bd. Resolution 68-16,
40 CFR § 131.12



Violates Antidegradation Policy

- Where no TMDLs exist, allows lowering of water quality during and after plan development (subparagraphs b and d on pages 52-53.)
- Unimpaired waters must be protected, not made a lower priority because they are not polluted or lack TMDLs.



Requirements for TMDLs

All permit terms must be consistent with the assumptions and requirements of the WLAs in TMDLs. 40 C.F.R. § 122.44(d)(1)(vii)(B)



Inconsistent with Assumptions and Requirements of TMDLs

1. The Proposed WMP/EWMP Approach provides a safe harbor for violations of *interim* WQBELs that are exceeded *during and after* plan development (page 146, VI.E.2.d.i.(4)&(4)(d))
 - This is inconsistent with the deadlines set in the TMDLs (except for trash).
 - Also exposes the fallacy of this process.
2. Allows for final WLA compliance in EWMP areas meeting the 85th percentile retention requirement (page 147)
3. For EPA established TMDLs, staff hasn't established that numeric effluent limits are infeasible (page 147-149)



Recommendations

Eliminate safe harbor provisions :

- Delete WMP/EWMP Section VI.C.2 on pages 50-53
- Delete WMP/EWMP Section VI.C.3 on pages 53-54

- Delete TMDL Section VI.E.2.d.i.(4) on pages 146-147
- Delete TMDL Section VI.E.2.e.i.(4) on page 147

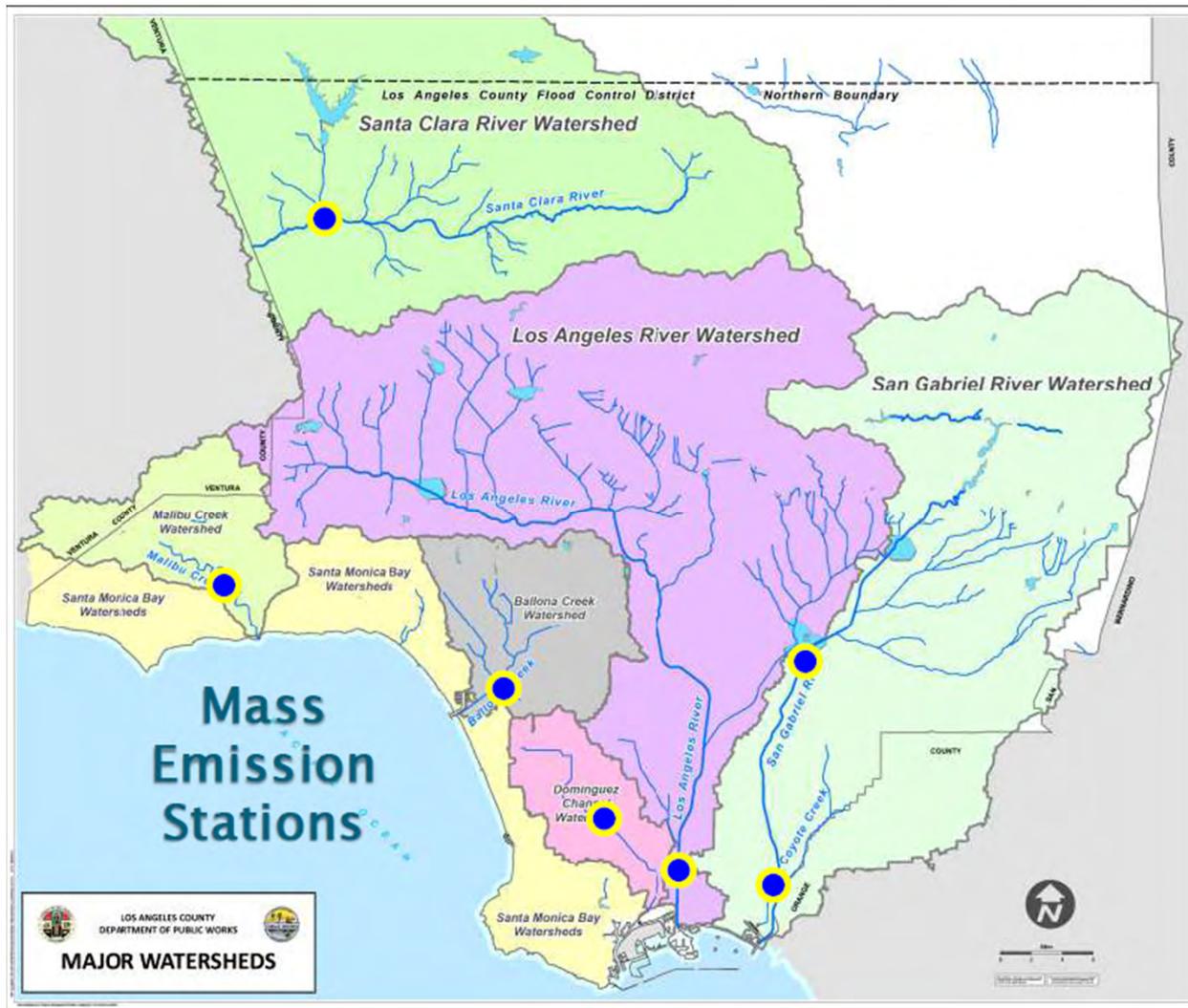


Monitoring

The Clean Water Act requires that a Permittee undertake a self-monitoring program sufficient to determine compliance with its NPDES permit.
40 C.F.R. § 122.44(i)(I).



LA County Watersheds



Remove Off-ramp

7. Integrated Watershed Monitoring and Assessment (Page 67)

Permittees in each WMA shall develop an integrated monitoring program as set forth in Part IV of the MRP (Attachment E) ~~or implement a customized monitoring program with the primary objective of allowing for the customization of the outfall monitoring program (Parts VIII and IX)~~ in conjunction with an approved Watershed Management Program or EWMP, as defined below. Each monitoring program shall assess progress toward achieving the water quality-based effluent limitations and/or receiving water limitations per the compliance schedules, and progress toward addressing the water quality priorities for each WMA. ~~The customized monitoring program shall be submitted as part of the Watershed Management Program, or where Permittees elect to develop an EWMP, shall be submitted within 18 months of the effective date of this Order. If pursuing a customized monitoring program, the Permittee(s) shall provide sufficient justification for each element of the program that differs from the monitoring program requirements as set forth in Attachment E.~~ Monitoring programs shall be subject to approval by the Executive Officer following a public comment period. ~~The customized monitoring program shall be designed to address the Primary Objectives detailed in Attachment E, Part II.A and shall include the following program elements:~~

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



Alternate Proposal



7. Integrated Watershed Monitoring and Assessment

Permittees in each WMA shall develop an integrated monitoring program as set forth in Part IV of the MRP (Attachment E). Individual Permittees with greater than 200 major outfalls total for all subwatershed drainage areas may implement a customized monitoring program that allows only for the customization of the ~~with the primary objective of allowing for the customization of the~~ outfall monitoring program (Parts VIII and IX) in conjunction with an approved Watershed Management Program or EWMP, as defined below. The customized outfall monitoring program shall be submitted to the Executive Officer for approval by the Regional Water Board following a minimum 30 day period for public comment.



Alternate Proposal (cont.)

Stormwater Outfall Monitoring

- Monitoring Locations
 - o Locations associated with receiving water monitoring locations and representative of the land-uses within the jurisdictions
- Parameters
 - o All stormwater outfall locations: subset of mass emission station parameters that are representative of MS4 discharge and conventional pollutants
 - o Subset of stormwater outfall locations representing industrial and transportation land-uses: aquatic toxicity
- Frequency
 - o Minimum frequency of 3 times per year

Non-Storm Water Outfall Screening and Monitoring

- Program elements
 - o Identification and monitoring of outfalls with significant non-storm water discharges
 - o Development of a source identification program for prioritized outfalls
- Parameters
 - o Flow, TMDL parameters, subset of mass emission station parameters that are representative of the land-uses
- Frequency
 - o Minimum frequency of 4 times per year for first year and with the ability to request for a reduction in monitoring from the Executive Officer



Miscellaneous

“stormwater management programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity. . . .”

Environmental Defense Center v. U.S. EPA (9th Cir. 2003) 344 F.3d 832, 854-56

- VI.C.4.c (Table 9, Page 55) “Approval or denial of final [WMP or EWMP] by Regional Water Board or by the Executive Officer on behalf of the Regional Water Board”
- VI.D.7.iii.(6) Regional Storm Water Mitigation Program - “Upon review and a determination by the Regional Water Board Executive Officer” (Allows Permittee to replace New Development and Redevelopment Program)



Miscellaneous - DELETE

Page 67

6. Watershed Management Program Implementation

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



Miscellaneous - DELETE

Page 43 (Reopener)

ix. To include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges. Such modifications shall be based on the Regional Water Board's evaluation of whether Watershed Management Programs in Part VI.C. have resulted in attainment of interim WQBELs for storm water and review of relevant research, including but not limited to data and information provided by Permittees and other stakeholders, on storm water quality and the efficacy and reliability of storm water control technologies. Provisions or modifications to WQBELs in Part VI.E. shall only be included in this Order where there is evidence that storm water control technologies can reliably achieve final WQBELs.



Miscellaneous - ADD

Confirmation that Permit Applies to Flood Control Dist.

F. Permit Scope (Page 18)

“Notwithstanding these modifications to the stormwater management program, the LACFCD shall remain responsible for compliance with all other provisions of this permit, including Section IV (effluent limitations) and Section V (receiving water limitations).”



Miscellaneous

- TMDL – Attachment M
 - Premature to include prior to approval
 - Incredibly confusing language
- Recommendation:
 - Reject proposed revisions from 11/5/12 draft



Our Proposal

- **Water Quality Standards** – compliance required
- **TMDLs** – incorporate all numeric waste load allocations and include lawful compliance schedules
- **Public Participation** – future actions on Permit must include public participation and Board oversight
- **Monitoring** – remove “off-ramp” and require coordinated receiving water and outfall monitoring for all constituents currently monitored, TMDLs, and toxicity





Los Angeles County Municipal Stormwater NPDES Permit

Regional Board Hearing
November 8, 2012

County of Los Angeles and
Los Angeles County Flood Control District

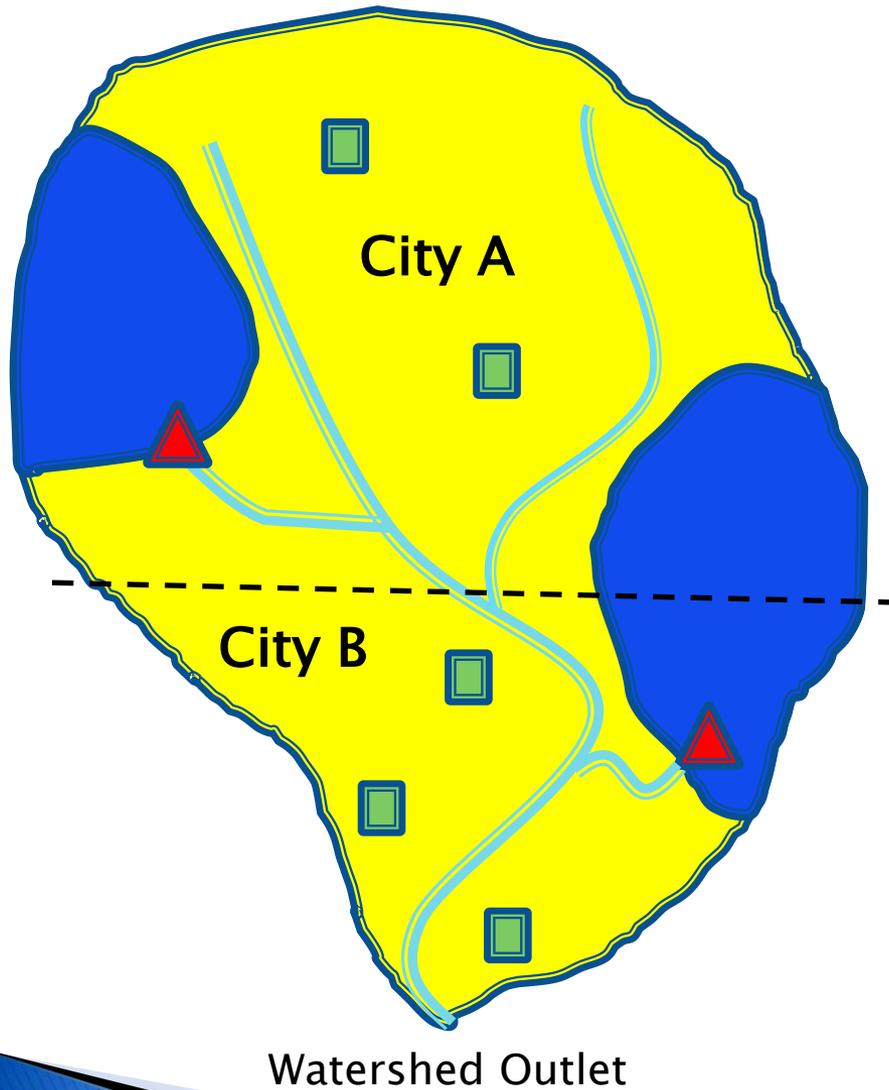


Overview

- ▶ The County and the LACFCD support the Permit before the Board
- ▶ Enhanced Watershed Management
 - New paradigm for stormwater permitting
 - Treat stormwater as resource
 - Sound technical basis
 - Broad stakeholder support



EWMP Conceptual Schematic



LEGEND

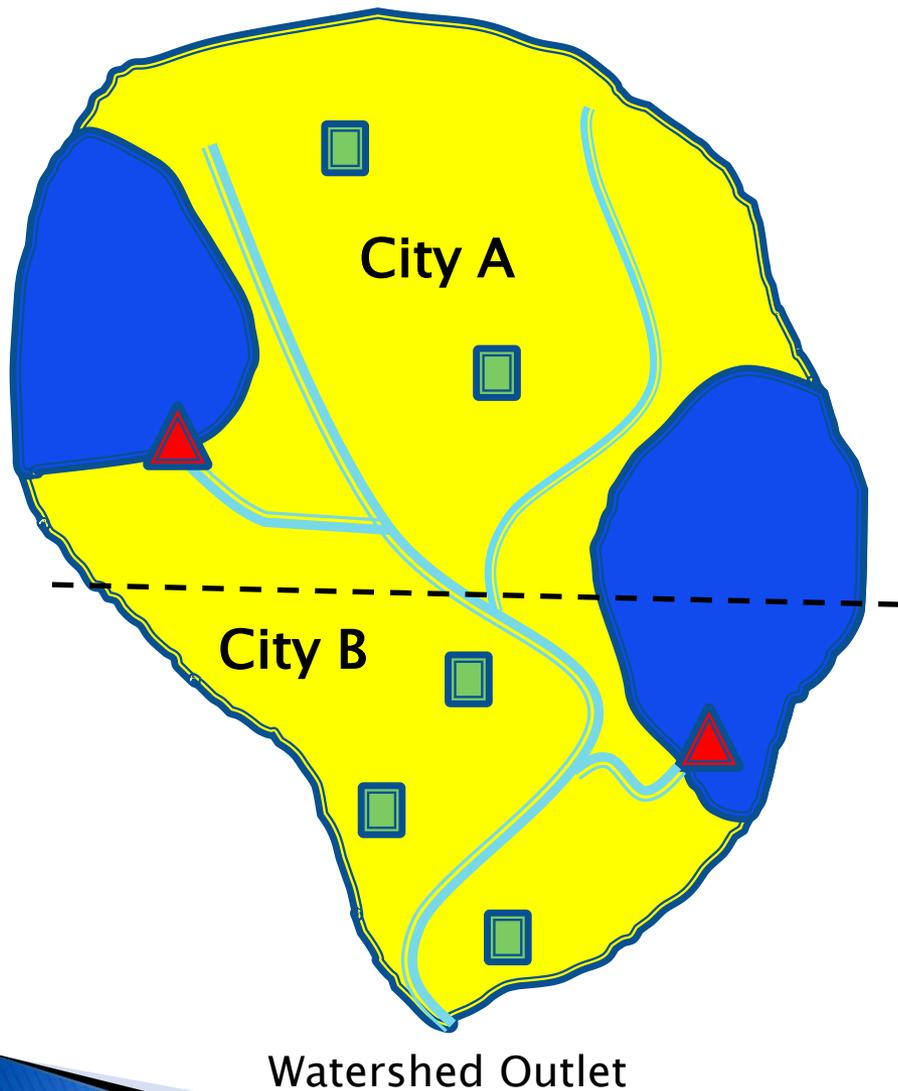
-  EWMP Area
-  Multi-benefit regional project
-  Area tributary to multi-benefit regional project
-  Other BMPs subject to Reasonable Assurance Analysis
-  City boundary
-  MS4

EWMP Planning Process

- ▶ Gather watershed information
- ▶ Identify potential project sites
- ▶ Gather other stakeholders
- ▶ Conduct feasibility analysis on project sites
- ▶ Identify funding sources
- ▶ Identify other BMPs / conduct Reasonable Assurance Analysis



EWMP Conceptual Schematic



LEGEND

-  EWMP Area
-  Multi-benefit regional project
-  Area tributary to multi-benefit regional project
-  Other BMPs subject to Reasonable Assurance Analysis
-  City boundary
-  MS4

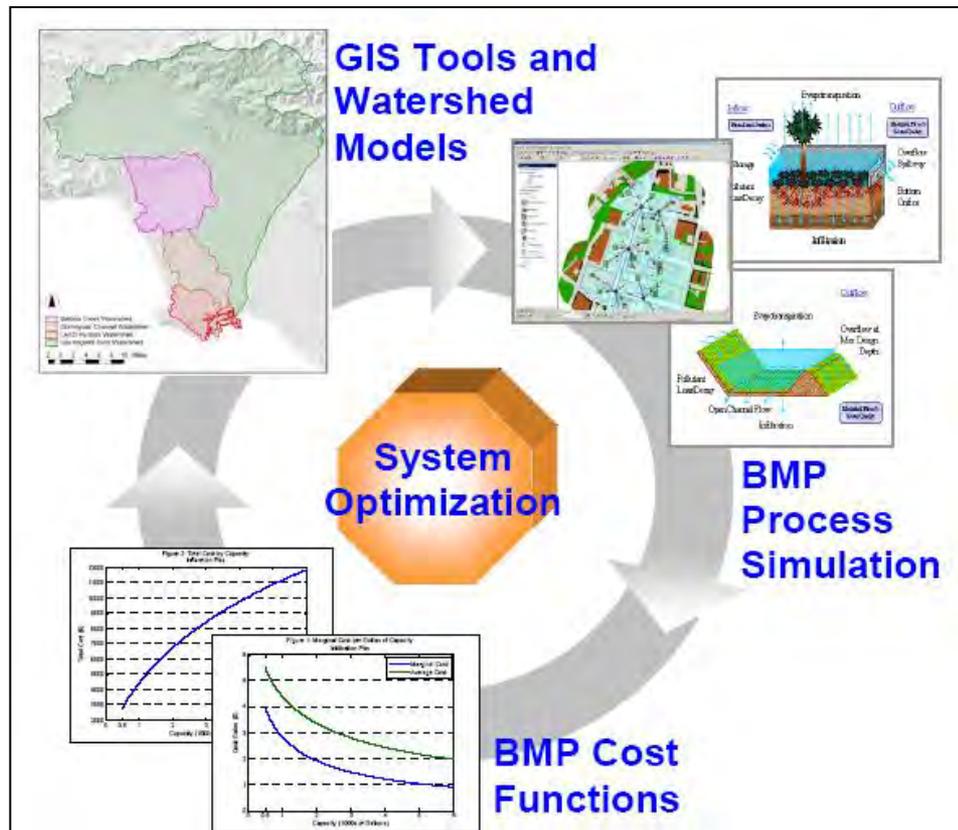
Sound Technical Basis

- ▶ EWMP is based on state of the art computer modeling tool for stormwater management and planning
- ▶ Based on USEPA model for TMDL development and recognized nationally
- ▶ Integral in implementing TMDLs and providing Reasonable Assurance where multi-benefit projects are not feasible
- ▶ Presented to Dr. Richard Horner



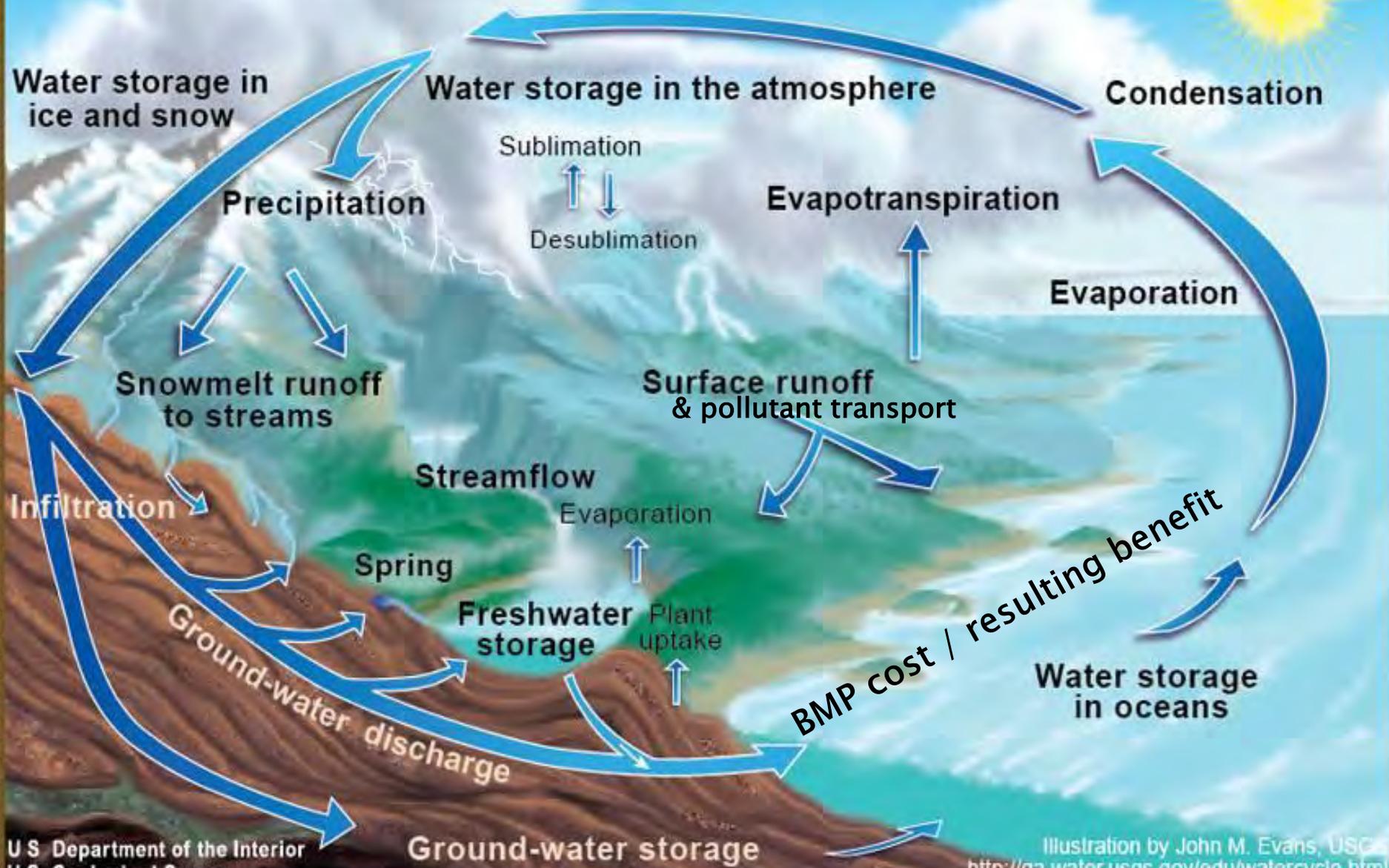
Watershed Model as Planning Tool

Some planning questions:



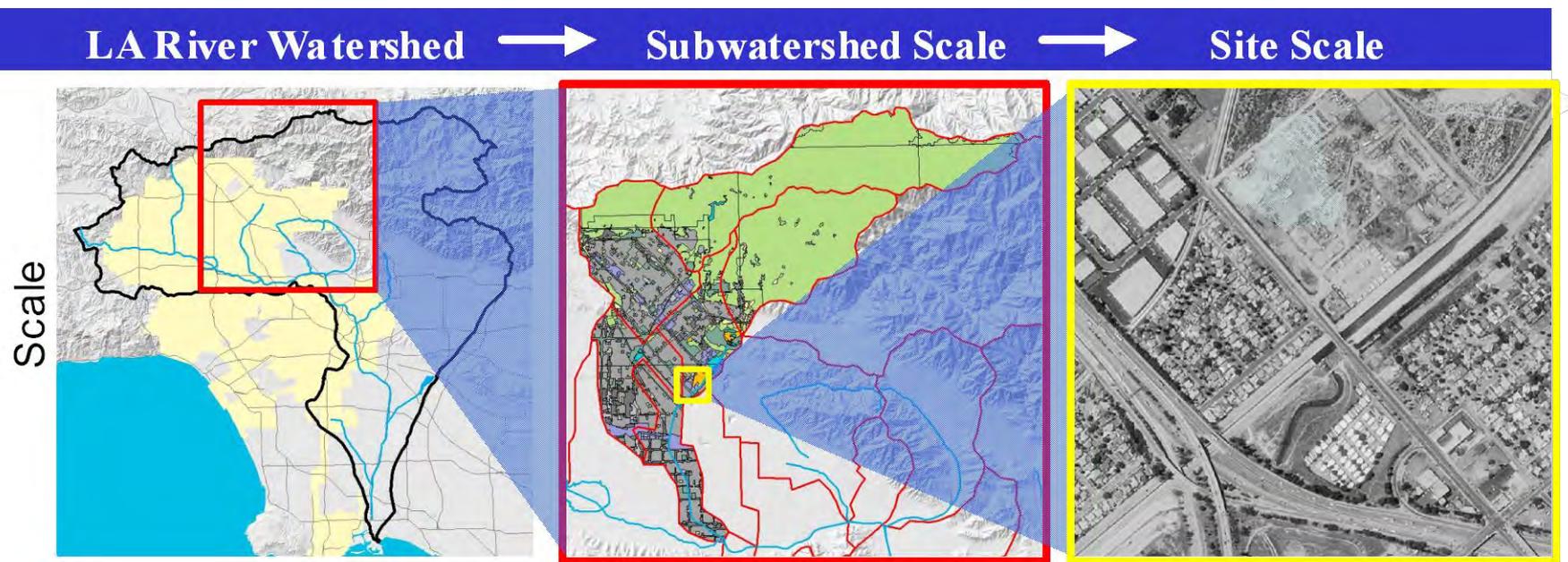
- What combination of BMPs?
- How many BMPs and where?
- How much water must be treated or infiltrated to meet standards?
- How much will BMPs cost?

The Water Cycle

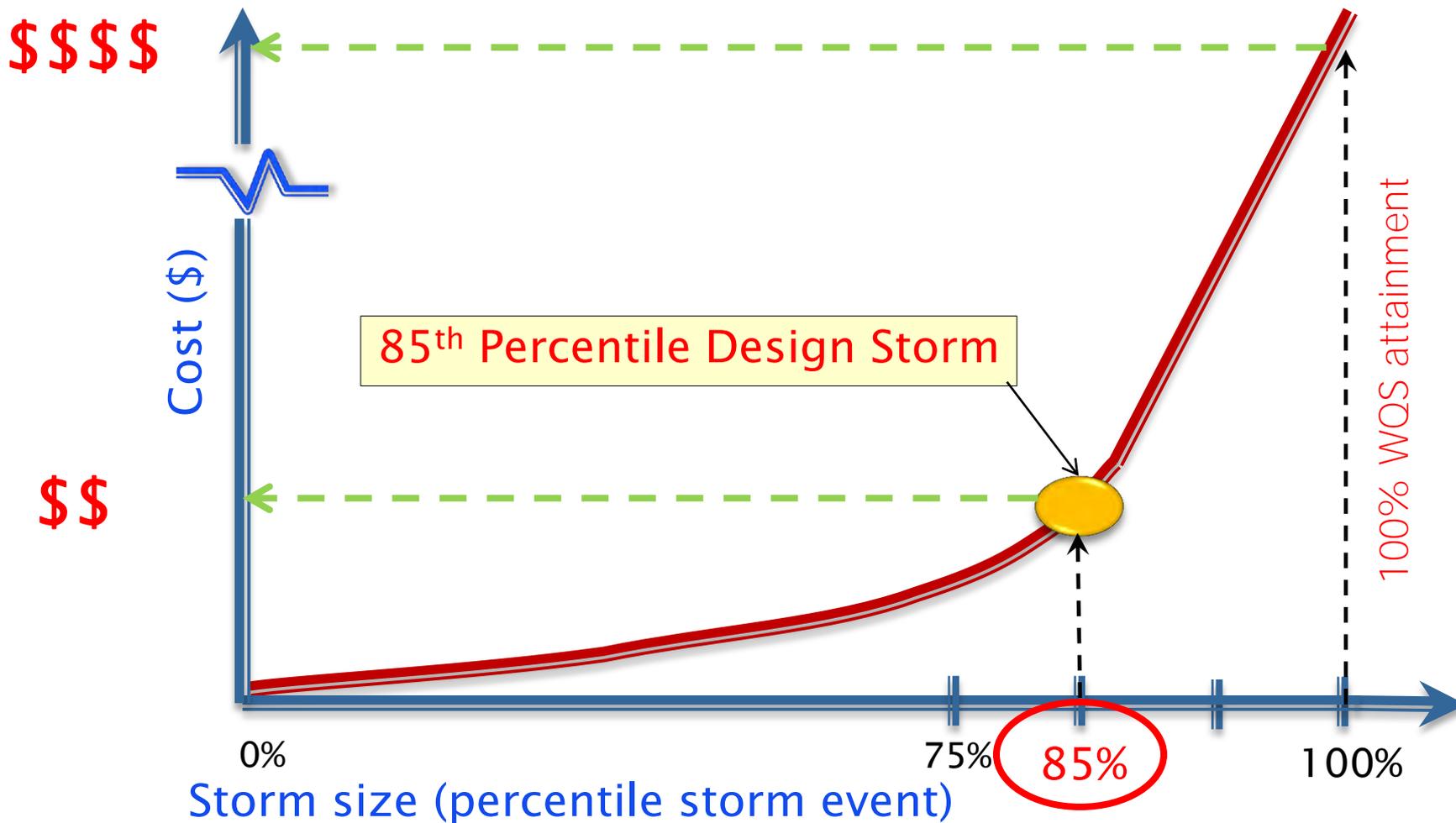


Model Addresses Broad-scale Watershed Issues

- ▶ Watershed-based stormwater quality infrastructure planning
- ▶ TMDL implementation strategy development
- ▶ Other multi-benefit watershed management planning



Design Storm



Technical Advisory Committee



- ▶ Collaboration
- ▶ Transparency
- ▶ Technical expertise



Benefits of the Revised Draft

- ▶ Unprecedented opportunity to integrate water supply planning with CWA compliance
- ▶ Compliance certainty
- ▶ Facilitates collaboration
- ▶ Additional potential funding partners



Revised Draft is Supported by the Law

The Regional Board may exercise its best professional judgment in establishing permit terms. (33 U.S.C. § 1342(a)(1)(B) [agency includes such conditions at it “determines are necessary to carry out the provisions of [the Act].”]

Natural Res. Def. Council, Inc. v. U.S. EPA (9th Cir. 1988) 863 F.2d 1420, 1425; *City of Arcadia v. State Water Res. Control Bd.* (2006) 135 Cal. App. 4th 1392, 1412.)



Revised Draft is Supported by the Law

As the Water Boards have argued, the “very nature of best professional judgment dictates that the permitting agency use its best judgment to interpret a standard in the absence of regulatory guidance, and this necessarily requires the use of discretion.”

(Voices of Wetlands v. California State Water Res. Control Bd. (2007) 157 Cal. App. 4th 1268, review granted and opinion superseded, 180 P.3d 223 (Cal. 2008) and aff'd sub nom. Voices of the Wetlands v. State Water Res. Control Bd. (2011) 52 Cal. 4th 499.)



Philadelphia Example

BEFORE THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103

In the Matter of)
)
The City of Philadelphia Water) Proceeding Under Sections 308 and 309(a) of
Department) the Clean Water Act, 33 U.S.C. §§ 1318 and
) 1319(a)
and)
) **ADMINISTRATIVE ORDER FOR**
The City of Philadelphia) **COMPLIANCE ON CONSENT**
)
Respondents) Docket No. CWA-03-2012-0264

ADMINISTRATIVE ORDER FOR COMPLIANCE ON CONSENT

I. STATUTORY AUTHORITY

1. This Administrative Order for Compliance on Consent ("AOCC" or "Order") is issued under the authority vested in the United States Environmental Protection Agency ("EPA") by Sections 308 and 309(a) of the Clean Water Act, 33 U.S.C. §§ 1318 and 1319(a) ("CWA" or "Act"). The Administrator of EPA has delegated this authority to the Regional Administrator of EPA Region III who in turn has redelegated it to the Director of the Water Protection Division.

II. STATUTORY AND REGULATORY BACKGROUND

2. Section 301(a) of the Act, 33 U.S.C. § 1311(a), prohibits the discharge of any pollutant (other than dredged or fill material) from a point source into waters of the United States except in compliance with a permit issued pursuant to the National Pollutant Discharge Elimination System ("NPDES") program under Section 402 of the Act, 33 U.S.C. § 1342, and 40 C.F.R. Part 122.

3. Section 502(6) of the Act, 33 U.S.C. § 1362(6), defines "pollutant" to include, *inter alia*, sewage, sewage sludge, biological material and industrial, municipal and agricultural waste.

4. Section 502(12) of the Act, 33 U.S.C. § 1362(12), defines "discharge of a pollutant" to include "any addition of any pollutant to navigable waters from any point source."



Philadelphia Example

16. PADEP approved a 25 year implementation schedule for the PWD to implement its Updated Long Term Control Plan (“LTCP”), which is referred to by the City as its *Green City, Clean Waters* program, to achieve the elimination of the mass of the pollutants that otherwise would be removed by the capture of 85% by volume of the combined sewage collected in the CSS. The LTCP targets the conversion of 34% of the CSS drainage to “greened acres” which will manage the first inch of rainfall runoff from directly connected impervious areas. Overall LTCP costs, which include the management of green acres, are estimated at 1.2 billion dollars in net present value.



Philadelphia Example

18. The City's innovations in coordinating wastewater and stormwater planning embody many of the principles embraced by EPA in its encouragement of integrated planning for municipal wastewater and stormwater management under the CWA. For instance, the City has uniquely synthesized its wastewater NPDES and stormwater NPDES planning, compliance and reporting efforts through the development of integrated watershed management plans. The City's financial strategy and capability assessment integrates the sewer and stormwater efforts across the City with *Green City, Clean Waters*, an important element of the EPA integrated planning framework. In seeking efficient sustainable integrated solutions to wastewater and stormwater issues, the City has fully embraced the application of green stormwater infrastructure, asset management, comprehensive integrated engineering alternatives analyses, triple bottom line goal setting, and a number of other approaches suggested in the EPA's integrated planning framework.



EPA Integrated Municipal Stormwater Planning Guidance



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN -5 2012

MEMORANDUM

SUBJECT: Integrated Municipal Stormwater and Wastewater Planning Approach Framework

FROM: Nancy Stoner 
Acting Assistant Administrator
Office of Water

Cynthia Giles 
Assistant Administrator
Office of Enforcement and Compliance Assurance

TO: EPA Regional Administrators
Regional Permit and Enforcement Division Directors

In recent years, EPA has increasingly embraced integrated planning approaches to municipal wastewater and stormwater management. EPA further committed to work with states and communities to implement and utilize these approaches in its October 27, 2011 memorandum "*Achieving Water Quality Through Municipal Stormwater and Wastewater Plans*." Integrated planning will assist municipalities on their critical paths to achieving the human health and water quality objectives of the Clean Water Act by identifying efficiencies in implementing requirements that arise from distinct wastewater and stormwater programs, including how to best prioritize capital investments. Integrated planning can also facilitate the use of sustainable and comprehensive solutions, including green infrastructure, that protect human health, improve water quality, manage stormwater as a resource, and support other economic benefits and quality of life attributes that enhance the vitality of communities.

To provide further guidance on developing and implementing effective integrated plans under this approach, we have developed, with extensive public input, the attached Integrated Municipal Stormwater and Wastewater Planning Approach Framework document. We are posting the framework document on our website and, as they become available, will provide practical examples of how municipalities are implementing this approach. We would like to thank Regions 2, 4, 5, 7 and 10 for their assistance in conducting public workshops to gain input on the draft framework. We encourage all Regions to work with their States to identify

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County and LACFCD Support the Permit



Comments on the Greater LA County MS4 NPDES Permit NPDES No. CAS004001

November 8, 2012

Los Angeles Regional Water Quality Control Board
Public Hearing

LA PERMIT GROUP

*A collaborative effort to negotiate the
Los Angeles County MS4 NPDES Permit*

Presenter Panel

Heather Maloney, City of Monrovia

John Dettle, City of Torrance

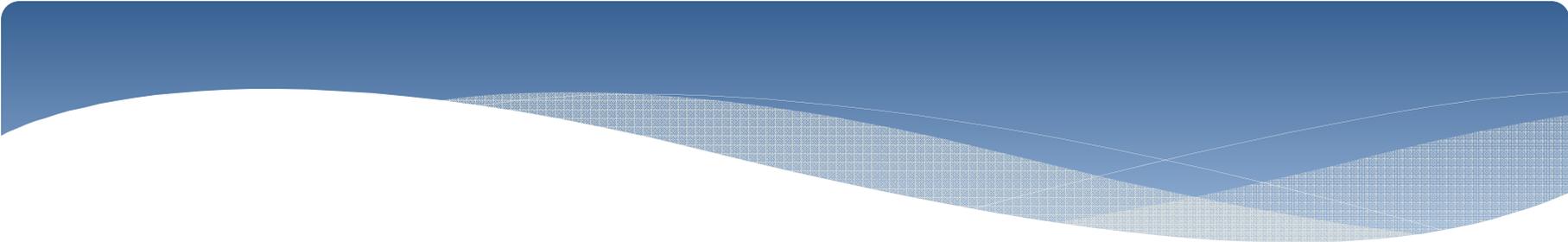
Joe Bellomo, City of Westlake Village & City of Agoura Hills

Heather Merenda, City of Santa Clarita

LA Permit Group

62 Voting Agencies

- * Agoura Hills
- * Alhambra
- * Arcadia
- * Artesia
- * Azusa
- * Baldwin Park
- * Bell
- * Bell Gardens
- * Bellflower
- * Beverly Hills
- * Bradbury
- * Burbank
- * Calabasas
- * Carson
- * Claremont
- * Commerce
- * Covina
- * Culver City
- * Diamond Bar
- * Duarte
- * El Monte
- * Gardena
- * Glendale
- * Glendora
- * Hawthorne
- * Hermosa Beach
- * Hidden Hills
- * Huntington Park
- * Industry
- * Inglewood
- * La Verne
- * Lakewood
- * Lawndale
- * Los Angeles
- * Lynnwood
- * Malibu
- * Manhattan Beach
- * Monrovia
- * Montebello
- * Monterey Park
- * Paramount
- * Pasadena
- * Pico Rivera
- * Pomona
- * Redondo Beach
- * Rolling Hills
- * Rolling Hills Estates
- * Rosemead
- * San Dimas
- * San Gabriel
- * San Marino
- * Santa Clarita
- * Santa Fe Springs
- * Santa Monica
- * Sierra Madre
- * South El Monte
- * South Gate
- * Torrance
- * Vernon
- * West Covina
- * West Hollywood
- * Westlake Village

- 
- * We want to thank your staff for all their hard work on the permit. They worked hard to identify solutions that address cities concerns and achieve water quality
 - * Cities are encouraged by the changes in the 2nd Revised Tentative.
 - * Support the Watershed Management Plan and Enhanced Watershed Management Plan

Early Actions Between Effective Date and WMP/EWMP Submittal

- * Setting up multi agency agreements
- * Developing RFPs to implement permit requirements.
- * RFP for the development of WMP/EWMP
- * Continued implementation of existing MCM (ex. education, plan check, enforcement inspections, etc.)
- * Continuing TMDL required actions and approved implementation plans
- * Continuing actions required under Trash TMDLs
- * Fiscal analysis/Budget preparations
- * Program and contract admin.
- * Developing job descriptions and hiring necessary staff
- * Training new and existing staff on the significant changes
- * Ordinances (legal authority, green streets, LID, etc.)

Plan Examples

Integrated Total Maximum Daily Load Implementation Plan for the Malibu Creek Watershed

February 27, 2007



Prepared for:
Los Angeles County Department of Public Works

Prepared by:
CDM
18561 Teller Avenue, Suite 200
Irvine, California 92612

Prepared with support from: Geosyntec Consultants, Integrated
Water Resources, Inc., E2 Inc., Bonterra, and Map Vision
Technologies Inc.

- * Malibu Creek Watershed
- * City of Torrance

WMP Development Process

- * Water Quality Characterization
- * Pollutant Classification
- * Source Assessment
- * Prioritization (TMDLs, others, etc.)
- * Select Control Measures
 - * Type, number, locations, frequency
 - * Schedule, including interim milestones
 - * Identify responsibilities of each participating agency

Reasonable Assurance Process

- * Quantitative process
- * Peer-reviewed model and watershed control measures
- * Includes data collected over the last 10 years, including land use and pollutant loading data
- * Establishment of quality assurance/quality control (QA/QC) criteria and data checks
- * Identification of the data set meeting the criteria for use in the analysis - data shall be statistically analyzed

Reasonable Assurance Process

- * Demonstrate that applicable WQBELs will be achieved
- * Ensure adequate progress toward achieving interim and final water quality-based effluent limitations and/or receiving water limitations with deadlines during and beyond the permit term
- * Demonstrate that the activities and control measures identified in the plan will achieve applicable receiving water limitations as soon as possible.

Summary of TMDL Development and Reasonable Assurance Analysis

Parameter	Reasonable Assurance
Watershed Info	
Input Data	
Modeling Tools	
Best Available Info	
BMP Information	
Make Most Informed Decision	
Uses Adaptive Management	

WMPs = Assurance

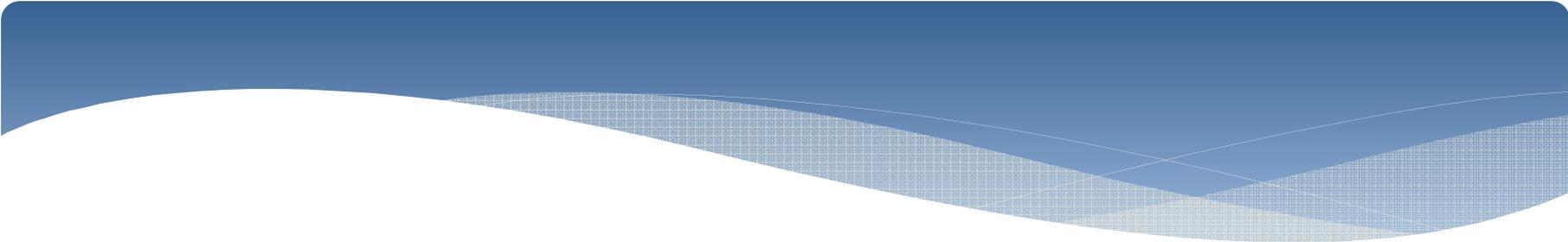
- * Watershed Management Plans provide a clear and transparent compliance plan
- * WMP's will be reviewed by the Technical Advisory Committee
- * The WMP includes strict compliance requirements for permittees to follow the plan

WMP – Compliance Schedule

- * Compliance schedule with interim milestones
- * Need to maintain flexibility in WMP/EWMP and Monitoring and Reporting Programs

Response to Comments and Natural Source Exclusion

<p>General</p>	<p>Please include a paragraph that Permittees are not responsible for pollutant sources outside the Permittees authority or control, such as aerial deposition, natural sources, sources permitted to discharge to the MS4, and upstream contributions.</p>	<p>LA Permit Group (Comment 23)</p>	<p>The permittees have ultimate authority and responsibility to prohibit, prevent, or otherwise control discharges that enter and exit the portions of the MS4 for which they are owners and/or operators. Even if the permittees do not themselves generate the pollutants entering/exiting their MS4s, the permittees are nevertheless responsible for ensuring that the pollutants do not reach receiving waters through their MS4. As recently stated by the 9th Circuit Court of Appeals, “the Clean Water Act does not distinguish between those who add and those who convey what is added by others - the Act is indifferent to the originator of water pollution.” (<i>NRDC v. County of Los Angeles</i> (2011) 673 F.3d 880, 900.) Thus, the Clean Water Act, and this permit, appropriately places responsibility for preventing or controlling MS4 discharges on the permittees.</p> <p>Further, it is the Board’s intention to regulate all pollutants, whether they are anthropogenic or naturally occurring, that are discharged from the MS4 to receiving waters. The entire purpose of a NPDES permit is to regulate discharges of “pollutants” from point sources to receiving waters. The Clean Water Act’s definition of “pollutant” in section 502(6) does not distinguish between pollutants that are caused by anthropogenic or naturally occurring sources. Further, the definition of “waste” in California Water Code section 13050(d) specifically includes waste “associated with human habitation, or of human or animal origin.” Even if a permittee is not able to control the source of a naturally occurring pollutant, permittees are required to control pollutants through an MS4 to receiving waters.</p> <p>Permittees are not responsible for direct aerial deposition on waterbodies. However, permittees are responsible for controlling discharges from their MS4. Therefore, permittees are responsible for controlling discharges of pollutants from indirect aerial deposition on land surfaces.</p> <p>Notwithstanding the above, the tentative order addresses sources</p>	<p>None</p>
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Further, it is the Board's intention to regulate all pollutants, whether they are anthropogenic or naturally occurring, that are discharged from the MS4 to receiving waters. The entire purpose of a NPDES permit is to regulate discharges of "pollutants" from point sources to receiving waters. The Clean Water Act's definition of "pollutant" in section 502(6) does not distinguish between pollutants that are caused by anthropogenic or naturally occurring sources. Further, the definition of "waste" in California Water Code section 13050(d) specifically includes waste "associated with human habitation, or of human or animal origin." Even if a permittee is not able to control the source of a naturally occurring pollutant, permittees are required to control pollutants through an MS4 to receiving waters.

Response to Comments

- * Conflicts with exemptions
- * Natural flows, including:
 - * Natural springs;
 - * Flows from riparian habitats and wetlands;
 - * Diverted stream flows, authorized by the State or Regional Water Board;
 - * Uncontaminated ground water infiltration⁵;
 - * Rising ground waters, where ground water seepage is not otherwise covered

Definitions of Pollutant in Response to Comments

- * CA Water Code: "Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.
- * Clean Water Act: The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

TMDL Natural Source Exclusion

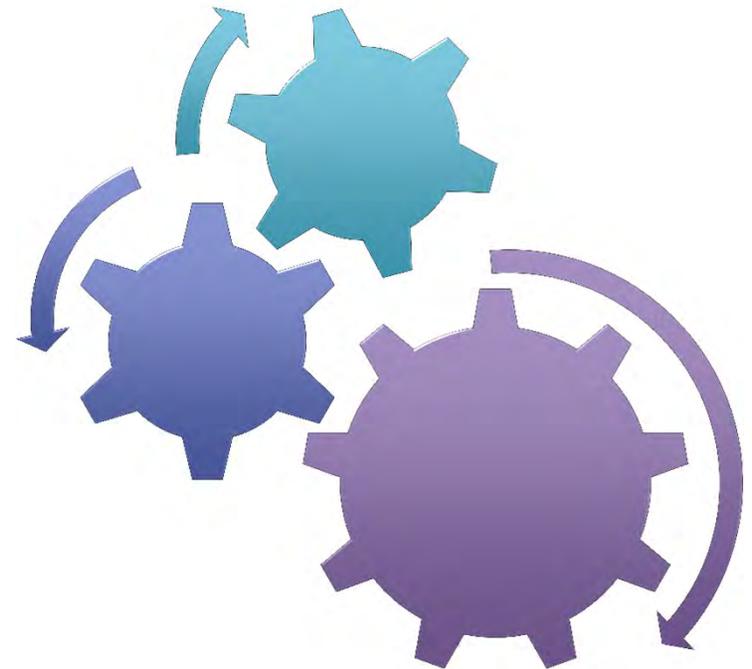
- * Implications in light of natural source exclusions not yet heard in the dry weather bacteria TMDLs
 - * Reference beaches
 - * Natural conditions
- * Please reconsider these overly broad statements and revise the response to comments

Remaining Concerns

- * We've come a long way; Positive changes
- * Still fundamental issues of concern
 - * Cost for implementing WMP/EWMP
 - * Timeframes are tight and may be unrealistic
 - * Wet and Dry Weather Bacteria TMDL
 - * Reconsideration for TMDL narrowly scoped and did not consider natural source studies and data
 - * Request a commitment from Regional Board to use the clause to reopen all the Dry Weather Bacteria TMDLs to consider issues such as natural sources

Conclusion

- * Partnership is key to achieving water quality
- * Integrated Planning and monitoring are the appropriate way to address water quality
- * WMP/EWMPs provide a clear and transparent compliance plan



Revised MS4 Permit

Ray Tahir
for the cities of

Baldwin Park, Carson, Compton, Duarte, Claremont, Gardena,
El Monte, Irwindale, Pico Rivera, San Fernando, South El
Monte, and West Covina

Revised MS4 Order Public Hearing

- Discussion Points
 - County's alternative regional approach
 - Looks promising but there are concerns
 - Revised permit still has unresolved issues
 - BMP WQBELs, Time Schedule Orders, non-stormwater discharge prohibition *through* instead of *to* the MS4
 - Possible solutions

Revised MS4 Order Public Hearing

➤ LACFCD Alternative

- Proposes to allow watershed management plans to meet TMDL numeric waste load allocations
 - Regional WMPs would call for structural BMPs such as parks retrofitted to operate as infiltration basins -- a good thing!
 - Projects would be funded presumably – though not clear – through the water quality initiative (assuming that it passes)
 - Implementation of the WMPs apparently would place permittees into compliance with TMDL – though the revised permit language does not clearly affirm that – still it's a good proposal!
 - Another benefit: in addition to improving stormwater quality the alternative would also increase ground water supply

Revised MS4 Order Public Hearing

- LACFCD Alternative – concerns
 - How much will it cost and where will the funding come from?
 - Water Quality Initiative or Proposition 84 funding
 - What would happen if neither of these funding sources is available?
 - Would permittees be required to use general funds?
 - If general funds are not available and the WMP cannot be implemented would permittees be in violation?
 - The revised permit would need to address this possibility by allowing permittees to implement 6 core stormwater quality management programs (general WQBELs) as an alternative compliance solution

Revised MS4 Order Public Hearing

➤ LACFCD Alternative – concerns

- Insufficient review time
 - Permittees have had less than two weeks to review the proposal (this will be an issue)
 - Municipal stakeholders have not been informed or given the opportunity to ask questions (discussions have been limited to a few LASP members, the County, and NGOs)
 - COGs (SCAG sub-regions) and watershed committees should have been included in discussions
 - The revision constitutes a significant change that should have triggered a 45 day review and comment period and the opportunity to ask questions
 - Getting buy-off from municipal stakeholders would generate support from the proposal and for the water quality initiative
 - Bring in stakeholders early in the process and they can be your partners – bring them in late and they will be your judge
 - Not including them sooner raises suspicions

Revise Order Public Hearing

➤ Unresolved Permit Issues

- Time schedule order (TSO) requirement as a means of retroactively complying with TMDLs has not been eliminated
 - A TSO is an enforcement action - it's an admission that a permittee has caused violation
 - A permittee cannot not be in violation of a TMDL because (1) no outfall monitoring has been conducted to determine if it had caused an exceedance; (2) compliance with a water quality standard cannot be determined by monitoring in the receiving water; (3) implementation of a permittee's stormwater quality management plan determines compliance with RWLs (TMDLs and water quality standards); and (4) TMDLs are planning tools not regulations
 - The TSO must be removed from the revised permit

Revise Order Public Hearing

- Unresolved Permit Issues (continued)
 - Non-stormwater discharge prohibition still refers to discharges “from” the MS4 rather than “to” the MS4
 - This is a big deal because it would place a permittee in violation for exceeding a dry weather TMDL
 - The revised order is also in error because it says that *co-permittees need only comply with permit conditions relating to discharges from the MS4 for which they are owners or operators (40 CFR § 122.26(a)(3)(vi)).*
 - There is no 122.26(a)(3)(vi) – ends a “v”
 - Conflicts with other provisions in the order: the Permittee(s) shall effectively prohibit non-storm water discharges **to the MS4**
 - Also says the order implements the federal Phase I NPDES Storm Water Program requirements prohibit non-storm water discharges **through the MS4,**

Revise Order Public Hearing

- Unresolved Permit Issues (continued)
 - Here's what the Clean Water Act actually says:
*Municipal discharge Permits (ii) shall include a requirement to effectively prohibit non-stormwater discharges **into the storm sewers***
 - This is the same language that's in all California MS4 permits, including the recently adopted Caltrans MS4 permit and the draft San Diego MS4 permit
 - The revised order needs to be corrected to eliminate the confusion and make it clear that non-stormwater discharges are only prohibited to the MS4.

Revise Order Public Hearing

- TMDLs/Water Quality Standards compliance is determined by monitoring (sampling and analysis) at the outfall – not the receiving water
- Several TMDLs require monitoring in the receiving water (Los Angeles River)
- TMDLs/water quality standards are ambient, dry weather standards, not wet weather ones
- TMDLs must be re-opened to remove receiving water compliance requirements

Revise Order Public Hearing

- Unresolved Permit Issues (continued)
 - The iterative process (the trial and error process for meeting TMDLs and other water quality standards) must be unconditional
 - Revised order still allows it if a permittee chooses to participate in a Watershed Management Plan
 - The Caltrans MS4 permit contains an unconditional IP

Revise Order Public Hearing

➤ Proposed Solution

- Adopt the permit but provide include 180 day period to correct order's errors and propose language to place the order in compliance with federal stormwater regulations and state board orders
- While the corrections are pending permittees will be in compliance by implementing the order (in itself a general WQBEL)
- Permittees will file an administrative petition that will be placed in abeyance pending the corrections

Revise Order Public Hearing

- If the Regional Board rejects this option permittees will have no choice but file an administrative petition with request for a stay
 - This action could take several months for the State Board to address
 - The stay would prevent the permit from being implemented

City of Signal Hill



Presentation to the Los Angeles Regional Water Board Technical Issues with Revised Tentative Order

Richard Watson, A.I.C.P.

8 November 2012

The seal of the City of Signal Hill, featuring a woman in a red dress and a blue shawl, holding a staff, with a sunburst behind her. The text "CITY OF SIGNAL HILL" is visible around the border.

Outline

- Reopeners
- Changes to Watershed Management Program
- Changes to Monitoring and Reporting Program
- Changes to TMDL Provisions

The seal of the City of Signal Hill, featuring a woman in a red dress holding a torch, surrounded by a circular border with the text "CITY OF SIGNAL HILL".

Reopeners

- TMDL implementation plan reopener
- BMP Compliance with final WQBELS
- Incorporation of State Water Board action regarding precedential language of 99-05
 - Does not go far enough
 - Should acknowledge that 99-05 specifies that the iterative process is to apply to both discharge prohibitions and receiving water limitations



Change to Watershed Management Programs

- Flexibility of WMPs maintained and enhanced
 - Addressing highest watershed priorities first is extremely important
 - Highest priorities will be TMDLs and non-stormwater discharges
- The term “effectively prohibited” (See VI.C.1.d) should be defined in Appendix A to be subject to the iterative process to be consistent with precedential Order 99-05.



Change to Watershed Management Programs (Continued)

- The enhanced Watershed Management Program (EWMP) is intriguing, but requires more explanation:
 - “...for collaboration among Permittees and other partners on multi-benefit regional projects that, wherever feasible, retain (i) all non-stormwater runoff and (ii) all storm water runoff from the 85th percentile, 24-hour storm event...while also achieving other benefits including flood control and water supply, among others.” (p.48)
 - Role of comprehensive pollution prevention (true source control)?
- Addition of “Compliance with Receiving Water Limitations Not Otherwise Addressed by a TMDL” section important, but will let others comment on it.



Change to Watershed Management Programs (Continued)

- Part VI.C.4.b.i (page 56) specifies that a notification of intent to prepare a WMP shall specify which submittal date is being requested.
 - This requirement could delay commitments to prepare WMPs since getting a 6-month extension requires demonstration that two conditions have been met in 50% of the watershed area. Organization of a collaborative effort to develop an enhanced WMP is likely to be even more complicated.



Change to Watershed Management Programs (Continued)

- Part VI.C.4.b.i (page 56) *{continued}*
 - This provision should be modified to allow Permittees to notify the Regional Water Board of their intent to prepare a WMP with a 12-month submittal date and then amend their notification to request an 18-month submittal date or a 18/30-month submittal date if and when conditions have been met to do so.



Change to Watershed Management Programs (Continued)

- The term “transportation corridor” is an undefined term used three times in Part VI.C.4.c. (p. 57-58)
 - It should be defined.
 - The definition should be consistent with transportation planning terminology.
- Since Part VI.C.5.b.iv.(2) (page 63) has been changed to include “cause or contribute to exceedances of a receiving water limitation,” it should be further changed to clarify that BMPs must be implemented “in accordance with the iterative process specified in State Water Board Order 99-05.”



Change to Watershed Management Programs (Continued)

- The Reasonable Assurances Analysis (RAA) requirements have been changed to require that the RAA be performed using one of three peer reviewed models in the public domain.
 - None of these models directly address true source control.
 - For source control measures such as implementation of SB 346 (reduction of copper in brake pads), a quantitative spreadsheet model with clearly defined assumptions should be permitted.
- The Fact Sheet says on page F-45 that the RAA assessment can be done through quantitative analysis or modeling. A spreadsheet model is a form of quantitative analysis.



Change to Watershed Management Programs (Continued)

- The following changes are recommended for inclusion in Part VI.C.5.b.iv(5) (page 64):
 - Models to be considered for the RAA, ~~without exclusion~~ are include but are not limited to the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). For true source control measures, such as implementation of SB 346 (reduction of copper in brake pads), Permittees may use quantitative spreadsheet models with clearly defined assumptions until the treatment control models have been modified to directly account for true source control measures. The RAA shall commence with assembly of available, relevant subwatershed



Changes to Monitoring and Reporting Program – Attachment E

- Appreciate changes made to reduce complexity and costs
 - Reduced sampling and reporting requirements
 - Eliminated unnecessary pyrethroid insecticide study
 - Using TST approach for chronic toxicity testing reduces costs
- Allowing alternative approaches to meeting the Primary Objectives for IMPs and CIMP is potentially valuable.
 - However, alternative approaches should not have to repeatedly go through the review and approval process.
 - Once an alternative approach has been reviewed and approved for one IMP or CIMP it should be able to be used in others.



Changes to Monitoring and Reporting Program – Attachment E (Continued)

- Minimum stormwater outfall-based monitoring requirements in Part VIII.B.1.b.i have been changed to allow alternative precipitation thresholds as provided for an approved IMP or CIMP.
 - Instead of depending on alternative precipitation thresholds, we think it makes more sense to specify a more practical precipitation threshold, such as 0.25 inches as is done in Part VIII.B.1.b.iii
 - Also, sampling events should be separated by 3 days of dry conditions with less than 0.1 inches of rainfall over the 3-day period.



Changes to Monitoring and Reporting Program – Attachment E (Continued)

- Changes to Parts VIII.B.1.c.vi on page E-24 and IX.G.1.d on page E-29 are similar - and both have problems.
 - Part IX.G.1.d refers to the “nearest” downstream receiving water monitoring station; Part VIII.B.1.c.vi should also.
 - Both Parts need limits on how far upstream from where the reference TIE was conducted does aquatic toxicity need to be monitored.



Changes to TMDL Provisions

We appreciate the addition of Part IV.E.2.e.i.(4) (page 147):

“(4). ”In drainage areas where Permittees are implementing an EWMP, (i) all non-storm water and (ii) all storm water runoff up to and including the volume equivalent to the 85th percentile, 24-hour event is retained for the drainage area to the applicable receiving water. This provision (4) shall not apply to final trash WQBELs”.

- However, we think that this should apply to implementing either a WMP or an EWMP



Southern California
Los Angeles and Ventura
Counties Chapter



Comments on Tentative Draft LA County MS4 Permit

**Building Industry Association of Southern California
&
Construction Industry Coalition on Water Quality**

November 8, 2012

LA County Tentative Draft MS4 Permit Issue #1. Regional Mitigation Program Retention Standard

Permit Issue	Concerns and Technical Support	Suggested Approach
<p>Newly inserted permit provision for the Regional Stormwater Mitigation Program Option (6) (a) (found at top of page 106) is inconsistent with the permit’s established hierarchy of LID BMP consideration and implementation, which is clearly defined in: 7.c.i. and c. ii. (found on pages 100 to 102)</p>	<p>Provision is inconsistent with the permit’s implementation of Alternative Compliance Measures when a finding of technical infeasibility for infiltration is shown.</p> <p>Creates a separate retention standard for regional mitigation at the watershed scale</p> <p>Unnecessary and redundant with provision (6) (b) that requires: “improved storm water quality”</p>	<p>When a finding of technical infeasibility is made for infiltration at the watershed scale, allow implementation of biofiltration BMPs at 1.5 X the SWQDv.</p> <p>See suggested redline change on following page:</p>

LA County Tentative Draft MS4 Permit Issue #1. Regional Mitigation Program Retention Standard

Suggested Redline Change:

7.c.iii.(6) Regional Storm Water Mitigation Program

(a) Retains the runoff from the 85th percentile, 24-hour rain event or the 0.75 inch, 24-hour rain event, whichever is greater. **In instances of technical infeasibility, the regional or sub-regional program must result in biofiltration of 1.5 times the portion of the SWQDv that is not reliably retained, as calculated by Equation 1 in 7.c.iii.1(a).**

LA County Tentative Draft MS4 Permit Issue #2. Ground Water Replenishment Projects Outside of Watershed Management Programs

Permit Issue	Concerns and Technical Support	Suggested Approach
<p>Groundwater replenishment projects are restricted to only those identified in Watershed Management Programs (WMP) 7.c.iii.(3) Page 103</p>	<p>Provision restricts and inhibits creation and implementation of groundwater replenishment projects</p> <p>Time frame of WMP development is long; disfavors early project development; disfavors collaborative projects and developer and community participation</p>	<p>See suggested redline on following page:</p>

LA County Tentative Draft MS4 Permit Issue #2. Ground Water Replenishment Projects Outside of Watershed Management Programs

Suggested Redline Change:

7.c.iii.(3) Ground Water Replenishment Projects

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

LA County Tentative Draft MS4 Permit Issue #3. Technical Corrections to Permit Provisions

Permit Issue	Concerns and Technical Support	Suggested Approach
<p>7.c.iii.(7)(b)(ii) Page 106</p> <p>No evidence an isohyetal map exists for 1-year, 1-hour rainfall intensity for Los Angeles County</p>	<p>Provision inconsistent with SUSMP treatment control standards and sizing standards established by other MS4 permits in the state</p> <p>May result in structural BMP sizing 2 to 5 times larger than necessary</p>	<p>Delete (b)(ii) and insert permit language found in 2001 permit which has been provided to staff</p>



Southern California
Los Angeles and Ventura
Counties Chapter



Thank you

Mark Grey, Ph.D.

Director of Environmental Affairs

mgrey@biasc.org

Comply with Numeric Standard?

Jason Wen, Ph.D., P.E.

**Utilities Superintendent
City of Downey**



Los Angeles County
Municipal Separate Storm Sewer System

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

ATTACHMENT O. TMDLs IN LOS ANGELES RIVER WATERSHED MANAGEMENT AREA

C. Los Angeles River and Tributaries Metals TMDL

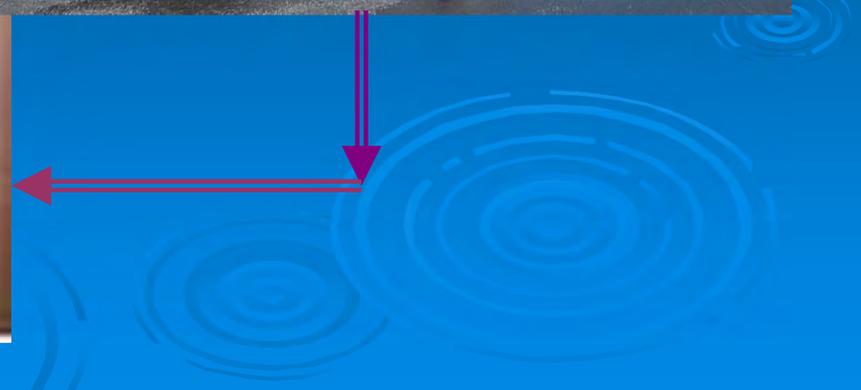
- 1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- 2. Final Water Quality-Based Effluent Limitations
 - a. The watershed is divided into five jurisdictional groups based on the subwatersheds of the tributaries that drain to each reach of the river. Each jurisdictional group shall achieve compliance in prescribed percentages of its subwatershed(s). Jurisdictional groups can be reorganized or subdivided upon approval by the Regional Water Board Executive Officer.
 - b. Permittees shall comply with the following grouped⁴⁴ dry weather⁴⁵ water quality-based effluent limitations no later than January 11, 2024, expressed as total recoverable metals.⁴⁶

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c. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather no later than January 11, 2024, expressed as total recoverable metals:

Waterbody	Effluent Limitations Daily Maximum (µg total recoverable metals/L)		
	Copper	Lead	Zinc
LA River Reach 5, 6 and Bell Creek	WER ¹ x 30	WER ¹ x 19	---
LA River Reach 4	WER ¹ x 26	WER ¹ x 10	---
LA River Reach 3 above LA-Glendale WRP and Verdugo Wash	WER ¹ x 23	WER ¹ x 12	---
LA River Reach 3 below LA-Glendale WRP	WER ¹ x 26	WER ¹ x 12	---
Burbank Western Channel (above WRP)	WER ¹ x 26	WER ¹ x 14	---
Burbank Western Channel (below WRP)	WER ¹ x 19	WER ¹ x 9.1	---
LA River Reach 2 and Arroyo Seco	WER ¹ x 22	WER ¹ x 11	---
LA River Reach 1	WER ¹ x 23	WER ¹ x 12	---
Compton Creek	WER ¹ x 19	WER ¹ x 8.9	---
Rio Hondo Reach 1	WER ¹ x 13	WER ¹ x 5.0	WER ¹ x 131

Outfall Monitoring to Meet Effluent Limitation



Where does water come from during dry weather days?

- FH flushing
- Irrigation run off
- Water pipeline leaks



Various discharge from

DRINKING WATER SYSTEM!!!

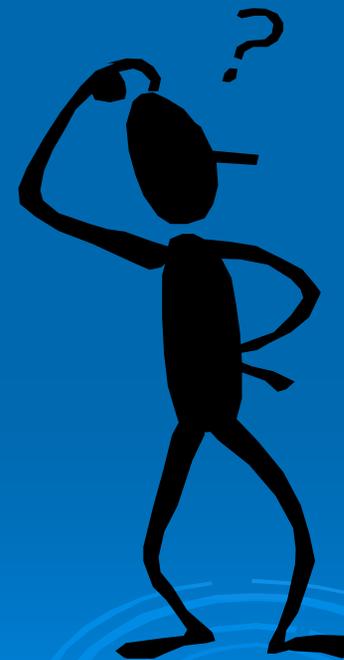
2011 Lead & Copper Sampling Result

Seq No.	Lab No.	Sample Collection Location		Date	Copper (ug/L)
1	34	8350	Florence	7/19/11	16
2	24	7817	DePalma	7/19/11	21
3	49	1143		7/21/11	22
4	9	1302		7/22/11	27
5	18	1212		7/19/11	37
6	21	1194		7/21/11	42
40	20	1194		7/19/11	230
41	39	8547	Sixth	7/19/11	230
42	41	9616	Cord	7/19/11	230
43	47	9838	Lesterford	7/19/11	230
44		LA River Reach 2 and Arroyo Seco			250
45		LA River Reach 2 and Arroyo Seco		WER ¹ x 22	260
46		LA River Reach 2 and Arroyo Seco			290
47	31	8136	Second	7/19/11	300
48	23	7549	Nada	7/19/11	340
49	46	9384	Suva	7/19/11	360
50	19	12155	Anderberg	7/19/11	380

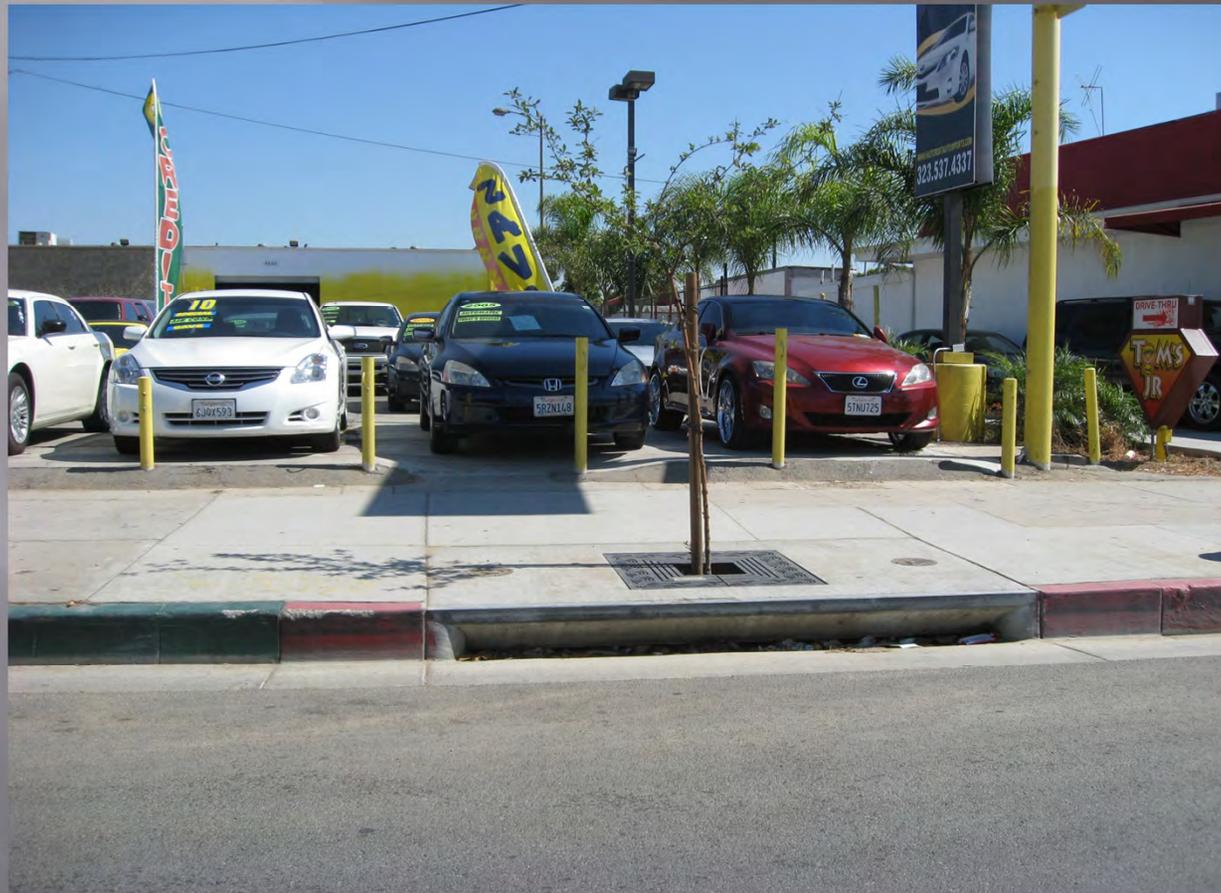


Question - Source water already exceeds standard, how can one comply with the limit?

- ZERO discharge!
- BMPs - alternative compliance
- Beneficial Use?



LID SYSTEMS 2011 – SOUTH GATE



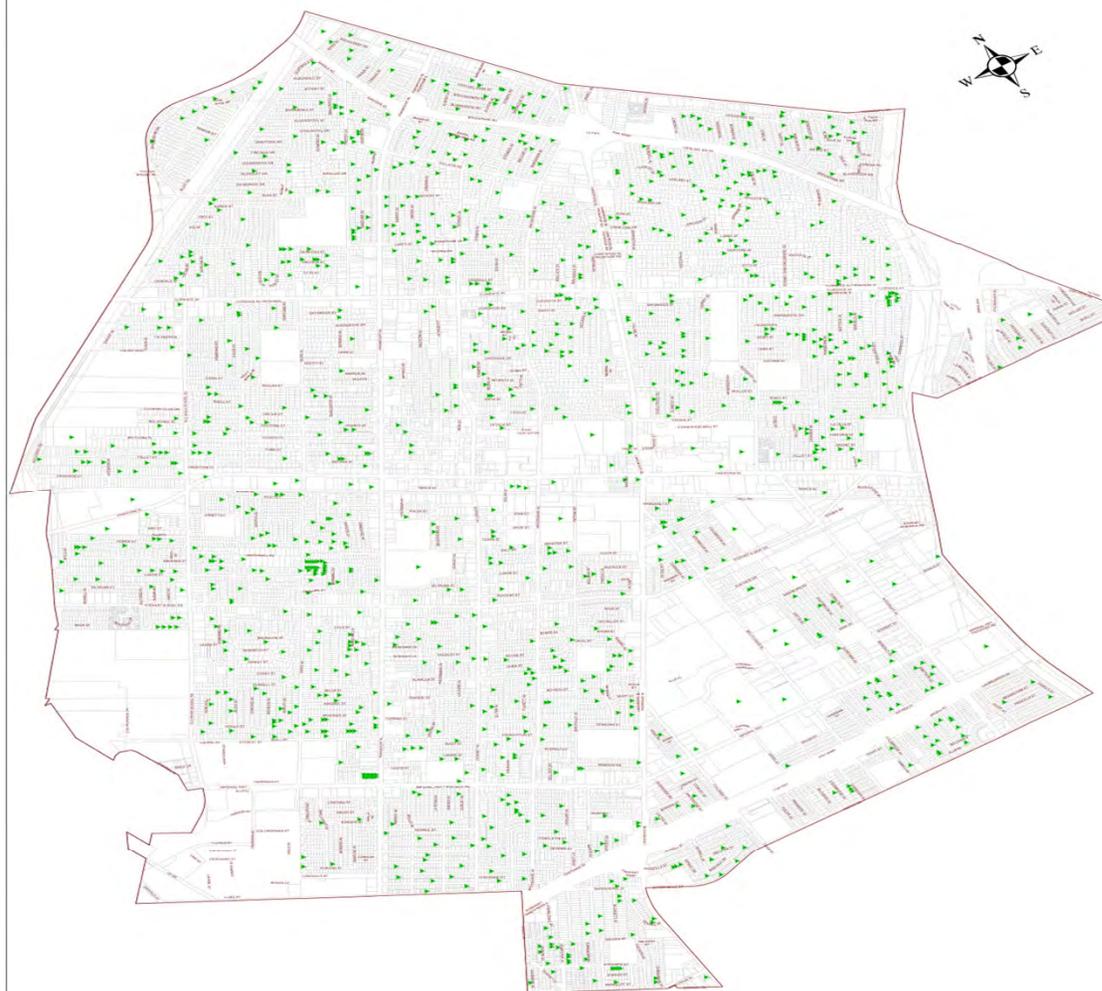
VIOLATION CORRECTION 2012 - NORWALK



TRASH CAPTURE SYSTEMS 2012 - MONTEREY PARK



City of Downey (BMPs)



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

MARIA MEHRANIAN, CHAIRPERSON

In the Matter of the)
Regional Board)
Public Meeting/Hearing)
_____)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Thursday, November 8, 2012

Reported by:

MARCENA M. MUNGUIA,
CSR No. 10420

-and-

KATRINA WOYJECK,
CSR No. 13603

-and-

ANDREA M. RINKER,
CSR No. 13437, RPR, CLR

Job No. :
B8937WQLA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

MARIA MEHRANIAN, CHAIRPERSON

In the Matter of the)
Regional Board)
Public Meeting/Hearing)
_____)

TRANSCRIPT OF PROCEEDINGS, taken at
Metropolitan Water District of Southern
California, Board Room, 700 North Alameda Street,
Los Angeles, California, commencing at 8:10 a.m.
on Thursday, November 8, 2012, heard before
the LOS ANGELES REGIONAL WATER QUALITY CONTROL
BOARD, reported by MARCENA M. MUNGUIA, CSR
No. 10420, and KATRINA WOYJECK, CSR No. 13603,
and ANDREA M. RINKER, CSR No. 13437, RPR, CLR,
Certified Shorthand Reporters in and for the
State of California.

APPEARANCES :

CHAIRPERSON: Maria Mehranian

VICE CHAIR: Charles Stringer

BOARD MEMBERS: Maria Camacho
Francine Diamond
Madelyn Glickfeld
Irma Munoz
Larry Yee

EXECUTIVE OFFICER: Samuel Unger

BOARD STAFF: Jennifer Fordyce
Nicole Kuenzi
Frances McChesney
Deborah Smith
Ronji Moffett

I N D E X

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1 Los Angeles, California, Thursday, November 8, 2012

2 8:10 a.m.

3
4
5 MS. MEHRANIAN: Will you please take your seats.

6 Okay. This is the monthly meeting of
7 Los Angeles Water Quality Control Board. Today is
8 Thursday, November 8, and we will open the meeting with
9 roll call.

10 Ronji, would you take the roll call, please.

11 MS. MOFFETT: Yes.

12 Ms. Camacho?

13 MS. CAMACHO: Present.

14 MS. MOFFETT: Ms. Diamond?

15 MS. DIAMOND: Here.

16 MS. MOFFETT: Ms. Glickfeld.

17 MS. GLICKFELD: Here.

18 MS. MOFFETT: Ms. Lutz? Ms. Mehranian?

19 MS. MEHRANIAN: Here.

20 MS. MOFFETT: Ms. Munoz?

21 MS. MEHRANIAN: She'll be here shortly.

22 MS. MOFFETT: Mr. Stringer?

23 MR. STRINGER: Here.

24 MS. MOFFETT: Mr. Yee?

25 MR. YEE: Good morning. Here.

1 MS. MEHRANIAN: Mr. Unger, do we need the order of
2 the agenda, any changes?

3 MR. UNGER: There are no changes to the order of the
4 agenda. You may note that we have some uncontested items
5 coming up as soon as we have our Board member
6 communications and the update from State Board.

7 MS. MEHRANIAN: Okay. Approval of draft meeting
8 minutes for September 14, October 4th and 5th.

9 MR. STRINGER: Move to approve.

10 MS. GLICKFELD: Second.

11 MS. MEHRANIAN: All in favor?

12 (Whereupon the Board unanimously approved the
13 motion)

14 MS. MEHRANIAN: Okay.

15 MS. FORDYCE: I'm sorry, Board members. I think Sam
16 neglected to say that that item was continued to the next
17 Board meeting, the minutes --

18 MS. MEHRANIAN: For which item?

19 MS. FORDYCE: -- for both September 14th and October
20 4th and 5th.

21 MR. UNGER: Yes. We don't have the second set in.

22 MS. FORDYCE: And there needs to be some corrections
23 to the September meeting.

24 MR. GLICKFELD: Withdraw the motion.

25 MR. STRINGER: I think I have to do that. I will

1 withdraw the motion.

2 MS. GLICKFELD: Withdraw the second.

3 MR. UNGER: So we're on to Board communications.

4 MS. MEHRANIAN: Yes. Board communications.

5 Fran?

6 MS. DIAMOND: Yes. I have no ex parte, but I do have
7 something to just mention. I was invited to participate
8 on October 9th at a -- it was a fabulous celebration of
9 the anniversary -- the 40th anniversary of the Clean
10 Water Act and we had a panel on L.A.'s clean water story
11 and it was a wonderful opportunity to stop for a moment
12 and reflect on what has happened over the many years,
13 over 40 years, and moving forward on the Clean Water Act,
14 and I was on a panel along with Mark Pestrella from the
15 County of Los Angeles Public Works and Flood Control;
16 Shelley Luce, the Deputy Director of the Santa Monica Bay
17 Restoration Commission; and Enrique Zaldivar from the
18 Bureau, the City of Los Angeles Bureau of Sanitation;
19 Mark Gold from UCLA; and David Beckman, who is formerly
20 with NRDC and now Executive Director of the Pisces
21 Foundation.

22 We also were fortunate to have State Board
23 Member Felicia Marcus give a keynote speech at lunch, and
24 Deb Smith was there and had worked with me in preparation
25 so we could tell the story of what positive things have

1 happened during the course of the work of the Regional
2 Water Board, and we talked about the Colorado Lagoon and
3 the efforts to restore and have -- and we have restored
4 this wonderful recreation area for the citizens of
5 Long Beach and all those that come to visit it as well as
6 many other projects that have happened in our region.

7 So it was a very positive way to sit down and
8 tell stories; not so much numbers and charts and graphs,
9 but just stories of how the Clean Water Act has been
10 implemented in Los Angeles and how we have been a part of
11 it and all the people and agencies and NGOs all working
12 together to make our water cleaner and increase supply,
13 and it was very helpful. So I was happy to do it and
14 look forward as we move forward to the next decade of
15 cleaning up our water.

16 MS. MEHRANIAN: Nothing?

17 MR. STRINGER: Nothing from me.

18 MR. YEE: None to report.

19 MS. CAMACHO: I guess I just wanted to make it known
20 that I attended and participated in a CORO Water
21 Conference in October and I also participated in the
22 Southern California State Water Projects Tour with the
23 California Water Commission, and then obviously I was
24 with most of you at the Delta tour prior to the Water
25 Board meeting in Sacramento.

1 MS. MEHRANIAN: Thanks.

2 And for me, I have received a letter from
3 Mr. Ray Tahir. I'm unaware of the content. It was an
4 e-mail and it was deleted and forwarded to the E.O. and
5 also, I participated in the CORO Foundation meeting,
6 symposium on water, and again with the Delta tour and
7 with the Chairs' conference at Sacramento last week.

8 Okay. Anything else?

9 So do we have a report from the State Board?
10 Fran's not here. No?

11 So we'll move on. We move on to Uncontested
12 Action items and we have Items 6 and 7. Mr. Unger?

13 MR. UNGER: At this point, the items are on consent.
14 If the Board chooses and has any questions about the
15 issues, Items 6, 7 and 8.

16 MR. GLICKFELD: 6, 7 and 8.

17 MR. UNGER: 6, 7 and 8 are -- they remain uncontested
18 and approved. If not, we will hear them at a later
19 meeting.

20 MS. MEHRANIAN: Yes. Board Member Glickfeld has a
21 question about Item 7, so let's answer it and then we'll
22 move on with it.

23 MS. GLICKFELD: Yeah. I just wanted to know, this is
24 a case where we're increasing the permitted runoff from a
25 project in Los Angeles to Ballona Creek. The Discharger

1 had a permit for 170 gallons per day of runoff from
2 planter boxes, irrigation, drainage, and discharge of
3 groundwater and we're increasing it to 14,652 gallons.
4 That's a huge increase. What -- do we have any
5 understanding of what the basis of that is or what the
6 requirement is?

7 MR. UNGER: We're going to ask David Hung and
8 Cassandra Owens to address your questions.

9 MS. GLICKFELD: Yeah. I'm more interested in knowing
10 what it is that we're asking the Discharger to do to
11 mitigate that large amount of runoff.

12 MR. HUNG: This is David Hung with the Watershed
13 Regulatory Section. This amendment actually -- the
14 discharge flow they used to provide to us in the
15 application was wrong, so they found out by using a flow
16 meter their flow is bigger than whatever they provided in
17 the past and the concentration -- the effluent limits for
18 the concentration base has not changed at all.

19 MS. GLICKFELD: But it is nonstormwater runoff that
20 goes into Ballona Creek --

21 MR. HUNG: That's correct. That is --

22 MS. GLICKFELD: -- which we are supposed to minimize.
23 We are asking our permittees to minimize, so I assume we
24 would want to minimize it as well. So --

25 MR. UNGER: Board member --

1 MS. GLICKFELD: -- I had a question about why it is
2 we just, "Oh, that's the flow. That's the flow they
3 get." Are they doing anything to try to reuse the water
4 on-site? What's the reason they have to do it?

5 MS. OWENS: Well, based on -- we had talked with them
6 regarding that and based on the information we have, it's
7 a building that's located in a highly urbanized area.
8 There is no opportunity for them to really reuse the
9 water for irrigation or anything like that and the fact
10 is they have been discharging that amount; but since they
11 had an estimated flow, we were really not apprised of the
12 actual flow that they were discharging.

13 And I understand your concern with regard to the
14 Ballona Creek TMDL, but that TMDL has been implemented in
15 this permit and as we get additional information
16 regarding the discharges, as needed we will modify limits
17 and hopefully in the future will investigate the
18 opportunity to potentially discharge some of this water
19 into the sewer system, but right now we are just trying
20 to get them in line with the fact that based on the newly
21 installed flow meter, they are discharging a lot more
22 than we originally estimated.

23 MS. GLICKFELD: So basically we are getting them to
24 the point where they are legally discharging what they
25 have been discharging for a long time.

1 But, you know, Sam, I would note that this is a
2 100-times increase in the permitted level and it
3 certainly explains why we -- you know, if you take this
4 to the hundreds and hundreds of other permits we have in
5 the Los Angeles County area, it certainly explains why we
6 have as much urban runoff as we do. It's clear to me
7 that our job is to not only ensure that it's not polluted
8 runoff but ensure that the volumes of urban runoff
9 reduce.

10 So I hope that after we get past today, we can
11 talk about how we implement these kinds of permits and
12 what we look at as possibilities of reducing these
13 things.

14 (Whereupon Board Member Munoz entered the
15 proceedings at 8:19 a.m.)

16 MR. UNGER: Board Member Glickfeld, I think there are
17 two options before us. One is we can bring this back to
18 you.

19 MS. GLICKFELD: I don't want to do that. What I
20 would like to do, I'm just noting that this is the case.
21 I think that we ought to -- I wanted the rest of the
22 Board to see that we are talking about somebody going
23 from 170 gallons per day to 14,000 or almost 0.15 million
24 gallons a day. That's a good-sized, medium-sized sewage
25 plant. That's a lot.

1 MS. OWENS: And historically, many of the Dischargers
2 have estimated their flow and the new protocol is for us
3 to ask them to put in flow meters whenever there's
4 estimated flow and that's giving us a better idea of
5 what's actually happening.

6 MR. UNGER: Yeah. I'd like Deb to say a few words,
7 actually, too, because we will caucus after this meeting
8 and we'll set forth a review of these permits, but go
9 ahead, Deb.

10 MS. SMITH: I just wanted to clarify for Board Member
11 Glickfeld that these are apartment tower buildings and,
12 you know, we have many of these in L.A. and particularly
13 in the Ballona Creek Watershed where we have a higher
14 groundwater table and subterranean garages, these
15 apartment buildings have no choice but to dewater to keep
16 their garages from filling up with groundwater. So they
17 really can't do anything with the volume of water they
18 have, but we certainly can look at ways for them to find
19 ways to reuse the water. But as Cassandra said, it was
20 just that they grossly underestimated their volumes to us
21 before. They're not increasing the flows. They just
22 grossly underestimated.

23 MS. GLICKFELD: As I said before, everything that we
24 do here is interconnected and sometimes pieces come
25 together and we are the only ones that see it all, so I'm

1 just pointing it out.

2 MR. UNGER: We will address it. Thank you for your
3 comment.

4 MS. MEHRANIAN: So Mr. Unger, should we pull out
5 Item 7?

6 MS. GLICKFELD: No.

7 MR. UNGER: No. We are going to leave it on Consent
8 unless there are other comments.

9 MS. MEHRANIAN: Any other questions on Consent
10 Calendar? If not, we'll entertain a motion.

11 MS. GLICKFELD: Move approval.

12 MR. YEE: Second.

13 MS. MEHRANIAN: All in favor?

14 (Whereupon the Board unanimously approved the
15 motion)

16 MS. MEHRANIAN: So we're going to move to Contested
17 Action Items, Item 9, NPDES permit for MS4 discharges
18 within the Coastal Watersheds of the Los Angeles County,
19 with the exception of discharges originating from the
20 city of Long Beach, renewal.

21 This is the time and the place for the
22 continuation of the public hearing to consider renewal of
23 the NPDES Permit for municipal separate storm sewer
24 system Dischargers for 86 co-permittees within the
25 Coastal Watershed of Los Angeles County, with the

1 exception of the City of Long Beach.

2 I'm Maria Mehranian and I'm the chair of the
3 Regional Water Board and will be presiding at this
4 hearing.

5 This hearing will be conducted in accordance
6 with the Notice of Public Hearing dated June 6th, 2012,
7 and Notice of the Adoption Hearing dated October 18th,
8 2012, and with the Chair's Order on Objections and
9 Requests Concerning Hearing Procedures and Processes and
10 Order of Proceedings. Note that any objections made
11 orally or in writing that have not been explicitly
12 addressed by the Chair's orders are denied.

13 The Regional Board is conducting a two-part
14 hearing on this permit. On October 4th and 5th, the
15 Board heard from Board staff, the parties to these
16 proceedings, and interested persons regarding the
17 Tentative Permit that was released for public comments on
18 June 6, 2012.

19 On October 18th, 2012, Board staff circulated a
20 Revised Tentative Permit which included revisions that
21 were made as a result of written and oral comments
22 received by the Board, including oral comments made
23 during the public hearing held on October 4th and 5th.

24 On November 5th, Board staff circulated a second
25 Revised Tentative Permit reflecting proposed additional

1 changes to the Revised Tentative Permit.

2 At this continued portion of the hearing, Board
3 staff will provide an overview of the key revisions made
4 to the Tentative Permit. The parties and interested
5 persons will have the opportunity to provide oral
6 comments only on the revisions made to the Tentative
7 Permit released for public comments on June 6th, 2012.
8 Comments regarding provisions that remain unchanged from
9 the Tentative Permit released for public comments on
10 June 6th, 2012 will not be accepted. Once comments are
11 completed, the Board will proceed to questions,
12 deliberations and voting.

13 Several parties have requested extended time to
14 present testimony to the Board. I have issued a Chair's
15 ruling specifying the time limits for each party and for
16 the public. Please adhere to the time limits.

17 Persons with similar concerns or opinions are
18 encouraged to choose one representative to speak.
19 Speakers may also simply state that they agree with a
20 previous speaker without repeating comments.
21 Repetitive comments are not helpful to the Board. What
22 is helpful is for you to identify specific provisions of
23 the permit that are of interest to you. If you wish to
24 reserve time for Cross-Examination of another party to
25 this proceeding, please indicate how much time you would

1 like reserved and our timer will notify you when you have
2 that amount of time remaining.

3 The deadline for submitting written comments and
4 evidence was July 23rd, 2012. If you are using speaking
5 notes or visual aids that illustrate previously submitted
6 evidence with your presentation, please leave a copy with
7 staff before you leave so they can be incorporated into
8 the record. No other written or documentary evidence
9 will be accepted into the record unless I make a specific
10 ruling allowing it.

11 The parties to this proceedings are the
12 Los Angeles County Flood Control District; the County of
13 Los Angeles; the 84 cities within the permit area, with
14 the exception of the City of Long Beach; Heal the Bay;
15 NRDC; and L.A. Waterkeeper.

16 Any persons or entities that I did not identify
17 as parties are deemed interested persons and they may
18 present comments to the Regional Board at the appropriate
19 time.

20 Regional Board staff, including attorneys, is
21 neither a party nor an interested person to these
22 proceedings. Staff's sole function here is to advise and
23 assist the Board in its consideration of the Tentative
24 Permit.

25 The order of proceedings of this hearing will

1 generally be as follows: Staff will present the
2 revisions to the Tentative Permit. Elected officials may
3 make -- elected officials will make policy statements on
4 the revisions to the permit, three minutes each. A U.S.
5 Environmental Protection Agency representative will
6 provide comments, about ten minutes. Next, the parties
7 will be allowed to testify according to the Order and
8 allocated times set forth in the Order of Proceedings for
9 the hearing today. The Board will then hear from the
10 Building Industry Association for up to eight minutes and
11 then the public for two minutes or less, depending on
12 time and the number of speakers.

13 Following public comments, the Board may ask
14 questions of staff, parties, and interested persons.
15 After the conclusion of Board questions, the Board will
16 deliberate and vote on the second Revised Tentative
17 Permit.

18 I would like to make sure that everybody knows
19 that this is a long meeting. There is going to be a lot
20 of discussion, Cross-Examinations. I would really urge
21 everybody to be very cordial and keep civility during the
22 meeting, in the interest of having a productive meeting.

23 If you intend to speak today, please promptly
24 fill out a speaker card and hand it to the Board's clerk,
25 Ronji Moffett, or the staff.

1 I will now administer the oath to all persons
2 that are intending to speak today. Please stand and
3 raise your right hand.

4 (Whereupon all prospective witnesses were
5 collectively sworn)

6 MS. MEHRANIAN: With that, we will start the
7 presentation.

8 Mr. Unger, this will be the staff presentation.

9 MR. UNGER: Yes. Thank you, Chair Mehranian.

10 I was asked by the building management to note
11 that someone in the audience did not leave their keys
12 with the valet. I understand the car is a Corvette, so
13 if you have a Corvette and you still have your own
14 keys --

15 MS. MEHRANIAN: Mr. Unger, before you start, we
16 haven't done the Pledge.

17 MR. UNGER: We can do that now.

18 MS. MEHRANIAN: My bad.

19 MR. UNGER: It's okay. And after the Pledge of
20 Allegiance, the person who has the Corvette, please give
21 your keys to the valet.

22 (Pledge of Allegiance)

23 MS. MEHRANIAN: I apologize.

24 MR. UNGER: Good morning, Chair Mehranian and members
25 of the Regional Board. Today we are continuing the

1 hearing that we opened last month under the issuance of
2 the National Pollutant Discharge Elimination System,
3 NPDES, system permit for discharges from the municipal
4 separate storm sewer systems in Los Angeles County, MS4s.

5 As you know, staff has been working on this
6 permit for more than a year. We've issued numerous
7 drafts for stakeholder review. We've offered
8 unprecedented opportunities for interested parties and
9 the public to interact with staff and with you. We
10 issued a Tentative Permit in June and received numerous
11 comments in July. We opened the hearing for
12 consideration of this permit in October to receive oral
13 comments on the Tentative Permit and staff has made
14 revisions to the Tentative Permit in response to those
15 comments.

16 Today, this hearing is focused on the revisions
17 we have made and before I turn it over to Renee to walk
18 you through those revisions, I wish to briefly describe
19 the permit structure before you today and how it is more
20 stringent and more effective from the existing MS4
21 Permit.

22 I just want to refresh your memory. This is a
23 slide showing the key elements of the existing permit
24 here and in the TMDLs at the bottom, you see two of them
25 are developed in the permit at this point. As we renewed

1 this permit, we noticed the Los Angeles region, note, is
2 a proactive agency in addressing water quality issues and
3 we address those issues from a watershed viewpoint. We
4 have been the most active region in developing TMDLs and
5 those TMDLs have been extremely successful in attaining
6 water quality improvements.

7 In the TMDLs that have been developed, it is
8 clear that the loading from the MS4 systems must be
9 reduced and it is also clear that a watershed approach is
10 the best mechanism for achieving clean water and
11 providing multiple beneficial uses.

12 Watershed approaches are based on sound science
13 and policy. They foster collaboration between
14 jurisdictions and interested stakeholders. They are
15 cost-effective because they can take advantage of
16 economies of scale and prioritization, and they result in
17 milestone and benefits beyond that clean water alone,
18 such as recreational uses, habitat, and the supported
19 water supply benefits as well.

20 The slide before you shows the key elements of
21 the existing permit. The first box, "Discharge
22 Prohibitions for Nonstormwater Flows," this requires that
23 permittees must prohibit nonstormwater flows into and
24 through the MS4 system and prescribes conditions for
25 flows that are essential for municipal services and

1 activities.

2 The "Receiving Water Limitations," this section
3 prohibits discharges that cause or contribute to
4 violations of receiving water limits.

5 The SQMP, which is Stormwater Quality Management
6 Program, required in the existing order consists of
7 components recommended by USEPA, and the emphasis of SQMP
8 is pollution prevention through education, public
9 outreach, and planning implementation of source control
10 BMPs. I wish to make clear, though, that there are no
11 clear metrics for compliance with SQMP in the existing
12 permit. It does not have a schedule nor milestones for a
13 monitoring to measure BMP effectiveness.

14 The minimum control measures, we've been talking
15 about that for over a year. I can run through them very
16 quickly. They consist of public information and
17 participation, industrial and commercial facilities
18 programs, planning and land use development, development
19 and construction, public agency activities, and illicit
20 connections and illicit discharge, programs to eliminate
21 those connections.

22 Finally, there's monitoring requirements. The
23 existing permit focuses on receiving water monitoring
24 only. However, in order to implement an effective MS4
25 program change and change it to a water quality based

1 program that supports water quality based objectives,
2 monitoring needs to meet additional objectives.

3 As you can see from the structure, the
4 requirements of the existing permit operate independently
5 from each other. This permit and most MS4 permits that
6 follow this standard architecture are seen as program
7 focused rather than water quality focused. The permit
8 does not recognize TMDL implementation plans nor
9 incentive permittees to collaborate to solve water
10 quality issues, and there is a general sense, both
11 statewide, locally, and nationally, that these stormwater
12 permits have not been entirely effective in reducing the
13 pollutant loading to receiving waters from MS4s and that
14 a new generation of permits that focus on achieving
15 multiple beneficial uses cost-effectively are needed.

16 Next slide, please.

17 The new permit looks on the surface much like
18 the old one. Starting at the bottom of this, you'll
19 notice that it needs to include 33 TMDLs in Los Angeles
20 County that this Board has developed and adopted that
21 have wasteload allocations assigned to MS4 Dischargers.
22 The TMDLs that were developed by this Board contain
23 implementation schedules that are also required to be
24 addressed by this permit.

25 This slide shows the new structure and as you

1 can see, it contains similar requirements to the existing
2 permit except for, in contrast to the existing permit,
3 the new permit replaces SQMP with a Watershed Management
4 Program. This program is developed by permittees, made
5 available for public review, and then evaluated by the
6 Regional Board and either approved or disapproved. The
7 plan contains enforceable milestones for BMP
8 implementations that are aligned with TMDL schedules; and
9 in addition to implementing the TMDLs, the Watershed
10 Plans can integrate the requirements of the permit.

11 So first of all, I wanted to show you that with
12 the TMDLs, because the Watershed Management Program
13 implements -- is driven by the TMDLs for a watershed
14 approach, there's a clear link between the TMDL
15 provisions to the Watershed Management Program. The
16 Watershed Management Plan affects the discharge
17 prohibitions that can be addressed on a watershed basis,
18 such as flowing discharges during dry weather can be
19 prioritized and investigated.

20 You may remember that this is a core element in
21 implementing the Bacteria TMDLs for the rivers, and
22 specifically the Los Angeles River, in our region.

23 For receiving water limitations, the new permit
24 provides a compliance mechanism for those permittees who
25 enter into a Watershed Management Program. The receiving

1 water limitations continue to be a core element of this
2 permit and for those permittees who meet the milestones
3 of their approved plan, they can be considered in
4 compliance with these requirements by meeting the
5 milestones of their Watershed Management Plans.

6 The Watershed Management Plan also provides the
7 ability to collaborate and customize on monitoring and
8 minimum control measures and monitoring as well.

9 So ultimately, this permit provides a clear path back to
10 the TMDLs which drive the permit to begin with.

11 So as you can see, the elements of this permit
12 are integrated and they meet the key objectives of water
13 quality rather than a program-based outcome. Watershed
14 management flexibility can achieve multiple beneficial
15 uses, and what I have to show you are two things on the
16 right as well. I want to let you know that a big focus
17 of our effort is to upgrade the minimum control measures
18 to include low impact development and I'll talk in a
19 moment about the Enhanced Watershed Management Programs
20 that staff has been talking about since our last permit.

21 Of course with these linkages it's a more
22 complex permit, but it provides clear compliance,
23 determination, mechanism, and requirements. It
24 incentivizes collaboration between permittees to address
25 water quality issues and attain multiple benefits and

1 this slide summarizes -- the next slide summarizes the
2 themes that are before you today. I'll just leave this
3 up here and talk about them briefly.

4 In October, we presented the Tentative Permit
5 for your consideration and recommended at that time that
6 you not take formal action, as staff was revising the
7 Tentative Permit based on the comments received.

8 We issued a Revised Tentative Permit in October
9 and still continue to outreach with stakeholders. A
10 significant effort of this outreach was based on the
11 Enhanced Watershed Program that we've been discussing
12 with permittee groups, the County Flood Control District,
13 and initially it started off as an initiative that the
14 environmental groups were very much in support of.

15 The key element of the Enhanced Watershed
16 Management Program was to address large, multi-benefit
17 projects and programs that will result in groundwater
18 recharge and water conservation on a large scale.

19 I'd like to stress -- turning our attention
20 briefly to the administrative process, it sounds rather
21 complicated, but I would like to stress that this
22 processing is actually very similar to the same
23 administrative process we employ on adopting NPDES
24 permits and TMDLs. That is, we issue the Tentative
25 Permit, we issued a revised permit, and now we're going

1 to bring to you change sheets. However, the magnitude of
2 course in this permit is far greater for the MS4 Permit
3 than for individual or even general NPDES permits, and
4 Renee and Ivar will be walking you through the revisions
5 that are the subject of the hearing today.

6 But before I turn it over to Renee and Ivar to
7 describe the revisions, you will recall at the hearing in
8 October, there were many comments about costs. We've
9 asked Dr. Gerald Horner, who's an economist with State
10 Board with extensive expertise and experience in water
11 quality compliant costs across many of the Water Board
12 programs, he is here today to provide some
13 recommendations for your considerations to improve the
14 reporting on a new permit.

15 So and finally, just before I close and turn it
16 over to Dr. Horner and then to Renee and to Ivar, I'd
17 like to just note that there's a lot that has happened
18 since we last met in October.

19 In addition to the Presidential election, the
20 40th birthday of the Clean Water Act was last month.
21 There were many celebrations on a national, state, and
22 local level and some of the Board members and staff
23 participated in those. The overall assessment I think at
24 the 40th anniversary of the Clean Water Act is that there
25 has been a lot accomplished and even in our region there

1 has been many improvements in ocean water quality, beach
2 standards and nitrogen standards. There's been much that
3 has been accomplished, but there needs to be a lot more
4 done.

5 The priorities have shifted and as a noted water
6 quality advocate wrote in the L.A. Times on the day of
7 the birthday, of the 40th birthday of the Clean Water
8 Act, we need MS4 permits that incentivize stormwater
9 capture and reuse. The permit before you today does that
10 and much more.

11 So with that, I would like to turn it over to
12 Dr. Horner, and then Renee and Ivar will walk you through
13 the details of the permits.

14 MS. MEHRANIAN: Mr. Unger, I just want to compliment
15 you on that slide. It's very, very nice, summarizing a
16 lot of information.

17 MR. UNGER: Well, actually, the author of the slide
18 is here working the timer for us.

19 MS. MEHRANIAN: If you can, give the Board members a
20 copy of the slide.

21 MR. UNGER: Yes. We will make a copy and pass it
22 around.

23 MS. MEHRANIAN: Thank you.

24 DR. HORNER: Good morning, Madam Chair and members of
25 the Board. My name is Jerry Horner. I'm an economist

1 with the Office of Research, Planning and Performance and
2 I was asked by Sam here today to provide some perspective
3 on the costs of the stormwater permit that is being
4 issued.

5 I would like to preface my remarks with some
6 background. About the only real documented study that
7 was done on MS4 Permit costs was done in 2005 by a
8 contracted study with the California State University
9 Sacramento Department of Civil Engineering. It was done
10 by two civil engineers and an accountant. It was funded
11 by the State Water Resources Control Board and in their
12 activity, they selected six cities in California that
13 they felt had a reasonably good program and were
14 cooperative and -- and this is the part that stood out --
15 was that they had reasonable accounting of their costs.

16 These six cities are in -- that were selected
17 were Encinitas in San Diego County, which is a small
18 coastal tourism county; Fremont, which is in the Bay
19 area, which has involved integrated or is involved with
20 an integrated countywide program; Santa Clarita, which is
21 Los Angeles County, involved in a -- or it's a tourism
22 and industrial; Corona, city of Corona, which is in
23 Riverside County, which is an industrial city;
24 Sacramento, which I expect most of you know where it is
25 and what it is like; and Fresno-Clovis, which has a very

1 substantial infiltration program and is a
2 fully-integrated, multi-city program.

3 Now, the costs that they came up with, which is
4 very well documented and is reported, vary from \$18 to
5 \$46 per household annually, and this is expressed in 2002
6 dollars. Now, one might look at that and say, "Gee,
7 that's a huge, huge disparity in costs. What's going
8 on?"

9 If we assign these costs to the various cities,
10 they look like this: \$46 to Encinitas; 45 for Fremont;
11 Santa Clarita, 39; Corona, 32; Sacramento, 29; and
12 Fresno-Clovis, 18.

13 And one of the first things that we did was to
14 simply graph these costs by the size of the city, which
15 explains a lot in the difference in the costs of this
16 permit. It ranges at \$45 for the small cities all the
17 way down to less than \$20 for the large cities. That is
18 a tremendous difference and can be explained by the fact
19 that size matters. Economies of size and scale decrease
20 costs per unit as the size increases.

21 This is caused by a number of things. As you
22 get larger, you can use resources that are cooperatively
23 with other functions and maybe even other jurisdictions
24 that specialize in certain functions. The other thing
25 that explains the differential in costs, of course, are

1 the terrain, inland city, coastal, mountain, has a flat
2 city or a very steep city, and then the soil composition
3 also is very important.

4 Land use is another determinant in cost. Cities
5 that are industrial, residential, commercial, or cities
6 that have open space also contribute to a highly
7 differential cost picture.

8 Population density of course is just nothing
9 more than the denominator. The more population you have
10 per square feet, square foot, square mile, your costs go
11 down, and so that is reflected in the cost parameters.

12 Climate and weather also play a very important
13 part.

14 Now, what can we do to correct for the
15 cost-reporting procedures that may provide another
16 differential? There was a number of things that were
17 explored in the study and it involves the four things
18 that are outlined here. One is that most -- a lot of the
19 BMPs that are being used, or at least was used when this
20 study was done, were implemented not knowing what their
21 effectiveness was, and of course a lot of the BMPs that
22 were suggested were high costs and some were not. There
23 was no evaluation that is readily available to make a
24 determination on the cost-effectiveness basis.

25 The next thing that can be done is to define the

1 cost categories. The way the cost categories are done
2 now, it is not very definitive, especially if you're
3 attempting to allocate costs to a specific function. So
4 those have to be defined and have to be updated
5 regularly.

6 The third thing is to develop cost allocation
7 rules; and this is, I think, very, very important. How
8 do you allocate the costs for a utility across function
9 such as a permit compliance? It's very, very difficult.

10 One of the ways that was suggested in the CSUS
11 study was to use a structured financial format. One does
12 exist. It is called the Comprehensive Annual Financial
13 Report, and let me read you the definition of the
14 Comprehensive Annual Financial Report. It is:

15 "A set of U.S. government financial
16 statements comprising the financial report
17 of a state, municipal or other governmental
18 entity that complies with the accounting
19 requirements promulgated by the U.S.
20 Governmental Accounting Standards Board,
21 which provides for the content of its
22 annually updated publication, 'Codification
23 of Governmental Accounting and Financial
24 Reporting Standards.' The U.S. Federal
25 government adheres to standards determined

1 by the Federal Accounting Standards Advisory
2 Board.

3 "A CAFR is compiled by a state,
4 municipal or other governmental accounting
5 staff and audited by an external American
6 Institute of Certified Public Accountants
7 certified accounting firm utilizing GASB,"
8 or the Government Accounting Standards
9 Board's, "requirements. It is composed of
10 three sections: introductory, financial and
11 statistical. It combines the financial
12 information of fund accounting and
13 Enterprise Authorities accounting."

14 And the last sentence is important. You can
15 establish a fund accounting system to track a specific
16 function, such as the compliance of a permit.

17 So I would suggest that those be at least
18 considered with compliance in the permit and added to as
19 something that could be considered in the final permit.
20 That concludes my remarks.

21 Are there any questions?

22 MR. UNGER: I would just like to let the Board know
23 that Dr. Horner will be here for the bulk of the day if
24 we have specific comments and I think we are trying to
25 develop some language that the Board may want to consider

1 as we move forward in the next permit, and he's also
2 committed to me that he would help us as we move into a
3 new permit.

4 And so if you have further questions, I would
5 suggest we --

6 MS. MEHRANIAN: Hold the questions or ask them? Is
7 that what you're suggesting?

8 MR. UNGER: At your choice.

9 MS. MEHRANIAN: Well, the reason I'm asking it
10 is because -- first of all, thank you for this, because
11 last time I think we ended the meeting when there were a
12 number of members, including Board Member Yee, Glickfeld,
13 and myself, that had specific questions and we thought
14 there was a hole on the costs side, and this is pretty
15 much the first time we're hearing this.

16 So I think there are a number of questions that
17 we would want to ask now before you continue your
18 presentation. Is that okay?

19 MR. UNGER: Sure. Yes.

20 MS. MEHRANIAN: Larry?

21 MR. YEE: Thank you, Dr. Horner.

22 What you just shared with us are basically
23 historical costs from six specific cities. So how does
24 all of that relate to what we're trying to develop here,
25 a permit that's very large in scope, quite comprehensive

1 and pioneering? So, you know, it's hard for me to relate
2 what you just shared with us to what we're trying to do
3 here and one thing that I heard in Sacramento last week,
4 which I think is really interesting, something that we
5 should talk more about, is economies of scope rather than
6 economies of scale, and I think that's one thing we're
7 trying to achieve here is economies of scope.

8 So it just seems to me a lot of what you just
9 shared, I just have a hard time relating that to what
10 we're trying to do here.

11 DR. HORNER: My presentation -- go ahead.

12 MS. MEHRANIAN: Oh, go ahead. Did you want to
13 respond?

14 DR. HORNER: Sure. What I was trying to address was
15 the great variation in the cost estimates for various
16 programs and what I'm trying to say is that those cost
17 differences can be explained by various components of
18 your regulatory program and I think what you're doing
19 here is something that is new and I'm not aware that this
20 has ever been tried before on this scale. It's
21 unprecedented and I can't come up with those costs
22 obviously since we're not even, you know, even
23 experiencing those things.

24 So what I'm trying to say is that you can
25 achieve, I think, effectiveness for a reasonable cost. I

1 think if you looked at the Fresno-Clovis experience, they
2 were doing some very good things there as far as
3 infiltration program. Now, they weren't doing the low
4 impact development, at least not near to the extent that
5 you're doing; but it can be done at a reasonable cost and
6 it's also very, very easy to come up with costs that are
7 very, very high because of some judgment or some calls
8 that are made on allocation of costs, how you categorize
9 your costs.

10 That's all I'm trying to say, and also to give
11 you some suggestions on how you may structure some kind
12 of a cost-gathering system that will help you going
13 forward.

14 MR. YEE: Thank you.

15 MS. MEHRANIAN: Board Member Glickfeld.

16 MS. GLICKFELD: Thank you very much.

17 Does the permit that is before us today have in
18 it a mechanism for us to work with the Dischargers, the
19 permittees, to develop the kind of cost analysis that use
20 their expertise and the expertise of Mr. Horner to come
21 up with an analysis that will allow us to track costs as
22 well as progress?

23 MR. UNGER: Well, I believe it does. I mean, I think
24 on the slide that I showed with all the interconnecting
25 lines really I think the bottom line there is that Board

1 and Board staff will be working with permittees as they
2 develop their Watershed Management Plans; and as part of
3 that, there's a clear requirement for setting forth a
4 reporting, a cost reporting, and in the annual report and
5 through our interactions with the permittees as we
6 approve those Watershed Management Plans, we can include
7 some of the requirements and some of the standards and
8 the methods that Dr. Horner is recommending.

9 So I would say it's going to be through the
10 Watershed Management Plans. I think there is a
11 mechanism.

12 And I would just like to reiterate what
13 Dr. Horner said in I think the second slide, that size
14 matters. Essentially what happens is you do get
15 economies of scale when you look at things on a watershed
16 basis rather than on a jurisdictional basis.

17 MS. GLICKFELD: So I have another question of
18 Dr. Horner, which is in looking at the past cost studies,
19 the one at CSUS, did they look at the type of cost as
20 well as the amounts? In fact, you know, what is a staff
21 cost? What is a planning cost? What is an actual
22 capital improvement cost and what's operational and
23 maintenance cost?

24 Here in L.A. County, while we have received some
25 bond money for capital improvements, the availability of

1 funds to the local permittees for all the other costs,
2 for what we call the soft costs, are pretty limited. So
3 have those been tracked, in fact, relating hard costs to
4 actual soft costs?

5 DR. HORNER: Your question is very difficult.

6 MS. GLICKFELD: Sorry. I mean, I'm asking if it has
7 ever been done. If it hasn't been done, it --

8 DR. HORNER: Yes. Yes. There was an accountant on
9 the project and they did the best they could, given the
10 statistics and the reporting and reporting expenditures
11 that were made, and the capital costs were tracked
12 from -- what you call soft costs, I'm going to call
13 operating costs.

14 MS. GLICKFELD: Operating costs, planning costs.

15 DR. HORNER: All right. In the implementation stage,
16 engineering, non, yes, those were tracked, I mean, to the
17 extent you can track them.

18 MS. GLICKFELD: Were any revenues that were earmarked
19 for these costs also tracked?

20 DR. HORNER: I'm not sure about that.

21 MS. GLICKFELD: Okay. Thank you.

22 DR. HORNER: This was completed in '05 and I was
23 called a couple of days ago to get this.

24 MS. GLICKFELD: Okay. Thank you.

25 MS. MEHRANIAN: Board Member Diamond?

1 MS. DIAMOND: I just was intrigued by your statement
2 that cost savings and economies of scale could be built
3 into the compliance part of our permit. And I don't know
4 whether you can answer this now, but if there is a way
5 that there is regulatory language that would be helpful
6 in terms of cost-gathering systems, I assume it's those
7 kinds of things that you're talking to -- about that you
8 would be working with our staff today and suggesting what
9 kind of language that would be. But is that -- in
10 general, is that what you're talking about in terms of
11 building in cost-effectiveness into the compliance?

12 DR. HORNER: Well, as far as costs go, I think the
13 regulated community, once they understand and realize
14 what it is they have to do, will minimize the costs of
15 meeting those provisions. So I don't think you need to
16 build regulatory constraints into the cost side of it.

17 MS. DIAMOND: So when you talked about that being
18 part of compliance, you were just -- it was just a
19 general --

20 DR. HORNER: Well, what I was getting at there was if
21 the scale that you're working on, which is Los Angeles
22 County, and I think you have I think 86 entities that are
23 in this, there's a great potential for cooperation and to
24 specialized functions and to work across many levels to
25 reduce the costs of complying with the permit. Because

1 we see it -- at least I've seen it in other areas where
2 you have just two cities and a county that cooperate, and
3 the effects of those actions are great in terms of
4 reducing costs.

5 MS. DIAMOND: Thank you.

6 MR. STRINGER: I don't have a question but maybe just
7 a comment, I guess. The way I view this is that there's
8 really no way we're going to be able to analyze costs at
9 this point. That comes in in the implementation phase,
10 so the key is to ensure that the permit provides a
11 flexibility to allow the permittees to do what they need
12 to do in the most cost-effective manner; and as I'm sure
13 we're going to hear throughout the day, I think there's a
14 number of places within the permit where it does that.

15 MS. MEHRANIAN: Any other questions?

16 MS. MUNOZ: The question I have for you, I think the
17 dilemma for me is when I hear -- it's usually the smaller
18 cities that say that they're having challenges and you
19 talk about cutting back police officers, laying off
20 employees, and they're very real and specific about the
21 numbers. What advice would you give a city that is
22 having those economic challenges, that is cutting back
23 staff and services and is trying to stay out of
24 bankruptcy in trying to implement the permit? Because I
25 think that that, for me, is the key. There are a lot of

1 cities that are financially healthy, but there are much
2 smaller cities that are not.

3 DR. HORNER: Another tough question.

4 I think what needs to be done is to emphasize
5 the benefits of the action. In other words, what is the
6 community going to get out of this and what is it going
7 to get out of this in terms of either a healthier
8 community, something that will promote economic
9 development, something that will -- you know, in the long
10 run. It's not going to happen today. It's not going to
11 solve your cash crunch, your cash flow problems that are
12 hopefully going to be alleviated in the near future; but
13 these actions that are taken now on this front, the
14 benefits will be received down the road. This is
15 something for your children and your grandchildren, and
16 that's about all I can say.

17 MR. STRINGER: I think there's another part of that,
18 potentially another answer or part of that answer, just
19 to add on to what you said -- and Renee, maybe correct me
20 if I'm wrong, but my response to that would be that in
21 addition to what you said is joining a Watershed
22 Management Planning group because you get your economies
23 of scale over a larger area and because of some of the
24 provisions in here, you can actually rely on a
25 neighboring jurisdiction to implement the kinds of

1 regulations that are required to cover what needs to be
2 covered under the permit for that Watershed Management
3 Planning area or under this new program for the Enhanced
4 Watershed Management Planning areas, it sounds like
5 there's even more opportunities to do that for the
6 smaller cities. But, again, I think we're hopefully
7 going to hear more about that from Renee and others
8 throughout the day.

9 MS. MEHRANIAN: Any other questions?

10 I have a question and a comment. I think my
11 comment is I think we've moved toward a positive
12 direction since the last meeting by having -- 'cause
13 somehow in the last meeting, everybody felt that cost is
14 this 500-pound gorilla in the room that nobody wants to
15 address and today we talked about it and through our
16 approach on Watershed Management Development, we are
17 taking an approach to address cost.

18 I have a question -- and I think that we've
19 moved towards the positive direction of how thorough this
20 permit could become and is today.

21 My question to you is that I'm a big believer of
22 some kind of standardized -- I understand the variables
23 that we control for, but then there are certain kinds of
24 standards and constants that we also have in an equation
25 like this. The numbers that were presented, all these

1 averages, they stemmed from some kind of standardized
2 measures that ended up into this calculation of per
3 household; right?

4 Let's say every city had to take, no matter what
5 their topography, their coastal position versus
6 mountainous, all that. There's still standardized things
7 they had to do, like sweeping the streets. I'm taking
8 the simple. So these costs stem from a set of
9 standardized measures no matter what your city is; right?

10 DR. HORNER: Yes.

11 MS. MEHRANIAN: Because I'm trying to see the
12 validity of the numbers and trust in them.

13 DR. HORNER: Yes, it is.

14 MS. MEHRANIAN: Okay. Thank you.

15 I don't have more questions. Anybody else?

16 Thank you. Thank you for your presentation.

17 Renee?

18 MS. PURDY: Good morning, Chair Mehranian, members of
19 the Board. My name is Renee Purdy and I am the Section
20 Chief of the Regional Programs Section and I'll be
21 starting off the presentation today and continuing with
22 most of it, though later on I'm going to hand it over to
23 Ivar for a few slides, to discuss some of the changes to
24 the minimum control measures that we've made in response
25 to comments.

1 I want to just review -- Sam kind of introduced
2 this, but I just wanted to start with just a recap that,
3 as Sam was discussing, the L.A. County MS4 Permit was
4 last issued as you know on the cusp of TMDL development
5 back in 2001. We didn't have TMDLs in place at that time
6 and the advent of the TMDLs that Sam discussed has really
7 driven, as we've talked about, a real paradigm shift in
8 the L.A. MS4 Permit from one that's been really focused
9 in the past on prescriptive programmatic requirements for
10 the 86 co-permittees across the board to a permit that
11 establishes and focuses on achievement of measurable
12 water quality outcomes, many of which have stemmed from
13 the development of the 33 TMDLs that are now incorporated
14 into this permit.

15 So to achieve these water quality outcomes, the
16 new permit really does provide substantial flexibility in
17 the requirements to provide permittees with opportunities
18 to collaborate at a larger scale, as we were just
19 discussing, on a watershed basis and customize their
20 monitoring programs based on the specific water quality
21 issues of concern within a watershed.

22 As discussed earlier, we did start this hearing
23 on October 4th and 5th and while we started the hearing
24 at that time, that hearing came on the heels of a very
25 long process over the last 18 months at which we've had

1 many Board workshops about the Tentative Permit as well
2 as many staff-level workshops and countless meetings with
3 groups of permittees with the environmental organizations
4 and as well as with individual permittees.

5 Does the Board have copies of the presentation
6 and --

7 MS. MEHRANIAN: Yes, we do.

8 MR. STRINGER: We were one short.

9 MS. PURDY: Oh, okay. All right. Just checking. I
10 saw a flurry of activity there.

11 Okay. So during the hearing that we began on
12 October 4th and 5th, as we talked about, staff at that
13 time provided an overview of the Tentative Permit that
14 was released in June of 2012 and we talked about some of
15 the significant comments that we received on that permit.
16 The deadline for comments was July 23rd. And at the
17 time, the Board also had the opportunity to hear
18 extensive comments over the two days from permittees as
19 well as the environmental community and other interested
20 persons on the Tentative Permit.

21 At that time, we also had an opportunity to
22 discuss with the Board some of our initial thoughts on
23 some of the revisions that we were contemplating in
24 response to those comments, and you will hear more about
25 those today and those are now reflected in the second

1 Revised Tentative that you've received and that's been
2 distributed.

3 So since the October 4th and 5th hearing, staff
4 has continued to meet with permittees and interested
5 persons to discuss their comments and possible revisions
6 to the Tentative Permit, and some of those meetings
7 started as early as 6:30 in the morning and some went
8 well into the evening, so I appreciate everybody's
9 efforts, the whole team at the Regional Board as well as
10 all the permittees and the environmental organizations,
11 for really a very, very intensive last month between the
12 October hearing and the continuation of that hearing
13 today.

14 During that time, staff also has circulated
15 responses to all written comments received and circulated
16 both, as Sam described, a Revised Tentative Order as well
17 as a second Revised Tentative Order.

18 I do want to just point out that both of those
19 reflect the many comments that we've received, both
20 verbal as well as written. The second Revised Tentative
21 Order in particular reflects additional changes to
22 provide greater clarification on permit requirements, to
23 ensure consistency throughout the permit, and to correct
24 some inadvertent omissions or typographical and
25 grammatical errors. And just so everybody knows, to

1 assist the Board and the public in identifying these
2 changes, what we did is we had issued the Revised
3 Tentative in underline strike out. For the second
4 Revised Tentative, we accepted all the changes to the
5 Revised Tentative and showed the additional changes in
6 the second Revised Tentative in track changes so you
7 could see the changes from that.

8 And I also just want to say at this point and
9 just to emphasize that we really have heard the many,
10 many comments that we've received from the permittees
11 across L.A. County, from all parts of L.A. County, and
12 we've tried to make this permit a permit that is going to
13 be a workable permit that will really take us to the next
14 stage of improving water quality in Los Angeles County
15 and provide many opportunities for permittees, through a
16 lot of flexible approaches, to collaborate and achieve
17 some of the economies of scale that we've heard talked
18 about already today.

19 So just as a brief recap before I describe the
20 revisions made and response to comments, I just want to
21 state again the key permit provisions that are included
22 in the second Revised Tentative. These include
23 provisions that are consistent with the assumptions and
24 requirements of the 33 TMDLs, as required by Federal law;
25 and these include the inclusion of numeric water quality

1 based effluent limitations, corresponding compliance
2 schedules and various means of demonstrating compliance
3 with those water quality based effluent limits;
4 provisions allowing permittees the opportunity to develop
5 and implement Watershed Management Programs, including
6 the Enhanced Watershed Management Program that Sam
7 described as a means of complying with the permit
8 provisions in a more integrated and efficient manner;
9 requirements for outfall monitoring as well as receiving
10 water monitoring to determine compliance with permit
11 provisions; and the impact that MS4 discharges are having
12 on receiving water; and requirements to implement low
13 impact development for new development and significant
14 redevelopment to control pollutant loads and runoff
15 volume to receiving waters; and finally, requirements to
16 effectively prohibit nonstormwater discharges of
17 pollutants.

18 In the rest of my presentation, I'm going to
19 provide an overview of the key revisions that have been
20 made to the Tentative Permit that was released in June,
21 both covering the Revised Tentative that was released on
22 October 18th as well as the second Revised Tentative
23 released on November the 5th. And on this slide, I've
24 listed the main areas of revisions to the Tentative
25 Order.

1 So the first area and the one I'm going to be
2 talking about the most is the Watershed Management
3 Programs. This is the new section of this Tentative
4 Permit and this is the area where we've made the most
5 changes in response to comments.

6 As I have talked about before, the purpose of
7 this Watershed Management Program is to provide a
8 framework for permittees to work collaboratively to
9 implement both individual as well as collective BMPs and
10 watershed control measures to address the highest
11 watershed priorities.

12 The Watershed Management Programs will provide
13 permittees with the flexibility to customize some of the
14 core permit requirements within the Stormwater Management
15 Program where appropriate and also sequence their
16 implementation actions to reduce pollutants in MS4
17 discharges in the most cost-effective manner, to achieve
18 water quality based effluent limitations consistent with
19 the compliance schedules, and also address exceedances of
20 receiving water limitations that are not addressed by a
21 TMDL.

22 I wanted to show you this graph one more time.
23 You've seen this many times, but this is just
24 illustrative of the fact that the Watershed Management
25 Program is going to encompass all of these various

1 aspects of the permit. It's just another way of looking
2 at things. Sam provided you with a box graphic as a
3 means of looking at how the Watershed Management Program
4 integrates all the different traditional aspects of the
5 MS4 Permit as well as the addition of TMDLs, and this is
6 just another way of looking at that same concept.

7 So within the Watershed Management Program, I'm
8 going to talk about five main revisions that we've made
9 to the Watershed Management Program, and the first of
10 these will be a discussion of the Enhanced Watershed
11 Management Program which you first heard the County and
12 the Flood Control District introduce at the October 4th
13 and 5th hearing and was also discussed in their comment
14 letter.

15 I'm also going to talk about the timing, process
16 and submittal requirements for both the regular Watershed
17 Management Program as well as the Enhanced Watershed
18 Management Program. I'm also going to talk about the
19 compliance mechanisms that we're providing for receiving
20 water limitations that are not addressed by a TMDL. I'll
21 briefly discuss some of the additional criteria that
22 we've included for reasonable assurance analysis within
23 the Watershed Management Program and then also the timing
24 and implementation of the compliance mechanisms that are
25 provided through the Watershed Management Programs.

1 So first with regard to the Enhanced Watershed
2 Management Program, at the hearing on October 4th and
3 5th, you heard the Flood Control District and County talk
4 about this, and specifically they introduced this idea of
5 an Enhanced Watershed Management Program that would focus
6 on large regional stormwater retention projects that
7 could not only address MS4 discharges but provide
8 long-term water supply benefits. These collaborative
9 projects that they introduce would involve multiple
10 permittees within Los Angeles County as well as other
11 partners that are not permittees and would be located in
12 areas that cover more than just a single jurisdiction.

13 The environmental groups and other stakeholders
14 have expressed a very strong interest and support for
15 these Enhanced Watershed Management Programs; therefore,
16 in the Revised Tentative, we provided new provisions to
17 allow permittees to develop these Enhanced programs.

18 Permittees discussed that these projects would
19 take longer to plan and implement than projects
20 contemplated by the standard Watershed Management Program
21 and staff does agree that extra time would be warranted
22 for planning for these Enhanced Programs. However, while
23 Board staff are proposing a longer planning schedule of
24 30 months instead of the 12 to 18 months for these
25 Enhanced Plans, we have included a number of early

1 actions as well as interim milestones as part of the
2 requirements for development of the Enhanced Programs to
3 ensure progress happens during that longer planning
4 horizon, and you can see some of the changes, including
5 the Enhanced Watershed Management Program, on page 48 of
6 your second Revised Tentative Permit.

7 Sorry. I didn't realize I had put animation in
8 these slides, so I'm just going to put all of these up at
9 once.

10 The next thing that I'd like to talk about is
11 some of the timing and process for both the standard
12 Watershed Management Program and the Enhanced Watershed
13 Management Program. We've made several changes to the
14 timing and the submittal process in response to comments
15 as well as input from the Board at the October 4th and
16 5th hearing. Many permittees commented that more time
17 was needed to develop the standard Watershed Management
18 Programs as well as the Enhanced Programs, while some of
19 the environmental organizations did express concern about
20 delaying the implementation as a result of the time
21 needed to actually prepare the plans.

22 So to address this, the Revised Tentative allows
23 a six-month extension for submittal of the standard
24 Watershed Management Program where certain early actions
25 related to low impact development ordinances and green

1 streets policy are implemented during that planning
2 period. This extension would allow permittees 18 months
3 instead of the 12 months to submit a Watershed Management
4 Program.

5 For the Enhanced Watershed Management Program,
6 as I said, the Revised Tentative allows 30 months to
7 develop and submit the draft Enhanced Program. However,
8 given that longer planning horizon, the Revised Tentative
9 includes other requirements prior to submittal of the
10 draft Enhanced Program and these include: To submit an
11 executed MOU at the time of notification that permittees
12 intend to pursue the Enhanced Program; and in the Second
13 Revised, if it's not possible because of the inclusion of
14 other partners to get an executed MOU completed in time,
15 it would require a draft MOU as well as a letter of
16 intent from the City Manager of each or the head of the
17 agency for each participating entity within the Enhanced
18 program. It also requires the early actions as I
19 described earlier with regard to LID ordinances and green
20 streets policies, and it also includes a requirement to
21 implement one structural BMP or a suite of BMPs on a
22 scale that will result in measurable water quality
23 improvement.

24 This was initially indicated in the Revised
25 Tentative as a pilot project; but upon further

1 discussion, we have changed this to be either one
2 structural BMP or a suite of BMPs. However, that would
3 be subject to Executive Officer approval, the type of the
4 project and the scale of the project.

5 In addition, for the Enhanced Program, there
6 will be other interim milestones and two of those notable
7 milestones are the requirement of 18 months to submit a
8 work plan for the development of the Enhanced Program as
9 well as to submit a Monitoring Program for the area
10 covered by the Enhanced Program.

11 The other revisions that we've made with regard
12 to timing and process for these programs is to include
13 additional specificity about stakeholder involvement in
14 the development of these programs. Specifically, we've
15 included the establishment of a Technical Advisory
16 Committee from month six, which is when permittees need
17 to notify us of their intent to pursue one of these types
18 of programs through the approval of the Watershed
19 Management Programs, and the TAC would include
20 representatives of the permittees and other partners as
21 well as a representative -- at least one representative
22 from the environmental community as well as staff from
23 the Regional Board and USEPA.

24 The other change that we made in response to
25 comments as well as discussion by the Board at the

1 hearing in October was to indicate that for the Watershed
2 Management Programs and Enhanced Programs, those are
3 subject to approval by either the Regional Water Board or
4 the Executive Officer on behalf of the Board. So this
5 gives the flexibility for the Board if it desires to
6 consider and approve some of these directly or to
7 delegate that authority to the Executive Officer for
8 approval.

9 The next thing that I want to talk about is
10 compliance with receiving water limitations through the
11 Watershed Management Program mechanism.

12 The Tentative Permit that was released in June
13 provided incentives for permittees to develop this
14 Watershed Management Program by setting forth a
15 compliance mechanism that's linked to the receiving water
16 limitation provisions in Part V of the Tentative Permit.

17 That compliance mechanism deems the permittees
18 in compliance with the receiving water limitations
19 provisions and the TMDL schedules as long as the
20 permittees implement their Watershed Management Programs
21 according to the scheduled implementation actions that is
22 in the approved plan.

23 In the Tentative Permit that was released in
24 June, the compliance mechanism and the Watershed
25 Management Program was limited to just the pollutants and

1 waterbodies that were subject to approved TMDLs, as we
2 discussed in October. Many of the permittees commented
3 that there are waterbody pollutant combinations that are
4 not subject to TMDLs that should also be addressed
5 through the same type of compliance mechanism in the
6 Watershed Management Program.

7 Permittees noted that if the Watershed
8 Management Program was not available for these nonTMDL
9 waterbody pollutant combinations that permittees would
10 not be able to effectively develop Watershed Management
11 Programs, as their resources would be diverted to address
12 waters where nonTMDL pollutants are exceeding receiving
13 water limitations and this would take them away from
14 addressing interim steps needed to comply with TMDL
15 schedules.

16 Permittees also commented that unless nonTMDL
17 pollutant waterbodies were allowed to be addressed
18 through the Watershed Management Program, they could be
19 subject to enforcement by the Regional Board or by third
20 parties.

21 Permittees noted that many of the BMPs that will
22 be implemented under the Watershed Management Program
23 will also address the nonTMDL pollutants because in many
24 cases, the other pollutants are similar to the TMDL
25 constituents in terms of both their fate and transport

1 characteristics.

2 So as discussed, this is something that we
3 introduced verbally during the hearing in October, on
4 October 4th and 5th. This was one of the most frequently
5 raised issues among permittees and in response to these
6 concerns, the Revised Tentative Permit includes a
7 compliance mechanism through the Watershed Management
8 Programs and Enhanced Watershed Management Programs that
9 will ensure that the MS4 contributions to receiving water
10 limitation exceedances that are not addressed by a TMDL
11 are addressed in a timely and effective manner, and this
12 will allow permittees to focus on water quality
13 priorities in a comprehensive manner.

14 The Watershed Management Program does this by
15 basically promoting a process similar in some ways to the
16 process that's been in the current permit, but it
17 emphasizes a much more proactive approach in that for
18 these waterbody pollutant combinations that are not
19 addressed by a TMDL, those combinations have to be
20 addressed through the Watershed Management Program in the
21 same way as the TMDL pollutants, meaning that there needs
22 to be the same source assessment done and there needs to
23 be the same identification of watershed control measures
24 that will address MS4 contributions to those exceedances,
25 including the requirement to conduct the reasonable

1 assurance analysis to show that the watershed control
2 measures that are being proposed will be successful in
3 achieving the receiving water limitations that are not
4 yet addressed by a TMDL.

5 Additionally, this approach would be supported
6 by the Monitoring Program, which I'm going to discuss
7 later on, to make sure that progress is adequate toward
8 attaining the receiving water limitations.

9 Like I talked about last time in October, there
10 are three categories of waterbody pollutant combinations
11 that will be addressed using this approach. The first is
12 the waterbody pollutant combinations that are identified
13 on the 303(d) list as impaired but for which a TMDL has
14 not yet been developed, though there's a TMDL in place
15 for a similar type of pollutant. So you can see the
16 approach for addressing that category of waterbody on the
17 left of the slide.

18 The second is the waterbody pollutant
19 combinations that are identified on the 303(d) list as
20 impaired, but for which there's not a TMDL yet developed
21 that is similar in characteristics to those pollutants,
22 and that is provided on the right-hand side of the slide.

23 And then the final category is waterbody
24 pollutant combinations for which there are exceedances of
25 the receiving water limitations; however, the waterbody

1 is not yet listed as impaired. And as I said, in each of
2 these cases, these categories of waterbody pollutants
3 would be identified by the permittees and then addressed
4 in the same process that's laid out in the Watershed
5 Management Program for TMDL waterbody pollutant
6 combinations.

7 Permittees that do not elect to develop a
8 Watershed Management Program or an Enhanced Program would
9 be subject to the provisions of Part V.A, which are the
10 receiving water limitations provisions, without the
11 benefit of the Watershed Management compliance mechanism
12 for demonstrating compliance.

13 And staff has concluded, as I discussed in
14 October as well, that this would provide an effective
15 approach for addressing MS4 contributions to exceedances
16 of receiving water limitations in a proactive and robust
17 manner and affords permittees the same compliance
18 demonstration approach that is provided for TMDL
19 waterbody pollutant combinations.

20 And while the permittees largely support the
21 Watershed Management Program provisions in the Revised
22 Tentative Permit, in discussions with the environmental
23 community, the environmental community has expressed its
24 concern and opposition to the application of these types
25 of compliance mechanisms to receiving water limitations

1 not addressed by a TMDL except in the case of the
2 Enhanced Watershed Management Program where retention is
3 feasible, retention of the stormwater volume is feasible;
4 and the argument that they present, and I'm sure you will
5 hear more about this from them today -- is that the
6 revised provisions could allow degradation of
7 higher-quality waters that are not currently impaired
8 waterbodies, and staff disagrees that extending the
9 Watershed Management Programs to these nonTMDL pollutant
10 waterbody combinations will cause any sort of degradation
11 of waterbodies, as the Revised Tentative does not
12 authorize any new practices that would increase the
13 amount of pollutant loading from the MS4 and it continues
14 to require implementation of control measures to the
15 maximum extent practicable as required by Federal law.

16 In fact, we believe that the collective enhanced
17 actions required under the Tentative Permit will improve
18 water quality throughout the region and be effective in
19 addressing these receiving water limitations exceedances.

20 I want to talk about a few other additional
21 conditions for this compliance mechanism through the
22 Watershed Management Programs; and specifically going
23 back to their application to TMDLs, I want to emphasize
24 that this compliance mechanism would not apply to the
25 final water quality based effluent limitations that were

1 developed to implement TMDLs where compliance deadlines
2 have already passed or where final compliance deadlines
3 will come due during the program development either of
4 the Watershed Management Program or the Enhanced
5 Watershed Management Program.

6 Additionally, this compliance mechanism would
7 not be applicable to the interim or final water quality
8 based effluent limitations that have been developed to
9 implement Trash TMDLs. The compliance strategies that
10 are already provided for the Trash TMDLs would continue
11 to be the mechanisms by which permittees would
12 demonstrate compliance with both the interim and final
13 Trash TMDL water quality based effluent limitations.

14 The other thing that I wanted to discuss -- and
15 this was included in the Revised -- the second Revised
16 Tentative with regard to the receiving water compliance
17 mechanisms for waterbodies that are not addressed by a
18 TMDL, I wanted to mention a couple of things here. The
19 Revised Tentative included provisions to require that
20 permittees identify interim milestones and dates for
21 their achievement that were as short as possible to
22 address the exceedances of receiving water limitations
23 that are not currently covered by a TMDL.

24 In the second Revised Tentative, we've included
25 some additional specificity and clarification with regard

1 to the timing of these interim milestones and our
2 expectations. So where the final dates for achieving a
3 receiving water limitation not addressed by a TMDL are
4 beyond the permit term before you today, in the case of
5 an Enhanced Watershed Management Program where retention
6 of the 85th percentile storm event is planned, permittees
7 would be required to continue to target implementation of
8 watershed control measures in their existing programs
9 while at the same time implementing the multi-benefit
10 regional projects that are described as the cornerstone
11 of the Enhanced Watershed Management Programs.

12 For Watershed Management Programs and -- the
13 regular Watershed Management Programs and the Enhanced
14 Programs where retention of that 85th percentile event is
15 not feasible and the waterbody is listed as impaired by
16 the pollutant, in those cases, upon approval of the
17 program, permittees may initiate the development of a
18 stakeholder-proposed TMDL and then any extension of the
19 compliance mechanism in the cases of these waterbody
20 pollutant combinations would be consistent with a TMDL
21 implementation schedule approved by this Board.

22 In the case of waterbodies where there are
23 exceedances of receiving water limitations, however they
24 don't rise to the level of water quality impairment for
25 Section 303(d), in those cases, permittees would modify

1 their Watershed Management Programs or Enhanced Programs
2 to address those pollutants and propose interim
3 milestones and schedules for their achievement to address
4 those, such that the discharges were controlled
5 adequately to achieve the receiving water limitations.

6 Next I wanted to talk a little bit more about
7 the reasonable assurance analysis, because this is a very
8 important aspect of both the Watershed Management Program
9 as well as the Enhanced Watershed Management Program.

10 The scope of the reasonable assurance analysis
11 was initially focused on the waterbody pollutant
12 combinations that are addressed by a TMDL and focused on
13 doing the necessary analysis to show that the Watershed
14 Management Programs would achieve the interim and final
15 TMDL water quality based effluent limitations.

16 With the extension of the compliance mechanism
17 to waterbody pollutant combinations that are not
18 addressed by a TMDL, the reasonable assurance analysis
19 has also been expanded such that permittees will be
20 required to conduct this analysis for those waterbody
21 pollutant combinations that are not addressed by a TMDL
22 but which they intend to address through their Watershed
23 Management Program, and the objective of the reasonable
24 assurance analysis is, as I said, to demonstrate the
25 ability of these programs, either the standard Watershed

1 Management Program or the Enhanced Program, to ensure
2 that MS4 discharges, both stormwater and nonstormwater,
3 achieve the applicable water quality based effluent
4 limitations and don't cause or contribute to exceedances
5 of receiving water limitations.

6 One of the things that we've done in response to
7 comments and the discussions that we've been having over
8 the past month is to include additional criteria for the
9 reasonable assurance analysis and that is because this is
10 such an important element of these Watershed Management
11 Programs and our intention is that this analysis will be
12 very robust such that we have that assurance that the
13 control measures that are proposed and that are approved
14 in a plan will be sufficient to achieve the water quality
15 based effluent limits and the receiving water
16 limitations.

17 So we've included additional criteria with
18 regard to the type of model that needs to be used in this
19 analysis. We've included requirements for the data
20 period that needs to be considered in doing the modeling
21 and quantitative analysis, as well as additional criteria
22 for the types of input data and statistical analysis that
23 should be used to characterize BMP performance to predict
24 the types of outcomes that will basically come as a
25 result of implementation of the watershed control

1 measures.

2 And the one thing -- actually, before I go on, I
3 also want to talk about, and I'll mention more later, is
4 the reasonable assurance analysis, our intention in the
5 Tentative Permit is that this will be done up-front but
6 permittees need to routinely evaluate and then modify
7 their Watershed Management Programs, including their
8 reasonable assurance analysis, based on monitoring data
9 that's gathered during the course of this permit. So
10 they will make their best analytical effort up-front
11 based on the criteria we've laid out; but as they gain
12 additional information both on outfall monitoring as well
13 as receiving water monitoring, they will be required to
14 use that data to then go back and revise the reasonable
15 assurance analysis as appropriate over the course of the
16 term of the permit.

17 The next thing that I'd like to talk about is
18 the timing and conditions for the Watershed Management
19 Program's compliance mechanism that I've been talking
20 about, and specifically the -- as I talked about, the
21 Tentative Permit provides this compliance mechanism and
22 in the earlier version of the Tentative Permit, the
23 compliance mechanism was only provided to permittees once
24 the program was approved, which would be between 28 and
25 40 months after approval of the -- excuse me. It would

1 be within 28 to 40 months after submittal of the
2 Watershed Management Program or the Enhanced Watershed
3 Management Program; and permittees noted that there's no
4 guarantee as to when the programs would be approved and
5 commented that planning efforts to develop a Watershed
6 Management Program would be deprioritized as they
7 continued to remain at risk of permit violations during
8 the program development stage.

9 So in response to these comments, staff has done
10 a couple of things. First of all, staff has committed to
11 review and approve or disapprove these plans in a timely
12 manner. In addition, staff also has revised the
13 Tentative Permit to initiate the compliance determination
14 provided by the Watershed Program upon permittee
15 submittal of a Notice of Intent to submit the Watershed
16 Management Program. So that would be at month six rather
17 than at month 28 or 40. However, in order to get this
18 benefit, the permittees would have to provide timely
19 notice of their intent to develop a Watershed Management
20 Program, meet all interim and final deadlines for the
21 development of the program, and target implementation of
22 watershed control measures in its existing Stormwater
23 Management Program, including watershed control measures
24 to eliminate nonstormwater discharges of pollutants, to
25 address known contributions of pollutants during that

1 planning period, and then ultimately they need to receive
2 final approval.

3 So essentially, while the compliance mechanism
4 applies starting at month six, there's a very rigorous
5 set of interim milestones that have to be met by
6 permittees to continue to have that conditional
7 compliance mechanism from month six until the program is
8 approved; and if at any point a permittee did not fulfill
9 one of those interim requirements, then at that point the
10 permittee would not have the benefit of that compliance
11 mechanism from that point onward.

12 The next thing that I wanted to talk about is
13 one of the changes that we've made to the second Revised
14 Tentative is related to the methods for demonstrating
15 compliance with the final water quality based effluent
16 limitations, and this is specifically related to the
17 Enhanced Watershed Management Program.

18 And again, just to describe the Enhanced
19 Program, the cornerstone of that program is really the
20 multi-benefit regional projects for which the intention
21 is that those will capture the 85th percentile, 24-hour
22 storm event, such that that will achieve the final water
23 quality based effluent limitations once those projects
24 are fully implemented within the drainage area tributary
25 to the applicable receiving water.

1 And so in the case of the Enhanced Watershed
2 Management Program, we've included as another means of
3 demonstrating compliance with the final water quality
4 based effluent limitations that in that -- those drainage
5 areas tributary to the waterbody, there has been
6 retention of 100 percent of the 85th percentile, 24-hour
7 event for that drainage area.

8 So I'm going to go on to the -- I apologize.
9 I'm going to go on to the next slide now, "Compliance
10 with Final Water Quality Based Effluent Limitations."

11 The additional changes that we've made to the
12 Revised Tentative Permit is in response to some
13 additional comments that we received from permittees --
14 thanks, Alex -- and specifically permittees have
15 expressed concerns about compliance with the final
16 numeric water quality based effluent limitations and that
17 the permit should include a reopener should new data or
18 information warrant a change to TMDL wasteload
19 allocations or possibly to TMDL implementation schedules
20 as permittees gain more experience with implementing the
21 requirements of the TMDLs, and the permit already
22 included in the June draft a reopener provision,
23 including a provision to reopen the permit as a result of
24 reconsideration of a TMDL. However, to address this
25 concern more specifically, staff has included in the

1 Revised Tentative Order a more specific provision to say
2 that within 18 months of the effective date of a revised
3 TMDL, where the revisions would warrant a change to the
4 provisions of this permit, that the Regional Board would
5 modify the order consistent with the revised wasteload
6 allocations or with the revised TMDL implementation
7 schedule.

8 And permittees had in their written comments as
9 well as oral comments requested that they have the option
10 to demonstrate compliance with the final water quality
11 based effluent limitations using a BMP-based approach
12 through their Watershed Management Program, as was
13 already provided to them for demonstrating compliance
14 with the interim water quality based effluent
15 limitations. While staff concluded at the time of the
16 Tentative and continues to conclude in the Revised that
17 it's premature to allow this means of demonstrating
18 compliance at this time for the final water quality based
19 effluent limitations, the Revised Tentative does include
20 a new cause for reopener to evaluate that option before
21 the final compliance deadlines for stormwater discharges
22 that are subject to water quality based effluent
23 limitations, and this would be in consideration of
24 lessons learned from implementation of these Watershed
25 Management Programs over the term of this order; and if

1 those Watershed Management Programs are shown to be
2 effective in achieving the interim water quality based
3 effluent limitations, then the Board could consider that
4 same compliance mechanism for a final water quality based
5 effluent limitations at that time.

6 The next thing that I wanted to discuss briefly
7 that relates to the reopener provisions is the receiving
8 water limitations. The Revised Tentative Order and
9 second Revised Tentative Order don't make changes to the
10 language in Part V.A of the permit; however, as you heard
11 at the last -- at the hearing that started in October,
12 the State Board is considering the precedential language
13 of Water Quality Order 99-05 in a workshop that's coming
14 up this month, and so what we have done at the request of
15 the State Board is include a more specific clause to one
16 of the reopeners to say that the permit could be reopened
17 in consideration of any State Board action on the
18 precedential language of Water Quality order 99-05.

19 The next thing that I would like to do is talk
20 about some of the revised -- the revisions to the
21 Monitoring and Reporting Program. You heard a number of
22 comments from both permittees and the environmental
23 community alike about the monitoring requirements in this
24 permit.

25 The Tentative Permit that was released in June

1 significantly expanded the scope of monitoring relative
2 to the current 2001 permit and although the Tentative
3 Permit allowed permittees to submit Integrated Monitoring
4 Plans and Coordinated Integrated Monitoring Programs to
5 the Executive Officer for approval, the plans still had a
6 number of requirements that gave permittees some concern,
7 particularly with regard to the expansion and, actually,
8 the inclusion of the outfall monitoring.

9 The Tentative Permit also reduced the number of
10 constituents that were required to be monitored relative
11 to the existing permit and the environmental community,
12 on the other hand, noted that the reduction of the number
13 of constituents in the Tentative Permit was not
14 warranted.

15 So in response to both of those things, first
16 staff agreed to revise the Tentative Permit such that the
17 full set of constituents that are currently in the
18 existing permit would be used for initial screening; and
19 then based on the monitoring results, the Executive
20 Officer would consider eliminating constituents that
21 don't show exceedances of the water quality objectives.
22 However, if there are exceedances of water quality
23 objectives, those constituents would continue to be
24 monitored during the permit term.

25 With regard to the concerns over the scope of

1 the Monitoring Program and in particular the outfall
2 monitoring, what we've done in the Revised Tentative is
3 allow for customization of the Monitoring Program; and
4 the intention here is primarily that there will be
5 customization of the Outfall Monitoring Program for
6 stormwater and nonstormwater through a permittee's
7 Watershed Management Program or Enhanced Watershed
8 Management Program. So that's reflected in the second
9 Revised Tentative.

10 For the customization, the ability to customize
11 under the Watershed Management Program, one of the key
12 requirements of that, however, is that they continue to
13 meet the objectives that are outlined in the Monitoring
14 and Reporting Program of Attachment E and also that they
15 provide sufficient justification for the customization
16 that's being proposed. And one of the justifications
17 that needs to be provided is that for the outfall
18 monitoring that is being proposed, it needs to be
19 representative of the permittees' discharges and, in
20 particular, the permittees' land uses within that
21 watershed area.

22 The other aspects of the Monitoring and
23 Reporting Program that have been revised in response to
24 comments are the toxicity monitoring requirements.
25 Initially, the toxicity monitoring was required in the

1 receiving water and at the outfall and this was a concern
2 to the permittees, given the cost of toxicity monitoring.

3 Staff has worked closely with USEPA on the
4 revisions to the Tentative Order to address this concern
5 and now toxicity monitoring is required in the receiving
6 water and if toxicity is observed in the receiving water,
7 then permittees have a requirement to conduct what is
8 called a toxicity identification evaluation, or TIE, to
9 identify the pollutants that are causing the toxicity and
10 then those pollutants specifically would be monitored in
11 the outfalls, which will be less expensive for permittees
12 than actually doing the toxicity monitoring in the
13 outfalls. However, if the toxicity results and the TIE
14 results in the water are inconclusive, at that point a
15 permittee would be required to do some toxicity
16 monitoring in the upstream outfalls to identify if the
17 MS4 discharges are causing that toxicity.

18 The other change that's been made is there was
19 initially a requirement to conduct a study for pyrethroid
20 insecticides within the County and that requirement to
21 conduct that study has been removed, and the reason for
22 that is because staff has been working closely with the
23 Department of Pesticide Regulations on coordinating
24 monitoring and also with new regulations that are going
25 to dramatically reduce the use of the pyrethroids in and

1 around waterbodies, so we feel as though there is going
2 to be a significant reduction in the potential for
3 discharge of these insecticides and that it would not be
4 necessary to conduct the study.

5 Additionally, we are looking at other ways that
6 perhaps we can fund a study through contract money
7 available to the Regional Board and through our own
8 laboratory contract in lieu of this having to be a
9 requirement for permittees.

10 The next two slides, I want to talk about two
11 relatively specific changes that we've made to the
12 Revised Tentative and the second Revised Tentative.

13 During the hearing in October and also in our
14 written comments, you heard about the Middle Santa Ana
15 River specifically related to permittees Pomona and
16 Claremont. Portions of the cities of Claremont and
17 Pomona drain to the middle of Santa Ana River Watershed
18 and these portions of the cities are partially in the
19 L.A. Region and partially in the adjacent Santa Ana
20 Region.

21 The Santa Ana Regional Board established a
22 Middle Santa Ana River Watershed Bacteria Indicator TMDL
23 and as required by Federal law, staff of this Board has
24 included provisions in the Tentative Permit to implement
25 that TMDL and the wasteload allocations assigned to MS4

1 discharges.

2 Several commentors, Pomona and Claremont namely,
3 suggested that the regulation under this TMDL and the
4 provisions of this permit for bacteria would create
5 inconsistent requirements across the two regions.

6 While staff don't agree that this would create a
7 lot of inconsistency across regions -- both would be
8 implementing requirements consistent with the assumptions
9 and requirements of the TMDLs -- staff does generally
10 agree that MS4 discharges that are subject to the TMDL
11 are best regulated by the Santa Ana Regional Board and
12 we've initiated discussions with the Santa Ana Regional
13 Board staff as well as with Pomona and Claremont to
14 initiate a formal agreement -- it's termed a Designation
15 Agreement -- with the Santa Ana Regional Board that would
16 effectively allow the Santa Ana Regional Board to
17 regulate discharges of bacteria from the MS4 to the
18 waterbodies addressed by the Middle Santa Ana River
19 Watershed TMDL. And that's included in the Revised
20 Tentative, as I said.

21 The other change that we made related to the
22 Middle Santa Ana River TMDL is that in that TMDL,
23 permittees can develop what's known as a Comprehensive
24 Bacteria Reduction plan, or CBRP, and we have indicated
25 that for discharges of bacteria, that CBRP can constitute

1 the permittee's Watershed Management Plan for Pomona and
2 Claremont to address those TMDL requirements.

3 The other change that I wanted to mention that's
4 specific to some of our implementation provisions for
5 TMDLs and Attachments K through R is revisions for five
6 Bacteria TMDLs. And as you recall, this Board considered
7 and adopted provisions to the five Bacteria TMDLs in June
8 of 2012; these were for Santa Monica Bay bacteria,
9 Marina del Rey bacteria, Ballona Creek bacteria,
10 Marina del Rey -- let's see. Did I say that -- Malibu
11 Creek bacteria and also Inner Cabrillo Beach Bacteria
12 TMDLs.

13 These TMDLs are not yet approved by the State
14 Board, OAL, and EPA; however, they are working their way
15 through the process and upon approval, they do result in
16 some changes to the wasteload allocations for winter dry
17 weather and for wet weather, as well as some changes to
18 how the calculation of the geometric mean is done and how
19 that is applied.

20 So what we've done in the Revised Tentative --
21 the second Revised Tentative is we've included the
22 revised provisions adopted by this Board and have
23 included a provision that upon those becoming effective,
24 that those provisions would then become the prevailing
25 provisions for those permittees. So this will create the

1 efficiency of not needing to go in and reopen this permit
2 once those go into effect by putting them in now and
3 putting in a trigger basically to allow those provisions
4 to replace the current provisions for those TMDLs upon
5 their effective date.

6 Okay. One other thing that I wanted to mention
7 before I hand it over to Ivar for a couple slides is in
8 the Nonstormwater Discharge Prohibition Section of the
9 Revised Tentative -- actually, in the second Revised
10 Tentative, we made a few changes to the Nonstormwater
11 Discharge Prohibitions specifically related to the
12 conditionally exempt essential discharges related to
13 potable water sources and this was to address an
14 inadvertent change that was made. We defined "potable
15 water" in the Attachment A definitions and because of the
16 definition of "potable water," which is water that meets
17 the EPA drinking water standards, it then inadvertently
18 created a situation where raw water discharges from these
19 drinking water supplier systems then appeared to be
20 excluded from this conditionally exempt essentially
21 discharge exception, and that was not our intention. Our
22 intention was to allow those types of discharges to
23 occur. And so we've made a few changes to the section as
24 well as to the definitional section to include a
25 definition of "raw water" and also to clarify that this

1 conditionally exempt essential discharge exception does
2 apply to both discharges of potable and raw water that
3 come from drinking water supplier distribution systems.

4 With that, I'm going to turn it over for a
5 couple of slides to Ivar and then I'll wrap up.

6 MR. RIDGEWAY: Good morning, Chair Mehranian, Board
7 members, permittees and stakeholders. I'm Ivar Ridgeway,
8 Unit Chief of the Stormwater Permitting Unit.

9 I'd like to briefly discuss some of the
10 significant revisions to the minimum control measure
11 provisions.

12 First, we introduced a Los Angeles County Flood
13 Control District chapter in the October 18th Revised
14 Tentative. Given the L.A. County Flood Control
15 District's limited land use authority, it is appropriate
16 for the Los Angeles County Flood Control District to have
17 a separate and uniquely tailored Stormwater Management
18 Program in Part VI.D of the Order. Accordingly, the
19 Tentative Permit has been revised to clarify that the
20 Los Angeles County Flood Control District is not subject
21 to certain categories of minimum control measures
22 contained within Part VI.D of the Order.

23 The majority of the significant revisions within
24 the minimum control measures happen within the New
25 Development and Redevelopment Chapter.

1 The LID hierarchy was revised for additional
2 clarity. An independent Groundwater Replenishment
3 Section was introduced in the October 18th draft. I'd
4 just like to point out that those page numbers on the
5 slide point out to the second revised draft, the
6 November 5th Tentative.

7 The Regional Stormwater Mitigation Program
8 allows for regional LID implementation and does not
9 require the replenishment of groundwater supplies. The
10 volume of runoff from the entire project area is required
11 to be retained within the project area. This section was
12 introduced in the October 18th draft.

13 Due to potential geotechnical issues, the
14 technical infeasibility criteria was revised from 0.15
15 inches to 0.3 inches. This was also included in the
16 October 18th draft.

17 Regarding the Hydromodification Section, greater
18 flexibility for compliance was included in the
19 October 18th draft. The Order allows the use of the 2009
20 Los Angeles County Hydromodification Mitigation Criteria
21 to satisfy compliance and it also allows the use of
22 alternative erosion potential equations to satisfy
23 compliance. The original erosion potential equations
24 estimated work done on stream beds where the alternative
25 equations referenced in Attachment J focus on sediment

1 transport, providing improved assessment of
2 hydromodification impacts.

3 And last, I'd like to point out the revisions to
4 the timing for the implementation of the minimum control
5 measures. The start time has been revised from 30 days
6 after the effective date of the Order to six months after
7 the Order effective date. Permittees will elect to
8 participate in a Watershed Management Program or an
9 Enhanced Watershed Management Program or allowed to
10 continue the existing MCM provisions until the start of
11 the time of the minimum control measures contained within
12 those Watershed Management Plans occur.

13 Again, I'd like to turn this presentation back
14 over to Renee for the conclusion.

15 MR. PURDY: Okay. So I just have one slide left. I
16 just want to sum up by saying, as Sam started with and
17 reiterating what are the themes that we've been talking
18 about, both starting, you know, in October and even as
19 far back as 18 months ago when we began the development
20 of this permit back in May of 2011, and that is that this
21 permit is really based on a focus on water quality and
22 that's being driven in large part by the 33 TMDLs, but
23 the Watershed Management Programs allow us and allow
24 permittees to address not only the water quality
25 priorities that have been identified through the

1 development and adoption of those TMDLs, but other water
2 quality priorities that have not yet been addressed by
3 TMDLs.

4 It provides clear compliance determination
5 pathways for permittees to use to show compliance with
6 the requirements of the permit and it emphasizes
7 pollution prevention through the implementation of the
8 state-of-the-art low impact development provisions.

9 The Watershed Management, as you all know, is a
10 real cornerstone of this permit and we think that that is
11 going to provide a very workable and cost-effective way
12 to implement all the provisions that are within this new
13 L.A. County MS4 Permit. It's based on sound science,
14 including our reasonable assurance analysis, so that we
15 can be sure that the watershed control measures that
16 permittees will be implementing will result in the
17 desired water quality outcomes that we're looking for.

18 It provides a lot of flexibility to permittees
19 to work either individually or on a collaborative basis
20 to achieve economies of scale, like we've talked about.
21 It does foster collaboration not just between permittees
22 but now with the addition of the Enhanced Watershed
23 Management Program with other potential partners to
24 achieve not only the water quality benefits that we're
25 looking for but also other benefits to water supply and

1 it does so in what we think will be the most
2 cost-effective way possible.

3 So with that, I just want to go over the three
4 options that you have before you today, which is to adopt
5 the second Revised Tentative Order, and I do want to
6 point out that there is a change sheet which you've all
7 received to the second Revised Tentative. It's mostly a
8 number of small, minor things that we continue to
9 identify, and those are presented here on the change
10 sheet.

11 The one change that I am noticing on page 3 of
12 11, I did see that there is a small typographical error
13 to the language that we're proposing to add into
14 Attachment -- it's Attachment H, So it's at the middle of
15 that page. It should say -- this is related to basically
16 the update of the Plumbing Code to allow for reuse of
17 stormwater that's captured on-site and it says -- right
18 now, the sentence doesn't quite make sense. The second
19 sentence should say, "If the State of California update
20 incorporates the IAPMO Green Plumbing and Mechanical Code
21 Supplement, permittees are not required to adopt a model
22 ordinance addressing the potential use of harvested
23 rainwater" and continues on. So I apologize for that
24 typographical error.

25 But we are proposing that the Board adopt the

1 second Revised Tentative as proposed with this change
2 sheet.

3 Additionally, you can make modifications to the
4 second Revised Tentative in response to the comments and
5 discussion at today's hearing or you have the option to
6 decline to adopt the permit. We recommend, as I said,
7 adoption of the second Revised Tentative as proposed with
8 the change sheet, as well as with any modifications as an
9 outgrowth of today's hearing.

10 Thank you.

11 MS. MEHRANIAN: Thank you. Thank you for your
12 presentation.

13 We would like to -- there's a few questions.
14 Just -- we're not looking for questions but some
15 clarifications that Board members have. And after that,
16 I would like to let Fran Spivy-Weber do the report of the
17 State because we missed it on the agenda item and then
18 we'll take a break.

19 Questions?

20 MS. GLICKFELD: First of all, I can't thank the staff
21 enough for walking us through this. We've been trying to
22 keep up with the various drafts and you did a really good
23 job of explaining it.

24 There's one issue that I'm a little confused
25 about, which is on page 55 of the Revised Revised Draft

1 that we received on November 6th and the revised time
2 schedule has crossed out the early action language in
3 that table and it does, I think, on page -- the next page
4 on 56, it does refer to the three things that are early
5 actions, which is the LID, the green streets, and then
6 the pilot project; is that right?

7 MS. PURDY: That's correct. And to be honest, the
8 only reason that that language is stricken on page 55 is
9 simply because I realized that that table should really
10 focus on just the dates and that the requirement for
11 early actions was discussed, as you saw, on the
12 provisions on the next page.

13 MS. GLICKFELD: Yeah. I just thought that was a
14 deadline, too.

15 MS. PURDY: It's not an indication that that
16 requirement is deleted. It's just that it seemed more
17 appropriate to not have it in the table and just have it
18 on the other page.

19 MS. GLICKFELD: But the 30-month time deadline for
20 achieving that is still in effect; is that correct?

21 MS. PURDY: For the -- the 30-month time frame for
22 submittal of an Enhanced Watershed Management Program
23 continues to be 30 months.

24 MS. GLICKFELD: But how long to implement the pilot
25 project?

1 MS. PURDY: Oh, I see what you're saying. Yes, 30
2 months.

3 MS. GLICKFELD: Okay. That's what I thought.

4 MR. UNGER: The early actions.

5 MS. PURDY: Oh, I understand what you're saying.
6 Early action, unless otherwise noted in the provisions.
7 For example, for some of the LID ordinances and green
8 streets policies, there are actually requirements to, you
9 know, have the draft LID ordinance prepared within six
10 months.

11 MS. GLICKFELD: That's the only clarification I had.

12 MS. MEHRANIAN: Anybody else?

13 MR. STRINGER: I just have -- I just want to, I
14 guess, clarify or make sure that we're all on the same
15 page, and that's all of these changes are in response to
16 the comments. There's nothing that's not in response to
17 comments or flow from the comments; is that correct?

18 MS. PURDY: That's correct. All of these changes are
19 in response to either the written comments that we
20 received --

21 MR. STRINGER: Right.

22 MS. PURDY: -- or, you know, in many cases then
23 continuing discussions to further clarify those comments
24 that we received in writing or comments that we heard at
25 the hearing in October.

1 MR. STRINGER: And then the change sheet we got
2 today, it's 11 pages of changes and that seems like a
3 lot; but given the complexity of this, it probably is
4 not. Is there anything in here you'd like to
5 specifically --

6 MS. PURDY: Highlight?

7 MR. STRINGER: -- discuss or highlight for us? Any
8 substantive changes that we should be aware of? It's
9 difficult for us to read this and absorb it while we're
10 listening to you guys.

11 MS. PURDY: Right. And most of these changes are not
12 large changes. They're in most cases changes where, in
13 fact, in some cases where we indicated that we would make
14 a change and it was overlooked in some cases. In some
15 cases, they're for clarity. We made some changes and
16 then there was some apparent confusion over the meaning
17 of those changes and so we changed that.

18 One reason that it's so long, for example, is
19 there was some confusion over what we meant by some of
20 the language related to the geometric mean calculation
21 when we incorporated provisions for the new revisions to
22 the Bacteria TMDLs and because that had to be populated
23 throughout five different parts of the permit --

24 MR. STRINGER: Right.

25 MS. PURDY: -- it was the same change but multiple

1 times.

2 MR. STRINGER: Right.

3 MS. PURDY: And so it made the change sheet appear
4 longer than it really is from the point of view of the
5 types of changes. Many of those are exactly the same
6 changes.

7 Additionally, some of the changes are changes to
8 response to comments because in the continuing
9 discussions that we've had and continuing clarification
10 of changes in response to comments, we revised some of
11 the responses to comments that we initially provided.
12 But I don't think that there is anything that is at such
13 a level that it needs to be individually called out.

14 MR. STRINGER: Okay. And just in terms of process,
15 if we approve the permit today with these changes and
16 then over the next few weeks or months you discover other
17 things that need tweaking or modification or changed, do
18 those things -- I guess if they rise to a certain level,
19 they'd come back to us or are they things that can just
20 be done by our staff? How does that work?

21 MS. PURDY: Well, some minor corrections,
22 typographical errors, can be corrected.

23 I don't know, Jennifer, do you want to speak on
24 that? We do have a provision from Federal regulation
25 that allows us to make some minor corrections without it

1 needing to come back to the Board.

2 MR. STRINGER: I just want to make sure that we and
3 the stakeholders understand that process.

4 Jennifer, maybe you can --

5 MS. FORDYCE: Yeah. What Renee said is correct.
6 There's a provision in the Federal regulations called
7 modifications, basically typos, little things; but
8 anything that rises to a substantive level, we'd have to
9 see where it falls under one of the reopener provisions
10 and then bring it back.

11 MR. STRINGER: I see. Thank you. That's all I have.

12 MS. MEHRANIAN: No more questions?

13 Thank you, Renee, and thank you everybody on the
14 staff for preparing -- going through this process and
15 preparing this report.

16 Yes, please. Fran Spivy-Weber will do the
17 report of the State Water Board.

18 MS. SPIVY-WEBER: Thank you. And I'm pleased to be
19 here and pleased to see the progress that's being made.

20 MS. FORDYCE: I'm so sorry to interrupt. Can we just
21 make sure, just so it doesn't seem like Ms. Weber is
22 commenting on the L.A. MS4 Permit, can we close the
23 hearing and then reopen it when she ends?

24 MS. MEHRANIAN: Yes. We'll close the public hearing
25 section for now and then we'll reopen it later.

1 MS. SPIVY-WEBER: Thank you, again.

2 I particularly want to thank those members of
3 the Board would who attended the Water Quality
4 Coordinating Council meeting last week. I think it was
5 inspiring and energizing and I've just had a brief look
6 at the evaluations from other Board members, including
7 yourselves, and I think this opinion is shared by the
8 vast majority of the folks who were there. So now we --
9 now the hard work is how do we make this work? And this
10 permit is the type of thing that I think was envisioned
11 in a lot of the conversations that we had.

12 Also, we've had an election since I was here
13 last and Prop 30 did pass. While it doesn't directly
14 affect Water Boards, it certainly affects State
15 government and local and regional government as well and
16 so it's with a sigh of relief because the uncertainty
17 that a failure of Prop 30 would have brought to all
18 agencies in State government was pretty large.

19 So now -- but as those who attended the WQCC
20 know, we are all, 98 percent or so, fee-based now. Our
21 flexibility -- and we will be moving to 100-percent
22 fee-based within the next year or so versus the last
23 segment that isn't totally fee-based, and there's
24 legislation that's been signed that moves it in that
25 direction. So what that means is that there's a lot less

1 flexibility if we're working in siloed programs to move
2 staff around at the regional level, and Sam and Deb are
3 having to deal with that as we speak. So it's a new way
4 of operating and it's very important for the Boards to
5 understand the limitations as you make requests and want
6 to pursue things to keep in mind and ask Sam and Deb and
7 others to keep you apprised as to what they are
8 experiencing and where they might need your help to get
9 around some of these problems.

10 And we don't expect much increased funding in
11 the near term. While Prop 30 passed and it's a
12 significant amount of money, we do not expect that the
13 budgets are going to increase, certainly significantly,
14 and so that leads us back to a comment that Larry made
15 earlier about economies of scope and it's particularly
16 important not just to you and to the permit that you're
17 looking at today, but also to stakeholders.

18 We are envisioning that the work to achieve
19 water quality benefits at the regional level and
20 statewide are going to come from partnerships that engage
21 other actors who have their own missions and their own
22 areas of focus, but that they can overlap with what we
23 are doing and this includes, as has been mentioned
24 several times already today, water supply, but it also
25 includes energy efficiency. It includes greenhouse gas

1 reductions, it's land use issues and air deposition,
2 which I know is a big issue that a lot of the cities are
3 working with.

4 So I'm encouraged that this Enhanced Watershed
5 approach is something that can incorporate some of these
6 areas in the funding of projects that are going to
7 achieve water quality benefits and it's quite good.

8 We will be taking up, as Renee said, the
9 receiving water limitations language not just for MS4
10 permits but also for permits for -- our State permits for
11 CalTrans, for the Phase II's, for others. That comes up
12 on November 20th. We expect that it will be an all-day
13 workshop. It will be webcasted so if you're interested
14 in looking at it or coming in on it every so often during
15 your workday, I encourage you to do so.

16 We took the Toxicity Policy off the agenda, not
17 because of any pressure from anyone actually external to
18 our organization. Our attorneys had some questions about
19 what the Toxicity Policy -- how it was framed and so they
20 are going over it again with a fine-tooth comb. It
21 should be coming back fairly soon. I expect it in
22 December. So it's not a -- we just want to make sure
23 it's right and so that's what happened to Toxicity, and I
24 know you've been waiting for years so I hope -- I hope.
25 I won't predict. But anyway, it will happen when it

1 happens and the pressure is not from the outside at this
2 point.

3 Also, just as from a State perspective, there is
4 going to be -- the Air Board is going to conduct a
5 cap-and-trade auction on the 14th of November. This is
6 historic and it's being done in collaboration with a few
7 other areas, but mostly it's California and it is
8 envisioned that it will generate a significant amount of
9 money that will be spent on things that have a very,
10 very, very, very -- and I cannot give you enough verys --
11 tight nexus with reducing greenhouse gasses. The auction
12 is on the 14th. The certification of the auction that
13 has been done appropriately will not occur until the week
14 of the 19th, so don't expect a number to flash, Oh, we've
15 generated X amount of dollars on the 14th or the 15th.
16 It will occur sometime the next week, but there is some
17 indication that there will be significant moneys
18 generated and water will be one of the areas that they
19 will be looking at for expenditure of these funds, again
20 with a very tight nexus to greenhouse gas reductions. So
21 pay attention. If you've got spare change around, you
22 might want to join in.

23 Also, the Air Board will be updating its A.B. 32
24 Scoping Plan this next year, but the draft will be out
25 probably mid spring and they're going to in this update

1 focus on five areas: water, waste, transportation,
2 energy and agriculture.

3 Well, as you know, water touches almost all of
4 those -- impact, I would say, touches almost all of those
5 areas. So we will be working at the State level, but we
6 will be consulting with the Chairs and with Regional
7 Boards and staff, Regional staff, on the areas that we
8 will be wanting to emphasize again in making this nexus
9 between water and how water is handled from a water
10 quality perspective and the greenhouse reductions.

11 So with that, I will close, but we are -- it's a
12 much easier time psychologically at least at the State
13 level. Thank you.

14 MS. MEHRANIAN: Thank you.

15 We have questions for you.

16 MS. DIAMOND: Actually, I just wanted to first just
17 make a comment that the WQCC was really very valuable and
18 after going to so many of them over the years, that says
19 a lot because I've seen a range of WQCCs over the years
20 and this was really probably the best one, and I
21 particularly enjoyed the last panel of the day, was
22 really incredibly thought provoking and big-picture,
23 which I think is an opportunity for all of the Regional
24 Boards to work together on policies that really work on
25 the nexus between water quality and water supply and

1 having everybody in the state that deals with water think
2 about how that water is used and where we can be saving
3 money and using it more wisely.

4 So I think it was really a great thought
5 provoking and I know our Board members were talking about
6 it since, because there are opportunities to do a lot in
7 terms of saving water, using water for appropriate
8 purposes and not wasting it, and at the same time working
9 towards efficiencies. So thank you very much for that.

10 MS. SPIVY-WEBER: Thank you.

11 MS. MEHRANIAN: Thank you.

12 MR. YEE: I just wanted to echo what Fran had to say.
13 Thank you very much. It was a great conference.

14 MS. SPIVY-WEBER: Thank you.

15 MS. MEHRANIAN: Thank you. Thanks a lot. So we'll
16 take a ten-minute break. We'll come back at 10:30 and
17 then we'll start with USEPA. Thank you.

18 (Recess)

19 MS. MEHRANIAN: Please take your seats so we can
20 continue with our meeting. We would reopen the public
21 hearing and we have a representative of USEPA.

22 MS. FORDYCE: We have elected officials.

23 MS. MEHRANIAN: Oh, are there any elected officials?
24 I have Patricia Elkin for Mayor Jim Dear.

25 Patricia Elkin? No? Okay.

1 We'll move on to be Ken Manning, San Gabriel
2 Valley. Did you take the oath?

3 MR. MANNING: No, I did not.

4 MS. MEHRANIAN: And whoever did not take the oath,
5 can we?

6 (Whereupon all prospective witnesses were
7 collectively sworn)

8 MR. MANNING: Madam Chairman, members of the Board,
9 staff, I am here today as the Executive Director of the
10 San Gabriel Basin Water Quality Authority. The chairman
11 of my Board is also here today to speak on behalf of the
12 City. He's the mayor of the City of South El Monte.

13 But on behalf of the Water Quality Authority,
14 I'd like to encourage you to move and support the permit
15 as drafted by staff.

16 First, I'd like to commend staff for listening
17 to the constituents within the San Gabriel Basin and
18 throughout the L.A. region, for developing a program that
19 I think is workable and sustainable.

20 From the perspective of the water industries and
21 the Water Quality Authority, in particular, we see this
22 Enhanced Watershed Management Program as accomplishing
23 three important objectives. The first one is
24 conservation and for us that's absolutely critical that
25 we're able to obtain as much of the free stormwater that

1 we are able to get and get it into the ground. It also
2 has tremendous water quality objectives for us. It
3 allows us to get water into the ground, high-quality
4 water into the ground and be able to sustain our
5 watersheds. And the third thing, and I think it's
6 important and possibly overlooked, is that it also helps
7 the communities. It's encouraging communities to develop
8 a healthy community through the development of
9 watersheds, parks, and enhancing those kinds of
10 facilities that are going to make our communities a much
11 better place to live.

12 So it's a win-win-win situation for everybody
13 and I think it also brings into play a lot of partners.
14 I think Fran in her talk called us actors, so I guess I'm
15 an actor, and so I'm here today just to mention that
16 these actors are interested in participating and we think
17 that this is the right way to go, and so we're
18 encouraging your support on behalf of the Water Quality
19 Authority.

20 Thank you.

21 MS. MEHRANIAN: City of El Monte, Louis Aguinaga?
22 Okay.

23 Susan Reyes, for Senator Hernandez.

24 MS. GLICKFELD: Madam Chair, could you ask them to
25 check outside. I think I just saw them out there.

1 MR. UNGER: Thanks, Rebecca.

2 MS. MEHRANIAN: Okay. So let's go with the EPA
3 representative. Thank you.

4 MR. KEMMERER: Good morning, Board members.

5 My name is John Kemmerer. I'm Associate
6 Director of the EPA Region 9 Water Division and I'd like
7 to, I guess, start off by briefly reiterating what we see
8 as the real importance of renewing this 2001 permit to
9 bring it up to date with municipal stormwater permits
10 issued across California.

11 As I noted back on October 4th, from EPA's
12 perspective, it's really critical to update this permit
13 covering the nation's second largest municipality where
14 urban runoff is the primary cause of water quality
15 impairments.

16 I can't say enough about the hard work your
17 staff have done on this permit over the past year and a
18 half. I know they've been working around the clock since
19 the October hearings and I really would like to be able
20 to stand up here today and say I 100 percent support
21 everything in the renewed revised permit, but there are a
22 couple aspects of the permit that I do have concern with
23 and based on our review of the changes made over the last
24 month, we believe it's important to revise three specific
25 aspects of the permit prior to its adoption.

1 All three of these suggested revisions pertain
2 to the use of the Watershed Management Plans. We clearly
3 see that there are a lot of really impressive benefits
4 from the preparation and implementation of these
5 Watershed Management Plans, but we believe it's
6 critically important to not compromise the protectiveness
7 of the permit during this Watershed Management Plan
8 process and that's what these three suggestions pertain
9 to.

10 The first suggestion is that the revised -- the
11 first issue really pertains to the fact that the revised
12 permit's provisions on Watershed Management Plans in
13 Section VI.C provide that the permittees can be
14 considered in compliance with the receiving water
15 limitations language in Section V.A by participating in
16 the Watershed Management Plan process.

17 You've heard a lot about that. You know, this
18 is a significant step that departs from the approach used
19 of course in the existing L.A. County permit and MS4
20 permits across California since the issuance of the State
21 Water Resources Control Board Resolution 99-05.

22 We would fully support sticking to the existing
23 receiving water limitation language that's included in
24 the 2001 permit; however, we realize that your staff have
25 taken a very creative and thoughtful approach in coming

1 up with this alternative approach and we don't oppose the
2 approach that they've -- conceptually the approach that
3 they've drafted which we do believe has the ability to
4 spur meaningful water improvements. The point is if you
5 do choose to adopt the proposed approach in the revised
6 permit, we believe the timing of the Watershed Management
7 Plan approach to attain compliance and receiving water
8 limits should be revised.

9 The revised permit allows for a compliance -- as
10 Renee did a really good job of describing, allows for
11 compliance with the receiving water limitations language
12 beginning with the notice of a permittee's intent to
13 develop a Watershed Plan.

14 We disagree with this approach and would
15 recommend that the existing receiving water limitations
16 language in Section V.A, which has been in effect for
17 over ten years and has been in effect across the state,
18 remain in effect until these new Watershed Plans are
19 actually approved.

20 So the second suggested change pertains to how
21 the Watershed Management Plan approach affects the
22 implementation of the permit's minimum control measures.
23 Section VI.D of the permit provides these minimum control
24 measures and we believe, you know, that in working with
25 your staff over the past year and a half, we believe that

1 these measures establish some of the best MS4 provisions
2 we've seen for implementing the Clean Water Act's
3 provisions that pollutants from MS4s be controlled to the
4 maximum extent practicable.

5 Unfortunately, the way the permit is revised now
6 only requires that permittees who do not develop
7 Watershed Management Plans implement these thorough
8 revised MCMs within six months of the permit's effective
9 date. Permittees who provide notification of the
10 preparation -- that they're going to go ahead and use the
11 Watershed Management Plan approach only follow the
12 less-protective existing Stormwater Management Plans
13 pursuant to the existing 2001 permit. It's our view that
14 all permittees regardless of whether they are preparing
15 the Watershed Management Plan should be required to
16 initially implement the renewed permit's MCMs within six
17 months of the effective date of the permit and then when
18 Watershed Management Plans are prepared, there must be a
19 justification that any revisions they make to this new
20 thorough language for MCMs will still ensure that the --
21 will still result in a reduction of pollutants to the
22 maximum extent practicable; and then when those
23 acceptable plans are approved, then the Watershed
24 Management Plan approach could be used for implementing
25 any kind of tweaks to the MCMs that are made under those

1 plans.

2 So then our final suggested change concerns how
3 the revised permit's provisions for implementation of
4 TMDLs and how the Enhanced Watershed Management Plan
5 applies here. With really one exception in this permit,
6 we believe this revised permit contains a really very
7 thorough and thoughtful approach reflecting how wasteload
8 allocations need to be attained in the permit, but we
9 disagree with the proposed permit's provision that would
10 allow compliance with final wasteload allocations if
11 these Enhanced Watershed Management Plans achieve
12 retention of the 85th percentile storm.

13 It's been noted many times in the workshops and
14 in the hearing in October by both us and by the Regional
15 Board, your staff, that if -- when you incorporate a TMDL
16 into a permit, if you're going to use a nonnumeric
17 BMP-based approach, there must be a demonstration that
18 the specific BMPs are going to be sufficient to achieve
19 the applicable wasteload allocations. And while we
20 recognize that there could be very incredible benefits
21 from -- if this level of retention is actually achieved
22 under these Enhanced Watershed Management Plans, there
23 has not been a demonstration in this permit, in this
24 really late change to the permit, that retaining the 85th
25 percentile storm will result in achievement of those

1 final wasteload allocations and I think we see the real
2 advantage of encouraging this level of retention and we
3 really believe that if the paragraph in the TMDL Section
4 that lays this out is deleted that there's still a
5 vehicle under the new permit whereby if the Enhanced
6 Watershed Management Plan can really have that rigorous
7 scientific demonstration that the wasteload allocations
8 are going to be achieved by retention of the 85th
9 percentile storm or whatever array of control measures
10 are assembled in that Enhanced Watershed Management Plan,
11 then the new revised permit includes a reopener provision
12 that allows the permit to be revised to reflect that.
13 But we really think it's premature and not scientifically
14 sound or consistent with our EPA guidance to be able to
15 take the approach that was taken and the change that was
16 made just the other day.

17 So, again, I wish I could say that we
18 100 percent support everything. We think there's a huge
19 amount of great language in this permit. We really
20 believe that's important to make these three changes; and
21 after incorporating these changes, we recommend that you
22 adopt this permit. Thank you.

23 MS. MEHRANIAN: Thank you.

24 MR. GLICKFELD: I actually have a question.

25 MS. MEHRANIAN: We have a few questions.

1 MR. YEE: Does staff have a quick --

2 MS. DIAMOND: Mr. Kemmerer, could you come back for a
3 second?

4 MS. MEHRANIAN: Staff and the Board had a few
5 questions or clarifications.

6 MR. YEE: Renee, do you have a response to USEPA?

7 MS. MEHRANIAN: Go ahead.

8 MS. DIAMOND: So I had a couple --

9 MS. MEHRANIAN: Hold on. Let's ask this one question
10 and then we'll go back to you, Renee.

11 MS. DIAMOND: I wanted to ask you -- and obviously we
12 hope that you'll be here for the duration of the day
13 because there may be more questions, but just to clarify
14 what you just said, do you you believe that all of these
15 three things need to be changed in order to be protective
16 of water quality and based on sound science? Is that
17 basically what you're saying?

18 And also, would you address the issue of do the
19 revisions that you're responding to today with these
20 three points, would you -- do you believe that if we went
21 ahead without making these changes that we would be
22 backsliding or -- you know, backsliding or would there be
23 any antidegradation involved? 'Cause you say these
24 aren't protective, so I want to understand why.

25 MR. KEMMERER: Yeah. I would say I'm not

1 necessarily -- I'm not making the statement, I don't
2 think, that -- at least that by not making these changes,
3 I'm not making the blanket statement that the permit is
4 not protective. I believe that these changes are needed
5 in order to make the permit as protective as possible.

6 I do think that -- I know you're going to hear a
7 lot more probably today about antibacksliding. We -- I
8 would say that having the final plans in place before
9 changes are made to the -- or, you know, before the
10 receiving water limitation language is basically achieved
11 by the Watershed Management Plan and having the final
12 plans in place before the minimum control measures, you
13 know, are not being implemented would help make the
14 permit more protective.

15 I think with the form -- and from our
16 perspective, we have not made a conclusion that the
17 approach -- I think that the raw approach of using
18 Watershed Management Plans necessarily results in a
19 backsliding of the permit, but we recognize that there
20 are some -- there are some difficult issues over the
21 legal jurisdiction and pertaining to antibacksliding
22 provisions and when we've been in touch with our counsel
23 back in Washington and counsel in San Francisco, we have
24 not made a final decision on whether antibacksliding is
25 an issue.

1 I'd really most like to hear your counsel
2 respond to some of those issues, but we have not made a
3 conclusion that this permit even with the -- without the
4 changes that I am suggesting here would result in any
5 backsliding.

6 We think, again -- especially with that first
7 one regarding the receiving water limitations approach,
8 we think that the permit would be better suited to and in
9 a better position to basically fend off any
10 antibacksliding claim or, you know, backsliding claim.

11 MS. DIAMOND: So some of these revisions you think
12 are premature at this point.

13 MR. KEMMERER: So the one I think is really premature
14 is the third one I have mentioned of having the TMDL --
15 that language -- and it's actually on page 147 of the
16 second revised permit where that new section that just
17 says, If you retain the 85th percentile storm, you're
18 deemed to be in compliance with the final wasteload
19 allocations.

20 I can't argue that retaining the 85th percentile
21 storm would be a huge -- would provide huge benefits and
22 I would applaud the idea of that happening. It's just
23 we're kind of talking a little bit -- in my opinion, it's
24 kind of apples and oranges here, because trying to make
25 that conclusion without any kind of backing -- backup

1 documentation and scientific analysis that achieve doing
2 that will result in, say, achievement of the copper TMDL
3 in the L.A. River just doesn't translate and yet when
4 this Board adopted -- you know, incorporated the Trash
5 TMDL into this permit, there was a very thorough analysis
6 done to say that the control measures that are part of
7 that Trash TMDL will result in attainment of the
8 wasteload allocations and we were totally supportive of
9 how you've incorporated the Trash TMDL into this permit
10 without having -- you gave the option of using a
11 BMP-based approach for achieving the final wasteload
12 allocations.

13 I don't believe that what came out here Monday
14 night really does that in terms of making that clear
15 justification that by retaining that level of storm, that
16 you're going to meet all of those final wasteload
17 allocations. And like I said, I think this permit lays
18 kind of a very valuable framework, sets out a valuable
19 framework where these plans are going to be prepared,
20 there's going to be these analyses done. The reasonable
21 assurance analysis that Renee described is going to be
22 done.

23 When you have all of that evidence and can say,
24 Okay, we're retaining the 82 or the 85 or the 87 percent
25 storm and it's actually going to meet all of these

1 wasteload allocations, then you can say, Okay, now we
2 have a BMP approach that's fully supported and really can
3 replace the numeric limits. And I think that, again, the
4 way the staff have drafted the permit, they have this
5 reopener language that when you do have that plan in
6 place, you can go ahead and make that change.

7 MS. DIAMOND: Thank you very much.

8 MS. MEHRANIAN: Renee, do you want to answer?

9 MR. KEMMERER: Do you want me here still?

10 MS. MEHRANIAN: Thank you. You're here, though.
11 You're not going anywhere.

12 MR. KEMMERER: I'm here all day.

13 MS. MEHRANIAN: Go ahead, Renee. You want to answer?

14 MR. UNGER: Yeah. I think there are three comments,
15 if you will. So I think Renee, Deb, and I are going to
16 try to handle them together.

17 But to start off with, we take exception with
18 the claim that there has not been a technical analysis
19 done. The County has been working on a watershed model
20 for several years now. We've been participating in the
21 stakeholder meetings on that model. In fact, our modeler
22 has worked on that.

23 When you start looking at reduction in copper in
24 the River that was mentioned, we think retaining the
25 storm is going to reduce the pollutants by around the

1 same order of magnitude.

2 I would also say, too, that there was a very
3 robust negotiation about the L.A. Trash TMDL and the fact
4 that the catch basin, both inserts and screens, may or
5 may not reach a zero trash level, but there really was no
6 technical analysis, per se. There were a lot of parties
7 in the room who did that work and so the precedent is
8 here in the L.A. region that -- as in regions throughout
9 the state and the nation where surrogates are used and we
10 think the 85th percentile retention of a 24-hour storm
11 that's been on the table for years. We've talked about
12 that as basing our design storm on it. We think it's a
13 very robust analysis and I think the County is going to
14 be able to explain it better. I hope they will. We'll
15 ask when they get to their testimony about how that
16 number is a relevant number for achieving significant
17 pollutant help.

18 So with that, I'd like to turn it over to Renee
19 and Deb to talk about some of the specific comments that
20 were made and suggestions that were made by USEPA.

21 MS. PURDY: Okay. I think what I want to do is build
22 on what you said, Sam, which is that given, I think, what
23 Sam said, in addition, one of the things --

24 MR. STRINGER: Renee, we're having -- can everyone
25 hear Renee?

1 UNIDENTIFIED SPEAKER: No.

2 MR. STRINGER: You might want to step up to the
3 podium, Renee. Thanks.

4 MS. PURDY: So, again, this is Renee Purdy and just
5 building on what Sam said, I would say with regard to the
6 third point that John was bringing up regarding allowing
7 compliance with the final water quality based effluent
8 limitations using the 85th percentile, 24-hour event, as
9 Sam said, we really do think that there is strong support
10 for this based on the very detailed, rigorous model
11 that's been developed by the County, the Watershed
12 Management Modeling System, and we've had a number of
13 discussions with them over several years regarding that
14 system as well as over the last several weeks with regard
15 to its demonstration that this design storm could achieve
16 final water quality based effluent limitations.

17 That being said, I think that one of the things
18 that we could consider is including a revision to that
19 provision to indicate that that surrogate threshold would
20 be basically evaluated through the reasonable assurance
21 analysis that's already provided for in the Watershed
22 Management Program and so that could be basically a
23 change in response to those comments to page 147. It
24 would be paragraph E.4.

25 MS. GLICKFELD: Hold on.

1 MS. DIAMOND: Can we get there?

2 MS. PURDY: I haven't quite come up with the language
3 yet, but I'm just pointing you to where I think we could
4 make that change to basically indicate that that criteria
5 could be used upon evaluation through the reasonable
6 assurance analysis, that that would achieve the final
7 water quality based effluent limitations.

8 MR. UNGER: And may I suggest that we hear full
9 testimony? We will craft language while we're hearing
10 other testimony and things rather than trying to create
11 language at this point.

12 MS. MEHRANIAN: Yes. Definitely we're going to do
13 that.

14 MR. UNGER: I appreciate that. Thank you.

15 MS. SMITH: Sorry. I had draft language, but I'll
16 wait.

17 MS. PURDY: So I'm going to -- I think what I'd like
18 to do now is jump to the first issue that was raised,
19 because it's more closely related, I think, to the third
20 and that specifically was with regard to our change in
21 the second Revised Tentative to allow the compliance
22 mechanism that I described through the Watershed
23 Management Program to start basically upon a permittee's
24 notification of its intent to develop a Watershed
25 Management Program or an Enhanced Watershed Management

1 Program, and we really feel as though that is important
2 and necessary to provide permittees with the -- you know,
3 the compliance mechanism as they're developing the
4 program so they don't feel as though they need to
5 redirect resources away from developing a very good,
6 strong program to implement to deal with occasional
7 exceedances that may arise during program development.

8 We think it's going to create a disincentive and
9 a difficulty for permittees to feel as though they need
10 to chase after some receiving water limit exceedances
11 that may occur during the development of the program
12 instead of focusing efforts on actually developing a
13 program to address those exceedances as well as all of
14 the TMDL provisions.

15 That being said, as I described in my
16 presentation, that compliance mechanism that starts at
17 the sixth month is conditional upon a permittee
18 implementing all of the interim actions starting at six
19 months. They have to notify -- you know, provide the
20 timely notification. They have to provide all of the
21 interim milestones. In the case of the Enhanced Program,
22 there are a number of things like providing a Work Plan,
23 providing a Monitoring Program, that will happen during
24 that period in addition to continuing to implement their
25 existing program.

1 So that's something that we feel as though it's
2 a reasonable approach. If at any point a permittee does
3 not fulfill one of those interim milestones for the
4 development of the program itself, at that point the
5 permittee is not afforded this compliance mechanism and
6 that's true both looking forward at that point as well as
7 looking backward. This is only a compliance mechanism if
8 the permittees meet all of those requirements during
9 program development; and if those aren't met and there
10 ultimately is not a program approved, then the permittee
11 doesn't have the benefit of this compliance mechanism not
12 only moving forward but also not for the period of six
13 months through whenever they submit their program.

14 So we think that this is the most reasonable,
15 workable approach to address this and give permittees the
16 room and the opportunity to develop these programs,
17 knowing that they can work diligently without feeling as
18 though they need to divert resources during that period
19 to address occasional exceedances that may occur.

20 Do you want to add anything else?

21 MS. SMITH: I think Renee did an excellent job in
22 describing. Just to add one more thing, I think the
23 objective that Mr. Kemmerer is looking for and having it
24 at the time of the approved plan is still in our approach
25 because if they don't do the plan, a good plan, it

1 doesn't get approved. They lose it retroactively and
2 they're still subject retroactively to enforcement on
3 that.

4 So it's still there. It just gives that little
5 bit of comfort as it's being developed, but it's -- the
6 other objective that he mentioned is still covered and
7 more with some of the other milestones.

8 MS. MEHRANIAN: Thank you.

9 Board Member Camacho, did you have a question?

10 MS. CAMACHO: There was three total.

11 MS. MEHRANIAN: There's a third.

12 MS. SMITH: The third one, I believe, was --

13 MR. STRINGER: It was that the process allows
14 basically the status quo and he thinks you should have to
15 implement, you know, the MCMs immediately is what I
16 heard.

17 MS. SMITH: I'm just talking to Renee one second. We
18 feel like on this one, it would be good to hear from the
19 other permittees before we weigh in because, you know, I
20 understand, again, what point Mr. Kemmerer is trying to
21 make and having a long lapse of using the old MCMs, but
22 people are developing a watershed-based prioritized
23 Implementation Plan for all these minimum control
24 measures and there's going to be a mix of things that can
25 be mobile, like you're moving your street sweepers to

1 certain areas and some things that might be structural
2 and built in the ground, and so to say they all -- all
3 the new stuff has to happen right away might be putting
4 something in that later on is deemed to be not a high
5 priority with the flexible focus plans that are being
6 developed. So it could be, you know, a waste of money
7 and we find out that that wasn't prudent to do and it was
8 prudent to do it in a different way once they, you know,
9 fully look at those plans and prioritize and put the MCMs
10 in the highest priority subwatersheds and all that.

11 You know, there's going to be a mix of things
12 and I think it would be prudent to hear from the
13 permittees about how this might affect their activities
14 and then we'll be glad to weigh in on it.

15 MS. MEHRANIAN: Any other questions? Thank you.
16 Thanks for that.

17 So we'll move on with the public hearing and we
18 have the electeds that are back in the room, I believe.
19 We have Susan Reyes, from Senator Ed Hernandez's office.
20 You have three minutes.

21 MS. REYES: Hello, Madam Chair and members of the
22 Board. On behalf of Senator Dr. Ed Hernandez, I'd like
23 to thank you for taking the time to listen to the
24 concerns of the cities within the 24th Senate district.

25 Earlier this week, Senator Hernandez held a

1 meeting with local water agencies and cities to discuss
2 some of the potential partnership opportunities amongst
3 permittees and nonpermittees under the revised version of
4 the MS4 Permit.

5 And Ivar Ridgeway, thank you for attending.

6 Senator Ed Hernandez would like to express his
7 support towards the recent new direction the Board has
8 taken with the Watershed Management Programs. This
9 provides incentives for cities to work together to
10 develop cost-effective solutions for stormwater quality.
11 Senator Hernandez would like to encourage the L.A.
12 Regional Board and staff to continue to move in this
13 positive direction and work with stakeholders to adopt
14 and implement the best and most reasonable MS4 Permit as
15 possible.

16 Thank you, from Senator Ed Hernandez.

17 MS. MEHRANIAN: Thank you very much.

18 We have Patricia Elkins, representing Mayor
19 Jim Dear.

20 MS. ELKINS: Good morning. I'll be reading a letter
21 from Mayor Dear, City of Carson.

22 "Dear Ms. Mehranian:

23 "On behalf of the City Council of the
24 City of Carson, I would like to comment on
25 the revised Tentative Municipal Separate

1 Storm Sewer System Permit for Greater
2 Los Angeles County.

3 "My staff informs me that" --

4 MS. MEHRANIAN: Can you speak up a little bit?

5 MS. ELKINS: I'm sorry.

6 "My staff informs me that the revised
7 MS4 Permit still contains provisions that
8 could expose the City to third-party
9 litigation. Among them include, one, the
10 requirement to comply with numeric instead
11 of best management practices water quality
12 based effluent limitations and, two, a
13 nonstormwater discharge prohibition
14 limitation that is inconsistent with Federal
15 stormwater regulations.

16 "The City cannot afford such exposure
17 and we are committed to filing an
18 Administrative Petition to prevent this from
19 happening. Although we do not wish to
20 resort to such action, we do not have much
21 of a choice unless the Regional Water
22 Quality Control Board modifies its approach.

23 "I implore you to delay adoption of the
24 permit to allow your staff the time to
25 revise the permit to remove its legally

1 harmful provisions. This will also provide
2 permittees the opportunity to meet with your
3 staff to review and understand the County's
4 Enhanced Watershed Management Plan, which
5 cities just learned of a few days ago. On
6 its face, the County's Enhanced Watershed
7 Management Plan offers a cost-effective
8 means of complying with total maximum daily
9 loads; however, we need to know more
10 details.

11 "Thank you for your time and
12 consideration.

13 "Sincerely, Jim Dear."

14 MS. MEHRANIAN: Thank you.

15 We have City of South El Monte, Mayor Louis
16 Aguinaga.

17 MAYOR AGUINAGA: Good morning. I just wanted to --
18 as Mayor of the City of South El Monte and President of
19 the San Gabriel Water Quality Authority, I'd like to -- I
20 was informed about the County Enhanced Watershed
21 Management Program a few days ago at a meeting hosted by
22 Senator Ed Hernandez. The Water Quality Authority has
23 retained -- excuse me. That was another one.

24 The County is proposing on how to clean up the
25 TMDLs. The consultant has already explained how the

1 County Watershed Program has increased groundwater
2 storage in the San Gabriel Valley.

3 As President of the Water Quality Authority and
4 Mayor of the City of South El Monte, I like the concept
5 of the County and the program they have moved forward
6 with; however, my staff has questions that need to be
7 answered before it is endorsed by the cities.

8 And actually, I am -- I was -- I received a
9 phone call from the City of El Monte and they asked me to
10 relay the same message, that they really want to thank
11 the Board for moving in a positive way and we think
12 it's -- this is a great move forward. We just think that
13 we just need a little bit more time to look at -- to
14 really have a little bit more time to evaluate it and to
15 be able to weigh in, to weigh in a little bit more.

16 The City of South El Monte is concerned about
17 being sued over the requirements, so we're asking you to
18 delay the adoption maybe a few -- a month or so or --
19 just to see how long it'll take us, all the cities,
20 actually just to weigh in on some of these TMDL questions
21 and some of the other options.

22 At this time, I'd like to actually again thank
23 the Board for moving in a positive direction and I think
24 this is -- with the help of Senator Ed Hernandez and the
25 Board I think listening to the cities, I think we're

1 moving in the right direction.

2 Thank you very much.

3 MS. MEHRANIAN: Sure. Thank you.

4 Now we're going to move to designated parties'
5 presentations and the first group is L.A. Permit Group on
6 behalf of 62 designated parties, and you have 40 minutes.

7 MS. MALONEY: I'm just waiting for the clock to come
8 up.

9 MS. MEHRANIAN: Have you provided this presentation
10 to the Board?

11 MS. MALONEY: Yes, I have. It's the blue slides.

12 MS. MEHRANIAN: Yes, please. Thank you.

13 MS. MALONEY: Good morning, Madam Chair and Board
14 members. My name is Heather Maloney, chair of the L.A.
15 Permit Group. And first off, I want to thank you for the
16 opportunity to provide the comments today. We really do
17 appreciate this opportunity.

18 So just to review, currently the L.A. Permit
19 Group is comprised of 62 Los Angeles County
20 municipalities and the participating agencies under the
21 L.A. Permit Group are listed up here on the screen for
22 your reference.

23 So at the October hearing, we requested changes
24 to the permit that would allow a collaborative plan
25 development and implementation process. The L.A. Permit

1 Group was formed for this very reason, because we desire
2 a collaborative relationship with the Regional Board and
3 key stakeholders.

4 In order to facilitate this collaboration, we
5 requested several permit revisions at the October
6 hearing, a number of which were related to the Watershed
7 Management and Monitoring Programs. We were happy to see
8 the most recent set of changes to the permit's Watershed
9 Management and Monitoring Programs, as we feel these
10 changes provide a program that facilitates collaboration
11 and measurable actions towards water quality.

12 We want to thank staff for the extensive time
13 and effort they have taken to meet with key stakeholders,
14 including the L.A. Permit Group, over the past month to
15 better understand our concerns. Throughout the
16 discussion of the permit, permittees have made several
17 concessions; however, we still feel the permit changes
18 take the permit in the right direction.

19 Our comments today primarily focus on the
20 changes made related to the Watershed Management Program
21 and the Monitoring Programs and I think Renee and Ivar
22 really did a great job of capturing a lot of our concerns
23 as permittees and we do support the changes that were
24 made that they explained and we think they really did a
25 great job explaining those.

1 We feel these changes are in line with Federal
2 policies as well, such as the Integrated Municipal
3 Stormwater and Wastewater Planning Approach Framework
4 that the EPA recently released, and additionally we've
5 referenced Executive Order 13563 in the past
6 presentations that call for a look at evaluating all of
7 the different regulations that municipalities, our
8 governed agencies, are under and taking those things into
9 account when creating these regulations. So we think
10 these are really in line with these Federal policies.

11 So this is not a unique approach, as you heard
12 Mr. Unger testify to earlier. While this may be new for
13 the L.A. region, we have seen the Watershed Management
14 Plans used in Michigan and the National Resource Council
15 has also recommended to the USEPA that they use a
16 watershed-based approach to achieve water quality
17 protections. We think this is right in line with these
18 recommendations as well, and this is furthermore
19 illustrated in EPA's Guidance Policy released on
20 June 5th, 2012, and I'm going to read you a couple of
21 quotes from this. It was a memo that was, yeah, released
22 June 5th, 2012 regarding the Integrated Municipal and
23 Stormwater Planning Approach Framework and this was a
24 memo from Nancy Stoner and Cynthia Giles from USEPA that
25 was written to the EPA Regional Administrators as well as

1 the Regional Permit and Enforcement Permit Directors.

2 And they go on in this memo to say that:

3 "In recent years, EPA has increasingly
4 embraced integrated planning approaches to
5 municipal wastewater and stormwater
6 management. Integrated planning will assist
7 municipalities on their critical paths to
8 achieving the human health and water quality
9 objectives of the Clean Water Act by
10 identifying efficiencies in implementing
11 requirements that arise from distinct
12 wastewater and stormwater programs,
13 including how to best prioritize capital
14 investments. Integrated planning can also
15 facilitate the use of sustainable and
16 comprehensive solutions, including green
17 infrastructure, that protects human health,
18 improve water quality, manage stormwater as
19 a resource, and support other economic
20 benefits and quality of life attributes that
21 enhance the vitality of communities."

22 So, again, we just think these changes are right
23 in line with the EPA policy and they reflect a lot of our
24 concerns that we had at the last hearing and we are in
25 support of these changes.

1 I'm going to have some of the other members of
2 the L.A. Permit Group come up and talk in more detail
3 about our comments related to the Watershed Management
4 Plan's monitoring and briefly on the MCMs.

5 MR. BELLOMO: Good morning. Joe Bellomo.

6 So there's three primary ways that agencies will
7 look at this permit and how they, you know, implement the
8 requirements of it. One is the MCM's wholesale,
9 including all the MCMs that are spelled out in the
10 permit, and with that path, you're ensuring that you're
11 doing -- you're meeting TMDL compliance not necessarily
12 in an integrated approach but a segregated approach. The
13 other pathway is the Watershed Management route and then
14 the Enhanced Watershed Management route.

15 So a lot of concern has been expressed about
16 what's going to transpire between the time this permit is
17 effective and the time that we submit our Notice of
18 Intent to the time that we have our drafts to the
19 Executive Officer for review. A lot of things are going
20 to occur and to highlight a few that are up there, we're
21 going to be developing RFPs in order to implement some of
22 the permit requirements. We're going to be continuing
23 with our existing MCMs, and there are many. There is
24 street sweeping, there is catch basin cleaning, public
25 education. There's a number of other MCMs that we are

1 doing on a day-to-day basis even today and they're going
2 to continue through day 30 -- month 30 if the Enhanced
3 Watershed Management route is the preferred option.

4 We are going to be continuing TMDL compliance
5 with the interim and final wasteload allocations for
6 certain TMDLs. The Trash TMDL is a perfect example.
7 Those efforts are still going to continue. BMPs are
8 still going to be installed. There's going to be fiscal
9 analysis. There's going to be budgeting preparations
10 that are going to be done. There's going to be hiring of
11 jobs or, you know, I'm sorry, developing of job
12 descriptions and hiring of staff to beef up our various
13 departments to handle the increased workload that are
14 called out in this permit that are either through the
15 Watershed Management route, through the Enhanced
16 Watershed route, or just the traditional MCMs. There's
17 going to be a staffing-up.

18 We're going to be training new and existing
19 staff on the significant changes; and if the agencies
20 elect to go the latter two, which is the Watershed
21 Management route and Enhanced Watershed Management route,
22 they're going to be setting up ordinances for green
23 streets and the LID, and that's a pretty significant
24 process in itself.

25 And, again, on the latter two, there's going to

1 be participation agreements developed for the
2 multi-agencies that are going to be doing these Watershed
3 Management routes. There's going to be RFPs that are
4 going to be developed to hire a consultant to develop
5 these plans. And to give you -- you know, the Watershed
6 Management route is nothing, you know, new. It's
7 something that some of our watersheds have been using for
8 some time and especially the enhanced where the enhanced
9 focuses on that multi benefits.

10 Your 2004 Bacterial TMDL encouraged water reuse
11 and for that encouragement, that bought you some
12 additional benefits and that's definitely what the Malibu
13 Creek Watershed took advantage of.

14 To give you an example of the time line
15 necessary to implement that, the Malibu Creek Watershed
16 started with multi-agency agreements 14 months in advance
17 of the actual TMDL effective date. It took us
18 approximately four months with the County's on-call
19 contract to develop an RFP and to select a firm, and then
20 it took about 14 months to work on -- with a consultant
21 on that plan in order to meet the one-year, the 12 months
22 after the effective date, to have that plan in front of
23 the Executive Officer for review and approval. There is
24 a significant time and amount of effort that is put into
25 these things.

1 So Malibu Creek has an example of what would be
2 considered a Water Management Plan. It's the
3 multi-pollutant/multi-benefit management route and it
4 could be considered an Enhanced Watershed Management
5 route because it did have multi benefit. That's a
6 multi-agency type of plan.

7 The City of Torrance also developed such a plan
8 and John Dettle will walk you through the steps that, you
9 know, comprised these plans, the Q.A., the quality
10 assurance that's, you know, behind that and the
11 reasonable assurance that's also provided through those
12 plans.

13 A lot of the mechanisms that John's going to be
14 talking about are exactly what the Malibu Creek Watershed
15 went through, so to save everybody time, John's going to
16 talk about his, but you understand that the times
17 necessary to do these things, to develop these plans,
18 it's a very long process and when you're doing
19 multi-agency agreements, it extends that process even
20 longer.

21 MR. DETTLE: Thanks, Joe.

22 John Dettle, City of Torrance.

23 And as Joe has pointed out, I've been asked to
24 talk about the Watershed Management Plans and how they'll
25 be used to show reasonable assurance, because the City of

1 Torrance has prepared a Watershed Management Plan. And,
2 in fact, I just got back last night from the CASQA
3 Stormwater Quality Conference where we did a presentation
4 on how we used our model to select BMPs and site them
5 with compliance for the Machado Lake Nutrient TMDL.

6 I'm going to be paraphrasing my slides to not
7 repeat what Renee has already gone through.

8 The process to develop these plans is
9 essentially a three-step process. The first step is
10 water quality characterization by subwatersheds. We
11 break our big watershed down into small watersheds. We
12 look at the land use in there and from the land use and
13 from impervious surface data, you can come up with what
14 the anticipated pollutant concentrations will be, and
15 then you select or you identify those subwatersheds that
16 have the highest pollutant concentration and that gives
17 you your target for siting your BMPs.

18 That third step then is to look at spaces you
19 have, public and private spaces that are open spaces
20 where you can install BMPs, and the real benefit of
21 having the Watershed Management Programs with the
22 enhancements where you look at multiple cities is that
23 your city boundary is not always the best place to put a
24 BMP. At the end of the pipe or in conjunction with storm
25 drains may actually provide the best place to site the

1 BMP which would treat water from multiple cities.

2 Now, to ensure reasonable assurance, we will
3 have a quantitative process. There will be peer review
4 of a model and there will be peer review of the BMPs that
5 are selected. The models will include data collected
6 over the last ten years, including land use and pollutant
7 loading data from the County. There will be a quality
8 assurance and quality control measures that will be part
9 of the whole process.

10 Reasonable assurance process: No matter what
11 BMPs are picked, whether they're enhanced stormwater BMPs
12 or treatment-type BMPs, these models are used to
13 establish the effectiveness of those for the whole
14 watershed and to show compliance and to demonstrate
15 applicable water quality achievements.

16 They're also used to select which BMPs are going
17 to need to be implemented to achieve those interim and
18 final wasteload allocations. This slide shows a summary
19 of the similarities or the sameness between the TMDL
20 development process and the reasonable assurance process.

21 This shows what is the same about them and the
22 point I'd like to make here is that for the adaptive
23 management process, the monitoring data that's collected
24 as BMPs are implemented and as the time process, that's
25 used for that adaptive management process. You install

1 your first BMP or regional BMP, you do the monitoring,
2 and that shows you exactly how effective that is and that
3 leads you to the design of the next BMP.

4 So in summary, the Watershed Management Plans
5 will provide the assurance that the cities, the counties,
6 and the state need to finance and to fund these BMPs.
7 The Watershed Management Plans will provide a clear and
8 transparent compliance plan. The Watershed Management
9 Plans will be reviewed by a Technical Advisory
10 Committees. These committees will be made up of not only
11 by City representatives but also environmental groups and
12 NGOs and the Watershed Management Plans provide a clear
13 and transparent compliance plan for the permittees to
14 follow and it will all be laid out there in the plan.

15 The Watershed Management Plans will show the
16 BMPs that are needed to meet the compliance schedule
17 interim milestones and, finally, we need to maintain the
18 flexibility in the Watershed Management Plans and the
19 Enhanced Watershed Management Plans and the Monitoring
20 and Reporting Programs to adjust these plans as the BMPs
21 are implemented and as more data is collected.

22 And with that, I'm going to turn it over to
23 Heather Merenda.

24 MS. MERENDA: Good morning. Before I start, I wanted
25 to also reiterate, thank you for the staff and I think we

1 all need to buy Renee a camping air mattress for her
2 office. I think that's something that we should all take
3 up a collection for.

4 Quickly, we just noticed this discussion in the
5 response to comments about natural source exclusion and
6 we're kind of concerned that natural sources are -- the
7 staff's response to comments and the natural source
8 exclusion conflicts with a lot of different things and
9 exemptions that are within the permit listed here. The
10 definitions that were put in place are up here and they
11 don't seem to imply anthropogenic -- they all apply
12 anthropogenic origin, so we'd just like you to reconsider
13 your -- some of your broader statements that were made in
14 the response to comments about natural source exclusions
15 because we do have reference beaches and natural
16 conditions in some of our Bacteria TMDLs I'd like you to
17 consider.

18 Just, I guess, in conclusion, there have been a
19 lot of positive changes and we've come a long way in the
20 last 18 months. We thank you very much for those
21 changes. The cities still have issues of fundamental
22 concern. There's going to be costs with implementing
23 these Watershed Management Plans and Enhanced Watershed
24 Management Plans that we're very concerned about. The
25 time frames are very tight and they might be unrealistic.

1 We are going to do everything we can to meet them, but
2 some of them are very, very tight.

3 And we still have some concerns over Bacteria
4 TMDLs. The reopeners were narrowly scoped and did not
5 consider natural sources study and data, as was discussed
6 previously, and we would like a commitment for those to
7 be reopened so that we can make sure that we're
8 discussing the natural source exclusions on the -- in
9 this permit.

10 With that, I'll give it back to Heather.

11 MS. MALONEY: This is Heather Maloney again.

12 So this permit and the policy decisions you are
13 making today will set out a path as a region for the next
14 five years. This permit presents the opportunity to
15 change the paradigm. We feel that the changes made to
16 the permit related to the Watershed Management and
17 Monitoring Programs provide the environment needed to
18 breed collaboration and innovation not just among cities
19 but other regional stakeholders as well. It allows for a
20 common plan to be developed that lays out a clear path
21 for us to improve water quality.

22 Over the course of this permit development, the
23 L.A. Permit Group has been advocating for permit
24 provisions that allow us to work toward increased water
25 quality while allowing us to prioritize scarce local

1 resources towards efforts that will have the largest
2 impact to improve water quality.

3 The proposed revisions in the second Revised
4 Tentative provide a very progressive approach that sets
5 up the framework for a strategic process which will lead
6 to significant improvements in water quality. In order
7 to achieve further water quality improvements, this
8 process sets clear goals while allowing flexibility with
9 the program and the BMPs implemented.

10 The Watershed Management Programs allow
11 permittees to plan with a larger picture in mind and
12 develop programs and BMPs based on addressing multiple
13 pollutants. In doing so, limited local resources can be
14 concentrated on the highest priorities. This is the best
15 and most efficient way of working towards our region's
16 water quality goals.

17 A permit tailored to Los Angeles County's unique
18 local and water quality issues is the path that will lead
19 us to the finish line. Please use your authority to
20 support us all in crossing this finish line.

21 And we want to thank you again for all of your
22 staff's work on this permit and for your time here today
23 to provide comments, and we'd like to reserve the
24 remaining time for rebuttals and Cross-Examination.

25 MS. MEHRANIAN: Yes. There's 20 minutes left, I

1 believe. How much was left?

2 MR. UNGER: 20.

3 MS. MALONEY: I do also want to note that one member
4 of our panel, John Dettle, does need to leave at
5 1:00 p.m. today. He has a mandatory meeting today he has
6 to attend back at his city, so if there's any questions
7 regarding his testimony today, I just want to note that.

8 MS. MEHRANIAN: Is there anything we would like to
9 ask him before he leaves now?

10 MS. GLICKFELD: Yes.

11 MS. MEHRANIAN: Sure. Can you come up to the mic?

12 MS. GLICKFELD: So thank you for coming up,
13 Mr. Dettle. I really appreciate the explanation you gave
14 for the City's current Watershed Management Plan, but is
15 it the City's own plan or is it a group of cities that
16 are together in the Plan and for what watershed is it?

17 MR. DETTLE: Well, currently our plan is City of
18 Torrance specific. So we have sited BMPs along our city
19 boundaries that will try to get us --

20 MS. GLICKFELD: And which watershed is this?

21 MR. DETTLE: We're in the Dominguez Channel
22 Watershed, Machado Lake Watershed, and the Santa Monica
23 Bay Watershed.

24 MS. GLICKFELD: So you're in three watersheds.

25 MR. DETTLE: Right.

1 MS. GLICKFELD: And what percentage -- are there
2 small -- what percentage of your city is in each of
3 those?

4 MR. DETTLE: It's about -- one-fourth is in the
5 Santa Monica Bay, about half in the Dominguez Channel,
6 and the remaining is in the Machado Lake. Then we
7 have -- actually, we have about 7 percent of our city
8 that drains to retention basins that have no outlet to
9 any receiving waterbody.

10 MS. GLICKFELD: So if this -- I'm not asking you to
11 make any commitment, but I'm trying to understand why the
12 cities or how the cities view these varied options and
13 I'm very interested in cities that have the
14 responsibility for more than one watershed and are in
15 more than one watershed, and I wanted to know how you
16 think your city might respond in six months, what kind of
17 participation you would have at every level for each of
18 these watersheds.

19 MR. DETTLE: Oh, we certainly plan on joining with
20 the other cities in our watersheds to do --

21 MS. GLICKFELD: So you'll be joining three different
22 watershed groups?

23 MR. DETTLE: Yes. So I'll be going to three
24 different meetings, working on three different MOUs.

25 MS. GLICKFELD: You have 62 other voting agencies.

1 Do you think that having been -- I'm assuming that you've
2 been in discussion with among those of you. Do you think
3 that other cities will feel the same way or how do you
4 think that cities that are similarly situated in being in
5 two or more watersheds and would they -- do they really
6 need the opportunity to do their own Watershed Plan or
7 can they all participate as you are intending to do in
8 larger watershed efforts?

9 MR. DETTLE: Well, I cannot speak for other cities,
10 but I can tell you what we've learned from our plan is to
11 try to keep it just to the City, it's very expensive
12 because the sites do not line up with the outfalls and a
13 lot of the cost that we've identified in complying with
14 the TMDLs is in pump stations and force mains, and so we
15 see a definite financial benefit in working with the
16 other cities to find better sites.

17 MS. GLICKFELD: So would you say then that you also
18 see a benefit to being only in plans that cover entire
19 watersheds or could you see cities having the need to be
20 in cooperative arrangements that, let's say, cover only a
21 portion of a watershed? I'm trying to understand why we
22 have this option in there and it's not clear to me it's
23 necessary and I was wondering if you could sort of
24 illuminate that. I could ask the staff, but I'd rather
25 ask a city person that question. I just picked on you

1 because you're here.

2 MR. DETTLE: We've actually identified both types,
3 the BMP treatment and the full capture type.

4 MS. GLICKFELD: I think I'm -- you're not
5 understanding. How can I say my question better?

6 There are three options: The --

7 MR. UNGER: Enhanced.

8 MS. GLICKFELD: The enhanced watershed, the watershed
9 that involves more than two cities, the watershed for one
10 city, and then we're going to just follow the rules.

11 Those are the four options that are available.

12 Can you anticipate any reason why a city would
13 want to do their own Watershed Plan even though they were
14 not -- they didn't -- they were only doing it by a part
15 even though it costs more money? Is there any reason
16 they would want to do that?

17 MR. DETTLE: No. We've kind of got to base our
18 decisions on money.

19 MS. GLICKFELD: Yeah. I thought so. Thank you so
20 much.

21 MS. MEHRANIAN: Thank you.

22 MR. DETTLE: Any other questions? I'm sorry.

23 MS. MEHRANIAN: Questions? Thank you.

24 So then you're reserving your time, the rest of
25 your time, and we're moving to City of Malibu for eight

1 minutes.

2 MS. LANGER: Good morning. Lauren Langer, Assistant
3 City Attorney for the City of Malibu. Thank you for
4 taking our comments today.

5 We understand that there are a lot of competing
6 interests at play here in this permit. We also
7 understand that Regional staff has tried to respond to
8 many different interests and concerns when revising this
9 permit and we appreciate the long hours and attempt at
10 collaboration. We also realize that every party will not
11 be completely satisfied with the outcome of this permit
12 and we accept that, but I think every person in this room
13 can acknowledge that the process to get there needs to be
14 fair and complete. No one can debate that.

15 At the most basic level, the permittees need to
16 understand what is being asked of them and how they can
17 comply with this permit.

18 Since we last left this room in October, the
19 revised permit, 500 pages, was issued. On October 19th,
20 the revised Fact Sheet was issued. On October 26th,
21 hundreds of pages of responses to comments were released,
22 and then at the end of the day on November 5th, a second
23 Revised Draft was released, and then today another
24 11-page change sheet. How can anyone digest all of this
25 information before the hearing today, provide complete

1 comments to you in just a few minutes that are allocated
2 to them, and then accept permit adoption?

3 We understand and appreciate that some changes
4 were made in responses to comments and others were not
5 made as requested, but the changes that were made bring
6 significant questions and the permittees need to
7 understand what is being asked of them before a permit
8 can be adopted and successfully implemented. This permit
9 is over 500 pages and has now been revised twice since
10 the permittees were provided an opportunity to provide
11 written comment.

12 The permit is complicated and complex, as we've
13 discussed here this morning. So even if staff takes the
14 position that you're not required by law to provide more
15 opportunities for public input, you should. This revised
16 document is much better and we support all the positions
17 that the L.A. Permit Group brought forward today, but the
18 document's not yet fully cooked and not ready for
19 implementation. Remember, the devil is in the details
20 and every word in the permit matters and must be
21 precisely drafted. That is the first rule of drafting
22 legislation and regulations. The language has to be
23 clear and cannot be vague. The public, or in this case
24 the permittees, must understand exactly what behavior is
25 permitted and prohibitive and what is required to comply

1 with the permit.

2 You have people telling you here today that the
3 language is not precise enough and some significant
4 issues still remain. If those questions exist in this
5 room, they will only be heightened when staff members get
6 back to City Hall and they're trying to implement this
7 permit and the environmental groups are monitoring to
8 ensure compliance. Leaving these gaps will only lead to
9 compliance and enforcement problems and, trust me, if the
10 permittees have questions on the permit, no one can
11 expect a court to understand the requirements.

12 So please listen to the comments today. What is
13 the rush? There have been so many issues raised on this
14 permit so far. The permittees have objected to the fact
15 that Board Member Lutz can't participate or that the
16 permit didn't adequately analyze costs, or that it
17 mandates method of compliance. The list of objections
18 you've heard goes on and on and we are appreciative of
19 the many changes so far, but this permit is complicated
20 and the City and all of the permittees who bear the
21 burden of implementing this permit deserve a little more
22 time and one more round of comments and cleanup before
23 being asked to implement this permit. Thank you.

24 MR. THORSEN: Thank you. I'm Jim Thorsen, City
25 Manager for the City of Malibu.

1 As you know, I've been up here many times
2 before, telling you about the great things that the City
3 of Malibu has done with regards to water quality. We've
4 complied and even exceeded many of the stormwater
5 regulations. We want -- and sincerely, we want to be
6 your partner in this. We want to help you create a
7 successful regulatory program and we feel that many of
8 the changes that were completed in the revisions have
9 helped tremendously. We still feel there's a few more
10 things that need to be done.

11 We have a lot of questions over what the City is
12 being asked to do. As Lauren mentioned, there are many
13 hundreds and hundreds of pages of documents we've been
14 going through. My staff has been working literally
15 full time on reviewing all of these.

16 I can tell you that the City of Malibu supports
17 the Watershed Management Plan approach and the BMP-based
18 compliance approach. This approach is consistent with
19 EPA's planning policies, but the City still has major
20 concerns and questions over such area as cost compliance.
21 I appreciate Dr. Horner being here today. I think that
22 helped bring some explanation to some of the costs.

23 As I mentioned before, I believe the cost
24 estimates were derived over ten years ago and before the
25 full cost of the permit implementation was really

1 established. Over the last ten years, the City of Malibu
2 has been spending on average of about a thousand dollars
3 per parcel, not \$18, not \$20, about a thousand in our
4 efforts to comply with all the water permits. I do not
5 expect that these costs will go down with the new permit.
6 I think it's fair to say they're going to go up.

7 In fact, if we did only just street sweeping,
8 nothing else, street sweeping, our costs for the City
9 would be about 12 and a half dollars per parcel. We
10 spent been \$80,000 on street sweeping; we have 6500
11 parcels, and I think Malibu is very much like many of the
12 other small cities here and I think that Board Member
13 Munoz explained it and highlighted the fact of financial
14 concerns for small cities. I feel a little bit like
15 we're a financial tree blowing in the wind. We're
16 willing to bend, but we don't want to break and we
17 certainly don't want to end up being broke.

18 A few other issues just to highlight: The
19 receiving waters limitations, we still have some concerns
20 about that. We have questions about the options for
21 Enhanced Watershed Management Programs and there are many
22 others.

23 I would like to introduce Joanne House, who's
24 our Mayor Pro Tem and she'll wrap it up for us.

25 MS. HOUSE: You have a lovely meeting room. It's

1 very nice. Anyway, Madam Chair and Board members, I'm
2 Joanne House. I'm currently the Mayor Pro Tem for the
3 City of Malibu.

4 When Malibu became a city in 1991, protecting
5 the coastal and natural resources has been a top
6 priority. In order to protect our waterways and
7 coastline, our City has spent over 60 million dollars in
8 the past ten years on projects to improve water quality.
9 Malibu continues to demonstrate its financial and
10 environmental commitment. We recognize that we are all
11 responsible for improving the quality of the ocean and we
12 are all dedicated to working with other organizations and
13 public agencies to achieve the goals of the Regional
14 Water Quality Control Board.

15 Success is only possible if we work together.
16 Programs that reward efforts, encourages participation,
17 and fosters partnerships should rule the day. Clear
18 regulations will assist all of us in achieving our
19 desired goals.

20 As many of you know, the most recent lawsuit
21 cost our City over 4 million dollars. This may not seem
22 much to many of you, but our City has a small General
23 Fund budget and that represents 20 percent of a single
24 year's budget. In fact, public safety for our 13,000
25 residents and 15 million tourists cost the city

1 6.5 million. Over the past ten years, we are now
2 spending as much for clean water as we do for public
3 safety. Think about that. We spend as much for clean
4 water as we do for public safety.

5 We need your help to keep the City's clean water
6 program on track by not engaging us in unnecessary
7 litigation that may or may not improve the water quality.

8 MS. MEHRANIAN: Please conclude your comments.

9 MS. HOUSE: Precise language --

10 MS. MEHRANIAN: Please conclude your comments

11 MS. HOUSE: Conclude it?

12 MS. MEHRANIAN: Your comments. Yes, you're out of
13 time. Your time is up.

14 MS. HOUSE: Oh, that's what it was about. We don't
15 have one of those. I was wondering.

16 All right. Just one last sentence.

17 We are committed to working with your staff to
18 finalize the permit language so that our mutual goal
19 becomes a reality for all of us. Thank you.

20 MS. MEHRANIAN: Thank you.

21 We're moving on to Mr. Ray Tahir, representing
22 the Cities of Baldwin Park, Claremont, Duarte, Irwindale,
23 Lawndale, Lomita, Carson, Pico Rivera, Compton, South
24 El Monte, El Monte, West Covina, San Fernando, San Dimas,
25 Gardena and Glendora for 15 minutes.

1 MR. TAHIR: Good morning, Madam Chair, Board members,
2 staff. I'm Ray "the fly in the ointment" Tahir and I'm
3 here today to comment on the Revised Tentative Permit --
4 I'm sorry -- the Revised MS4 Permit.

5 Okay. Here are the discussion points. The
6 County's alternative regional approach that it's
7 proposing, it looks promising, but there are some
8 concerns and I'll get to those in a moment.

9 And the Revised Permit still has some unresolved
10 issues: BMP WQBELs, Time Schedule Orders, nonstormwater
11 discharge prohibition through instead of to the MS4, and
12 then I'm going to talk about some possible solutions.

13 The Alternative here allows Watershed Management
14 Plans to meet TMDL numeric wasteload allocations. These
15 are WQBELs. The question is what type of WQBELs are
16 they? Are they the numeric surrogate parameter type?
17 That hasn't been explained yet. The regional Management
18 Plans would call for structural BMPs, as you know, such
19 as parks, retrofitted to operate as infiltration basins.
20 This is a good thing. The projects will be funded
21 presumably, though not clear, through the Water Quality
22 Initiative, assuming that it passes. Implementation of
23 these plans apparently would place permittees in
24 compliance with TMDLs, though the revised permit language
25 doesn't clearly affirm that. Still, it's a good

1 proposal. Another benefit from the County's proposed is
2 that in addition to approving stormwater quality, the
3 alternative would also increase groundwater supply,
4 another good thing.

5 But we have concerns: How much will it cost and
6 where will the funding come from? The Water Quality
7 Initiative or Proposition -- will it come from the Water
8 Quality Initiative or from Proposition 84 funding? But
9 what would happen if neither of these funding sources is
10 available? What if the Stormwater Quality Initiative
11 fails? Would permittees be required to use General
12 Funds? If General Funds are not available and the
13 Watershed Management Plan cannot be implemented, would
14 permittees be in violation?

15 The Revised Permit would need to address this
16 possibility by allowing the cities to implement the six
17 core programs which you know as MCMs. They form the
18 basis of the Stormwater Quality Management Plan and the
19 Stormwater Quality Management Plan is a WQBEL that is
20 intended to meet receiving water limitations and includes
21 water quality standards and TMDLs.

22 There's been -- as noted earlier by other
23 presenters, there has been insufficient review time. The
24 permittees had less than two weeks to review the
25 proposals and this will be an issue. Municipal

1 stakeholders have not been informed or given the
2 opportunity to ask questions. Discussions have been
3 limited to a few L.A. Stormwater Permit Group members,
4 the County and NGOs. The COGs, such as SCAG subregions,
5 and our planning agencies have not been notified of this
6 approach. They should be brought in for the reason of
7 garnering support for this proposal.

8 Further, the revision constitutes a significant
9 change that should have triggered a 45-day review and
10 comment period and the opportunity for all impacted
11 stakeholders to ask questions.

12 Getting buy-off from municipal stakeholders
13 would generate support from the proposal and for the
14 Water Quality Initiative, by the way.

15 This is one other thing -- when I started in
16 this business in 1993, I read this article by this
17 engineer from Kentucky. He wrote it on behalf of the
18 American Public Works Association. He said, "Bring in
19 stakeholders early in the process and they can be your
20 partners, but if you bring them in later, they will be
21 your judge." And not including them sooner, by the way,
22 stakeholders sooner, raises suspicions about this
23 proposition.

24 Okay. Now we're turning to unresolved permit
25 issues: The Time Schedule Order requirement is still in

1 the permit, the proposed permit, as a means of
2 retroactively complying with TMDLs and it has not been
3 eliminated. It needs to be eliminated. A TSO is an
4 enforcement action and that means that it's an admission
5 that a permittee has caused the violation, but how can a
6 permittee cause a violation if one has not been
7 determined yet? The problem with -- the problem with
8 this TSO is that it's based on TMDLs that contain
9 compliance requirements that are determined by monitoring
10 in the receiving waters.

11 As I mentioned to this Board and staff on
12 several occasions, compliance is determined by monitoring
13 the discharge from the outfall. That's how an exceedance
14 is determined. So those TMDLs that would give rise to a
15 violation frankly need to be reopened and the incorrect
16 compliance language needs to be removed.

17 In any case, getting back to the TSO, it has no
18 business being in the permit and this is something that's
19 going to be an issue for the several permittees that I
20 represent.

21 Oh, by the way, you shouldn't need a TSO because
22 if you have a Stormwater Quality Management Plan, MCMs,
23 and if you implement that plan, then you're deemed to be
24 in compliance with receiving water limitations because
25 the SQMP is a general water quality based effluent

1 limitation.

2 Next, nonstormwater discharge prohibitions in
3 the permit still refers to discharges from the MS4 rather
4 than to the MS4. This is a big deal because it would
5 place a permittee in violation for exceeding a dry
6 weather TMDL. The revised order is also in error because
7 it says that co-permittees need only comply with permit
8 conditions relating to the discharges from the MS4 for
9 which they are owners or operators, and this is per
10 40 CFR 122.26(a)(3)(vi). There's a problem here. There
11 is no 122.26(a)(vi). It ends at (v), so there is no
12 Federal reference from prohibiting discharges from the
13 MS4.

14 Also, this conflicts with other provisions in
15 the Order. The permittees shall effectively prohibit
16 nonstormwater discharges to the MS4. So now we've got
17 from the MS4 and now we've got to the MS4. Also, that
18 same Order says that there needs to be an implementation
19 of Phase I NPDES Stormwater Program requirements which
20 prohibits nonstormwater discharges through the MS4. So
21 now we've got through the MS4, from the MS4, and to the
22 MS4. Which one is it?

23 Well, which one is it? Here's what the Federal
24 regulation says. The Clean Water Act actually says that
25 "Municipal discharge permits shall include a requirement

1 to effectively prohibit nonstormwater discharges into the
2 storm sewers." This is the same language that's in all
3 the California MS4 permits, including the recently
4 adopted CalTrans MS4 Permit and the draft San Diego MS4
5 permit. The revised order needs to be corrected to
6 eliminate the confusion and make it clear that
7 nonstormwater discharges are only prohibited to the MS4.

8 Further, TMDLs/Water Quality Standards
9 compliance, according to the permit, is determined by
10 sampling -- should be determined by sampling at the
11 outfall rather than in the receiving water. The
12 compliance point once again for determining compliance
13 with any water quality standards is discharge from the
14 outfall and the several TMDLs require monitoring in the
15 receiving water, and the Los Angeles River Metals TMDL is
16 a case in point.

17 Furthermore, TMDLs and water quality standards
18 are ambient dry weather standards. They are not wet
19 weather standards. There is no such thing as a wet
20 weather wasteload allocation, nor is there such a thing
21 as a wet weather ambient standards. Ambient is always
22 dry. TMDLs must be reopened to remove the receiving
23 water compliance requirements to accommodate this change.

24 Also, as we mentioned to you before, the
25 iterative process, the trial-and-error process for

1 meeting TMDLs and other water quality standards, must be
2 unconditional. In the revised permit, we still have the
3 problem that if a per -- you're only entitled to the
4 iterative process if you participate in the Watershed
5 Management Plan. Well, no, that's not the way it goes
6 because we have a couple of state precedential orders
7 that say that the iterative process is entitled to
8 everybody, to every MS4. And by the way, the recently
9 adopted CalTrans permit contains an unconditional
10 iterative process.

11 Okay. So what's the proposed solution? Adopt
12 the permit but provide or include a 180-day period to
13 correct the order's errors and propose language to place
14 the order in compliance with Federal stormwater
15 regulations and State Board orders. While the
16 corrections are pending, permittees will be in compliance
17 by implementing the Order in itself, which is in itself
18 is a WQBEL. Permittees will file an Administrative
19 Petition that will be placed in abeyance pending these
20 corrections.

21 If the Regional Boards rejects this option,
22 permittees will have to choice but to file an
23 Administrative Petition with a request for a stay. This
24 action could take several months for the State Board to
25 address and the stay would prevent the permit from being

1 implemented while all this is pending.

2 Now, I've mentioned some defects. There aren't
3 only a few defects in the revised permit. There are
4 dozens of them, dozens of them in the permit that need to
5 be combed out before this permit can be adopted. You
6 should do it now. You should -- let me back up a step.

7 One of the reasons why it was really important
8 for this process to start earlier, say a year, year and a
9 half ago, was to give cities the opportunity to review
10 the draft and to comb out all of these imperfections, all
11 of these issues.

12 What has happened is that we've waited for the
13 last minute for that to happen and now you've made all
14 these changes which -- and I like the Enhanced Watershed
15 Management Program approach. I think it's really cool
16 and it's cost-effective and it's a panacea in many ways,
17 but it doesn't square correctly with a number of
18 requirements in the MS4 Permit, and the WQBELS is a big
19 one.

20 I mean, I think a Watershed Management Plan is,
21 in effect, a general WQBEL and once you implement that
22 WQBEL, you should be in compliance with all water quality
23 standards that apply to the receiving water and if you
24 don't meet them for one reason or another, then the
25 iterative process kicks in and you can revise your

1 Watershed Management Plans to increase BMPs in order to
2 address the exceedance. We need that. We need that
3 provision in the permit. So give us some time to work
4 out these bugs.

5 And I should mention something about the costs
6 analysis that Dr. Horner represented earlier. Those
7 costs clearly do not include TMDL costs and it's my
8 understanding that the Board was to direct staff to
9 identify what the TMDL compliance costs are. That hasn't
10 been done and we really don't know what this Enhanced
11 Watershed Management Plan costs is going to be. So
12 that's something we really need to take a look at.

13 Again, I think in the final analysis it's a
14 great plan. It's just we need more time to review it and
15 the City Councils, by the way, need time to review and
16 approve it. The Permit Group is -- I know that they're
17 very excited about this plan. It's just that they have
18 not taken this proposal to the group at large for
19 approval so that they can go to their City Councils and
20 get approval for it.

21 So again, I think it's worth spending time to
22 slow down on this and postpone adoption of this permit
23 until these wrinkles have been ironed out. Thank you
24 very much. I appreciate your time.

25 MS. MEHRANIAN: Thank you. Okay. Thank you.

1 We are moving on to Richard Watson, City of
2 Signal Hill, and you reserved ten minutes.

3 Yes, please.

4 MR. WATSON: Chair Mehranian, members of the Board,
5 today I'm before you again representing City of
6 Signal Hill and I, too, would like to thank the staff for
7 the work they've put in and their willingness to talk
8 with us, meet with us, and consider a diversity of ideas.

9 I'm going to be talking today just briefly about
10 a few items, the reopeners, the changes to the Watershed
11 Management Program, changes to the Monitoring and
12 Reporting Program, and changes to the TMDL provisions.

13 With respect to the reopeners, we were pleased
14 to see the three new reopeners related to the
15 Implementation Plan, the possibility of BMP compliance
16 with final WQBELs, and incorporation of receiving water
17 language related to coming out of the State Board's
18 effort after their workshop. However, that last reopener
19 we think doesn't go quite far enough. We think that the
20 reopener should acknowledge that 99-05 specifies that the
21 iterative process is to apply to both discharge
22 prohibitions and receiving water limitations.

23 Now I want to talk a little bit about the
24 Watershed Management Programs. We are really pleased
25 that the flexibility of the Watershed Management Program

1 has been maintained and enhanced and we've talked about
2 priorities and obviously addressing the highest
3 priorities is extremely important when you've got the
4 complex of TMDLs that we're all facing. The highest
5 priorities will, in fact, be TMDLs and nonstormwater
6 discharges. They virtually have to be. One request we
7 have is that the term "effectively prohibited" which
8 is -- I didn't put a page number on here, but it's on
9 page 49 -- should be defined in Appendix A and it should
10 be defined to be subject to the iterative process in
11 order to be consistent with Order 99-05.

12 The Enhanced Watershed Management Program has
13 been discussed somewhat earlier. It's intriguing. I
14 need to understand it a little bit better. I just put
15 some of the language in there from page 48 of the second
16 set of changes and page 50 of the first.

17 A couple of questions: Once the role of
18 pollution prevention -- and we've talked about true
19 source control before -- and a question of scale. I
20 think I heard earlier it could be as long as there are a
21 couple of cities in the watershed that that could, in
22 fact, be an Enhanced Watershed Management Program. I
23 guess my initial thought was it's probably some much
24 larger program working with the County on some areas of
25 infiltration. So it is good if it can be applied to

1 subwatersheds as well with municipal permittees because
2 we'll look for those opportunities.

3 Another point is that the addition of compliance
4 with receiving water limitations not otherwise addressed
5 by a TMDL is important. I'm not going to go into details
6 on that. Other people have discussed it.

7 I do have a couple of questions, though, about
8 the notification of intent to prepare a Watershed
9 Management Program. And as it's stated on page 56 in the
10 latest change and 55 in the previous one, we're supposed
11 to specify what sort of -- what submittal date we're
12 requesting and I think as written, this particular
13 requirement could delay action because it takes you -- to
14 get -- you know, it takes -- to get the extra six months'
15 extension, you have to demonstrate a couple of things.
16 You have to have LID ordinances and the adoption process,
17 green streets policies, and that has to be for 50 percent
18 of the watershed area and if you're going to organize a
19 collaborative effort for an Enhanced Program, that's
20 going to take longer.

21 We have got two subwatersheds that are already
22 well organized, have ten-year funding programs, and I
23 don't want to see these groups wait six months to really
24 get started. So I have a suggestion for you on how to
25 change that. I suggest that the provision should be

1 modified to allow permittees to initially notify the
2 Regional Board of their intent to prepare a Watershed
3 Management Program and basically the initial notice would
4 be on the 12-month submittal date, but have the
5 opportunity to amend their notification to the longer one
6 if the conditions can be met, if we can organize, get the
7 cities to do the LID ordinances and green street
8 policies, et cetera, or if collectively we group together
9 and we find there's a way to do an enhanced plan. So I'm
10 suggesting that it be a phased program because I'd like
11 to see the watersheds get started sooner.

12 There's another problem in some of the language
13 on pages 57 and 58 related to the green streets policies.
14 The term "transportation corridor" is used about three
15 times and I think it should be defined. I don't know
16 whether it's a major arterial. I don't think it's a
17 collector. I don't know what it is and that definition
18 should be consistent with "transportation planning"
19 terminology so that all of the permittees know what
20 they're looking at with a green streets policy.

21 And then on page 63, there's been a change to
22 include "cause and contribute to exceedances of a
23 receiving water limitation" and that should be further
24 changed again to talk about BMPs being implemented in
25 accordance with the iterative process.

1 The reasonable assurance analysis requirements
2 have been changed to require that the RAA be performed
3 using one of three peer-reviewed models. One of the
4 things that you need to know about those models is that
5 none of them directly address true source control. I
6 talked with the author of one of those, the County's
7 model, and basically to get at source control they
8 tricked the model. At some point I think it will be
9 modified.

10 Back in July, we talked some about S.B. 346 and
11 I briefed you on the status of that. I think that the
12 program's true source control measures need another way
13 of doing it, another quantitative spreadsheet which
14 defines the assumptions; and if you look in the Fact
15 Sheet, there is, in fact, a statement on page 45 that
16 says "quantitative analysis or modeling," but that's
17 changed to use one of those three models.

18 I have some suggested language for you just to
19 insert in the statement on page 64, and basically take
20 out those words "without exclusion" and put in "include
21 but are not limited to" and then add a sentence in there
22 that allows for true source control to use spreadsheets
23 until they get those other models so that -- we will try
24 to use both, but we really have to use probably a
25 spreadsheet and with really quantified assumptions about

1 the true source controls and some models are not designed
2 to handle that.

3 Now, about the Monitoring Program, we appreciate
4 the changes that have been made to reduce the complexity.
5 I've been working with a monitoring consultant and these
6 comments reflect his thought about it. The way the
7 sampling and reporting of sampling has been changed, it's
8 reduced some of the costs and we particularly appreciate
9 you eliminating that unneeded pyrethroid insecticide
10 study. As I said earlier in a staff workshop, we'll
11 stipulate that the pyrethroid is a problem. Using the
12 test for toxicity is a more economical way of dealing
13 with toxicity.

14 We do have a little bit of a question about the
15 alternative approaches. We like that idea for the IMPs
16 and the CIMPs, but the way it's written, I think each
17 time an alternative approach is recommended, it's going
18 to have to go through the review and approval process,
19 and our suggestion is once it's gone through that, there
20 ought to be some expedited way to include in other IMPs
21 or CIMPs.

22 Then the minimum stormwater outfall monitoring
23 requirements, they've been changed to allow the
24 alternative precipitation thresholds and again you have
25 to come back and ask for that. We would suggest an

1 easier way is just to change the definition from 0.1 to
2 0.25 inches so it's a much more workable size to use in
3 storm outfalls. Then the samples really need to be
4 separated by three days with a total precipitation with
5 less than 0.1 inches.

6 Then the outfall monitoring of toxics topic was
7 talked about earlier and it's on pages E-24 and E-29, and
8 that's that issue where if you have a downstream TIE,
9 you've got to do some monitoring for aquatic toxicity
10 upstream and one of the questions we have is just how far
11 upstream you have to go and we think this should be
12 quantified because one of those actually says the nearest
13 downstream station instead of the TIE and another one
14 doesn't clarify that.

15 And then one last comment on TMDL provisions.
16 We really appreciate the addition of the discussion that
17 came on earlier about the expanded or Enhanced Watershed
18 Management Program and getting credit for the area
19 tributary if you've captured and retained that 85th
20 percentile, 24-hour event, but we think it should apply
21 to a Watershed Management Program as well as Enhanced
22 Watershed Management Program. That will really encourage
23 everybody to see if they can capture and hold that water
24 and keep it going down. So we'd like to have that sort
25 of encouragement and added that to the same list.

1 Thank you very much.

2 MS. MEHRANIAN: Thank you.

3 We will have one more testimony and then we will
4 break for lunch. It's the cities of Redondo Beach,
5 Manhattan Beach, Hermosa Beach, and Torrance, and they've
6 reserved 10 minutes.

7 MR. SHAY: My name is Mike Shay with the City of
8 Redondo Beach and I'm here with Kathleen McGowan
9 representing Manhattan Beach and Hermosa Beach and we're
10 also representing Torrance today.

11 My comments refer to the language of
12 Attachment E, Section VI.B.2.C on page E.8.V.15.

13 The new language specifies that monitoring
14 stations subject to reference limits -- reference system
15 limits shall be monitored five times per week. This is
16 different from the TMDL and the Regional Board approved
17 four-day Shoreline Monitoring Plan, the CSMP which
18 specified that it would allow the agencies to select the
19 frequencies in which they selected weekly as a frequency
20 for monitoring.

21 When we first saw this in the provision, new
22 provisions, we wanted to know, well, what was the
23 rationale for that, what was the justification, so we
24 went to the Fact Sheet and there was no discussion
25 whatsoever. We also looked for a response to our comment

1 which addressed a similar comment that was in the permit
2 already and there was still no discussion as to why this
3 was being increased. We next thought, Well, what could
4 be the reasons that the Regional Board has? So we're
5 like, Will this increase public health? Will this
6 increase health? The answer is no.

7 The samples that are taken on Monday, the
8 results are not even known until Thursday. In evaluating
9 the data that was -- that we have collected for sites
10 that are being monitored for five days a week, we have
11 found that never has there been an instance where an
12 exceedance has persisted for four days and only three
13 percent of the time has it persisted for three days.

14 The delay in actually knowing results for
15 monitoring of fecal-indicator bacteria is an impossible
16 method for protecting health, and increasing the
17 frequency will not improve that.

18 We then thought, Well, could it provide for
19 insight into solving a problem? But no, again, we
20 already know the solution for the effect of MS4s on ocean
21 water quality and that's diversions. In fact, the J5-6
22 agencies have diverted all their storm drains that affect
23 the bay for dry weather.

24 We look next at what effect would this language
25 have. We found that the current CSMP had about 3500

1 samples per year requirement. This new language will
2 increase that to 13,000, over a three-to-four increase
3 and will affect J5-6 immediately from 360 samples to over
4 1200 samples. We then asked, Well, how much is it going
5 to cost? Well, evaluating current data, we know that
6 it's going to increase the cost by a million dollars a
7 year for the whole bay and it will increase our program
8 from 40,000 to \$120,000 a year.

9 This is problematic because we don't know even
10 know if it's going to have any effect and improve water
11 quality. It has no benefits and the money could be
12 better spent on solving the problem.

13 These many costs are only part of the big
14 impact. Sampling five days a week is going to really
15 cause more false positives. In other words, when MS4s
16 are diverted and they're not impacting water quality,
17 there'll still be exceedances that will occur. We know
18 that because the reference beaches since 2004 have
19 exceeded over 10 percent of the time and there's 25
20 stations that are called open beaches, which means
21 there's no MS4 and impacting of water quality. And of
22 these, since 2004 they've exceeded 7 percent of the time.
23 This is problematic because you still haven't
24 acknowledged the fact that there will be exceedances with
25 dry weather because the limit is still zero. Because of

1 this responsibility, we will be blamed. We will be
2 blamed for these false positives, and five times -- and
3 sampling five times more frequently will increase these
4 false positives and create more fines and liability.

5 This additional risk costs money. Even if
6 agencies win these lawsuits and can defend against fines,
7 the fight costs money. So you have staff time and costs
8 borne. When the TMDL was first implemented into the
9 permit and Notices of Violation went out, the Board staff
10 didn't take the time to review the data they had and they
11 would have known that many of these were not caused by
12 MS4s because there were diversions and there was
13 observation that showed there was no discharge when the
14 sample was taken. This history gives concern to the
15 agencies that are responsible for this that they're going
16 to be costly actions like this in the future and sampling
17 five times more frequency will just increase that
18 concern.

19 Lastly, the 25 stations I mentioned that are
20 open beach stations, 13 of those things are going to be
21 monitored five days a week. No MS4 impact. We ask the
22 question, Why? We recommend that this provision be
23 stricken from the permit and other language that requires
24 five-days-a-week monitoring was already in the permit and
25 basically the plan that was approved, developed by the

1 agencies with input from the NGOs and the staff, the
2 Regional Board staff, and that is the CSMP.

3 I'll turn it over.

4 MS. MC GOWAN: Thank you.

5 The jurisdictional groups 5 and 6 agencies have
6 been working together for quite a few years since the
7 Bacterial TMDL was adopted and we look forward to
8 continuing to doing that through a Watershed Management
9 Plan.

10 MR. STRINGER: Can you please state your name for the
11 record?

12 MS. MC GOWAN: I'm sorry. Kathleen McGowan. I'm a
13 consultant for Hermosa Beach and Manhattan Beach.

14 MR. STRINGER: Thank you.

15 MS. MC GOWAN: So we look forward to these
16 opportunities under the permit and Board staff's work on
17 this issue.

18 We also appreciate Board staff's revision to the
19 discharge prohibition language wherein permittees may
20 require a discharger of conditionally exempt
21 nonstormwater discharges to divert those discharges to
22 the sanitary sewer if they're found to be a source of
23 pollutants.

24 J5 and 6 agencies agree with Board staff that
25 low flow diversions are an effective approach for meeting

1 final TMDL dry weather wasteload allocations. Within the
2 Hermosa and Redondo subwatersheds, there are seven low
3 flow diversions operational year round right now.

4 The importance of low flow diversions as a key
5 tool for managing dry weather is further emphasized in
6 Board staff's response to comments on page F.4 where they
7 state, "For effluent limitations applicable to
8 nonstormwater discharges, a BMP-based approach is
9 provided in the sense that a permittee may demonstrate
10 that it has no nonstormwater discharge to the receiving
11 water; for example, by providing documentation of the
12 operation and maintenance of a low flow diversion."

13 However, this statement has not been made in the
14 permit itself nor are permittees given the option to
15 document with reasonable assurance the effectiveness of
16 such BMPs for past due dry weather TMDLs. It is
17 essential to expressly provide this low flow diversion as
18 a surrogate BMP-based compliance option for dry weather
19 TMDLs and receiving water limitations so that we have a
20 clear path to compliance in the permit, in a manner
21 analogous to the full-capture BMPs certification for
22 trash. And Mike kind of explained why we're having
23 problems with this.

24 There was a second issue that I had that was
25 corrected by staff today in a change sheet regarding

1 allocations for Manhattan Beach's site at 28th Street, so
2 I want to thank them for making that change for us.

3 Moving on, the Tentative Order has been revised
4 to remove the Planning and Land Development Program from
5 the list of minimum control measures that can be modified
6 in a Watershed Management Program. We feel this is
7 unfortunate because it's going to force a one-size
8 approach across the L.A. Basin and will prevent
9 municipalities from optimizing a tool that may be needed
10 to achieve TMDLs.

11 Without the ability to customize the Planning
12 and Land Use Program, we won't be able to use the full
13 capabilities of modeling in the reasonable assurance
14 process to prioritize the attainment of water quality
15 objectives. For example, it may be that modeling for
16 reasonable assurance will reveal that the LID
17 requirements currently defined in the permit will not
18 actually significantly assist us in achieving compliance
19 with the Wet Weather Bacteria TMDLs within the time frame
20 we need because the LID Program is dependent on the pace
21 of the redevelopment of the urban landscape.

22 Modeling could show that a more effective program
23 would be to try to increase the universe of projects that
24 would be subject to LID over a shorter period of time by
25 requiring smaller projects to capture runoff, maybe for a

1 smaller intensity storm, but when taken in the aggregate
2 over the time frame needed would effect greater
3 improvement in water quality than the default LID
4 program.

5 So we would recommend restoring the option of
6 customizing the Planning and Land Development Program
7 with the review and approval of the Regional Board
8 through the Watershed Management Plan and reasonable
9 assurance process so that we have another tool to meet
10 our TMDLs.

11 And finally, I just wanted to speak briefly to
12 what's sort of underlying this discussion of final
13 numeric effluent limits. There was a statement made by
14 Mr. Kemmerer at the last hearing and also was stated in
15 Board staff's response to comments on page F.8, a claim
16 that says, "The feasibility of setting numeric limits is
17 based only on the ability to calculate the limits rather
18 than the feasibility of complying with the limits."

19 However, in a recent 2011 decision, City of
20 Tracy versus State Water Resources Control Board, a
21 Superior Court found that this same argument expressed by
22 the State Board is, and I quote: "Unfounded and not
23 supported by case law or the Board's own water quality
24 Orders. It will nearly always be possible to establish
25 numeric effluent limitations, but there will be many

1 instances in which it will not be feasible for
2 Dischargers to comply with such limitations. In those
3 instances, states have the authority to adopt nonnumeric
4 effluent limitations." And it goes on to state that "The
5 ability to comply is a critical factor in determining the
6 propriety of setting numeric effluent limitations."

7 This same reasoning is applicable here and we
8 believe the reasonable assurance modeling and analysis
9 will be able to let us evaluate whether the 85th
10 percentile storm will achieve the numeric limits or what
11 other storm size and whether those objectives can be
12 achieved.

13 So we do support this reasonable assurance
14 modeling and analysis, but we think that's going to be
15 needed to assess whether the TMDL limits can actually be
16 met.

17 Thank you very much for your time.

18 MS. MEHRANIAN: Thank you.

19 We are going to break for lunch and then when we
20 come back, we'll hear from the environmental communities.
21 We have Heal the Bay, NRDC and L.A. Waterkeeper for 40
22 minutes, and please be here at 1:15 sharp.

23 MS. KUENZI: And during the lunch break, the Board
24 will meet in --

25 MR. UNGER: Excuse us for one second. We want to

1 announce Closed Session.

2 MS. KUENZI: During the lunch break, the Board will
3 meet in Closed Session to discuss Item 10.11 on the
4 agenda.

5 (Lunch recess)

6 (Katrina Woyjeck, CSR No. 13603, reported the
7 following portion of the proceedings)

8 MS. MEHRANIAN: Please take your seats. Continuing
9 with our public hearing, and we have at this point of
10 our agenda the environmental communities, Heal the Bay,
11 NRDC, and LA Waterkeeper; total of 40 minutes. You have
12 the mic.

13 MR. FLEISCHLI: I'll wait for the clock. Sorry.
14 Maybe I'll just start with the introduction.

15 Good afternoon, Madam Chair, members of the Board.
16 My name is Steve Fleischli, F-l-e-i-s-c-h-l-i. I'm the
17 senior attorney and the acting director of the water
18 program at the Nation Resources Defense Counsel here
19 today on behalf of NRDC, LA Waterkeeper, and Heal the
20 Bay. Thank you for the opportunity to comment again
21 today in particular with regard to the revised tentative
22 permit.

23 Let me go back to the beginning. I'm going to be
24 going through a couple main legal points that we'd like
25 to make today. Kirsten James from Heal the Bay is going

1 to be talking about the monitoring program, and then Liz
2 Crosson from LA Waterkeeper is going to wrap up the
3 concluding remarks. We'd like to reserve any time we
4 have left for either cross-examination or rebuttal.

5 I wanted to start today and just remind us where
6 we've been and what's really not in dispute today that
7 I don't think anyone, either the discharges or the
8 Regional Board, can reasonably dispute. The first issue
9 is that local waterways are important to local and the
10 state economy. We talked about that a lot last time,
11 and we also talked about how stormwater is the number
12 one cause of surface water quality problems in the Los
13 Angeles region and that polluted stormwater poses risks
14 to public health and the ecology of our local waterways.

15 And there have been thousands of exceedances of water
16 quality standards in local receiving waters since 2001
17 and hundreds of millions of dollars in public funds have
18 been raised to help the cities address these problems
19 over the last permit as well as prior to that.

20 Cities have had 22 years to meet these standards.
21 Eleven actually under the current permit. Most cities
22 have never acknowledged that they contribute to
23 exceedances of water quality standards. Very few cities
24 have submitted receiving water limitation reports to
25 address exceedances of water quality standards in local

1 receiving waters.

2 The Regional Water Board has rarely undertaken
3 enforcement under the current permit even where public
4 health is at risk -- think in the Santa Monica Bay
5 context -- and this permit and what you decide to do
6 here today could influence statewide stormwater
7 regulations. The cities that complained today about a
8 lot of issues, I want you to appreciate that they are
9 not the victims here. The millions of people who use
10 our local waterways, who want to use our local
11 waterways, and depend on our local waterways for their
12 economic viability are the real victims here.

13 There are other mechanisms to address the concerns
14 the cities raise. Instead of including safe harbors in
15 this permit, we propose that instead, the Board take
16 action through some sort of enforcement mechanism such
17 as time schedule orders. The cities have already been
18 required to meet these water quality standards for 12
19 years. And unfortunately, the proposed approach in the
20 revised tentative as proposed by Staff really reverses
21 the regulatory burden and takes us back decades in terms
22 of how we approach water quality in the United States.

23 The Clean Water Act was enacted to ensure that
24 enforcement of water quality provisions was clear,
25 straightforward, and simple. And unfortunately, we're

1 in a very different dynamic with the proposed language
2 here. It's a very complicated permit. I don't think
3 anyone who reads it can conclude otherwise. I would
4 argue it's very hard to understand what some of the
5 obligations of the cities are, and I think it puts too
6 much emphasis on allowing the cities to devise their own
7 plans, which is the way things worked before the Clean
8 Water Act, as opposed to emphasis on clear numeric
9 enforceable standards.

10 I'm now finding myself in the same situation as
11 earlier.

12 MS. MEHRANIAN: Stop the clock for you. Can you stop
13 the clock? Can anyone stop the clock?

14 MR. FLEISCHLI: So while he's fixing that, I'll go
15 into, you know, we do appreciate the efforts that Staff
16 has made to try to negotiate some sort of resolution
17 here. Board member Glickfeld last time mentioned the
18 trash TMDL from over a decade ago. I was involved in
19 those negotiations. So were a couple other people who
20 are here today. I thought that was a good suggestion.

21 We did engage in negotiations with the cities as
22 well as with the staff in the spirit if the trash TMDL
23 trying to find creative solutions around the hang-ups on
24 the water quality standard provisions. Our real
25 motivation is trying to incentivize stormwater capture

1 and reuse by embracing regional approaches and enhanced
2 watershed planning particularly so that we can encourage
3 water reuse particularly in a place like Southern
4 California where water is so scarce.

5 The irony of the situation is we're wasting so much
6 water by allowing it to flow out through our storm drain
7 systems when it rains. So we would like to incentivize
8 those types of approaches, capturing rain water, reusing
9 it, augmenting water supply.

10 We were engaged in numerous meetings with the
11 Regional Board and with LA County and some of the
12 cities. We did put significant compromise on the table.
13 Unfortunately, it was unsuccessful in the end. And in
14 our opinion, the current proposal from Staff largely
15 reflects the dischargers' wishes, particularly with
16 regard to Safe Harbor provisions, which for some reason
17 are now called "Compliance Mechanisms" instead of Safe
18 Harbor provisions, but we view them as safe harbors.

19 But I want to talk today about our three main
20 concerns that we have from a legal standpoint. The
21 first is that some of the Safe Harbor provisions -- in
22 fact, all of these Safe Harbor provisions violate
23 anti-backsliding requirements, they violate
24 anti-degradation requirements, and some of them are
25 inconsistent with assumptions and requirements in TMDLs.

1 We'd also like to point out that the process that's
2 being proposed is incredibly staff-intensive. As you've
3 seen, not just with this permit, but in the process that
4 has led up to this permit. It's hard enough to find
5 agreement with the discharges, 85 of them plus the
6 County, let alone trying to figure out what we're going
7 do with all these plans that are going to be submitted
8 and how the Regional Board Staff is going address those
9 issues.

10 In terms of anti-backsliding, I think you're all
11 clear about what it is, but I put this up there just to
12 remind folks. Anti-backsliding is when a permit is
13 renewed or reissued -- when a permit is renewed or
14 reissued, interim effluent limits, standards, or
15 conditions must be at least as stringent as the final
16 effluent limitations, standards, or conditions in the
17 previous permit. This comes from the federal
18 regulations.

19 Now, the interesting thing on page 25 of the proposed
20 permit in paragraph M, you'll note that it only includes
21 language about effluent limitations. It doesn't include
22 language any more about standards or conditions. The
23 June version had standards or conditions in there or at
24 least conditions in there, and that's been stricken.

25 And instead, they're relying purely on the Clean

1 Water Act itself as opposed to the implemented
2 regulations on the Clean Water Acts. But it clearly
3 applies to effluent limitations, standards, or
4 conditions. And we believe that not only are water
5 quality standards and the receiving water limitations in
6 here effluent limits, but in the alternative, if they're
7 not, they're certainly conditions in the permit that
8 can't be weakened.

9 The receiving water limitations, as you're well
10 aware, have been in effect since 2001. Staff has long
11 acknowledged that the 2001 permit did not contain a Safe
12 Harbor provision for receiving water violations and that
13 the 9th Circuit decision did not change that. That's
14 very clearly articulated into the response to comments.

15 In addition, we've provided Staff with an EPA letter
16 from Region 3 that talks about how additional time to
17 comply with permit terms from a prior permit violates
18 anti-backsliding provisions. This is the letter from
19 August of this year from Region 3 talking about a
20 stormwater permit in Maryland.

21 "Backsliding is prohibited in NPDES permits.

22 Allowing additional time to complete a task that was
23 required by the previous permit constitutes a less
24 stringent condition and violates the prohibitions
25 against anti-backsliding."

1 We maintain that that's the case here. Where does
2 this permit violate anti-backsliding? There are a
3 number of places, and they involve the Safe Harbor
4 provisions. There's a Safe Harbor for receiving water
5 limits that are exceeded during implementation. So this
6 is what EPA was talking about in terms of while you're
7 developing a plan, you're essentially protected or
8 deemed in compliance with water quality standards
9 assuming that at some point in the future you get that
10 plan approved and that you met the milestones to submit
11 the plan.

12 It provides a Safe Harbor after plan implementation
13 and development for pollutants lacking TMDLs. These
14 pollutants have been subject to receiving water
15 limitations since 2001, and the additional time was
16 provided in there to comply with those provisions that
17 would otherwise be justified that a TMDL is not
18 applicable here.

19 So where you have a TMDL, I think we can recognize
20 that with the exception of the California Toxics Rule,
21 we can recognize that you do get additional time to
22 comply with the timelines the implementation plans
23 adopted pursuant to the TMDL. We can recognize that.
24 But we can't recognize it where there is no TMDL. You
25 don't get additional time, and to give additional time

1 would constitute backsliding.

2 It provides a Safe Harbor for CTR pollutants. We
3 believe that the deadline for compliance with CTR
4 pollutants was 2010. There's been no exception given
5 for that, stormwater or otherwise. And for EPA
6 established-TMDLs, there's no timeline in those TMDLs,
7 but here the dischargers are given additional time to
8 comply with the EPA-established TMDLs.

9 There is from EPA's permit writer's manual. I'm
10 sorry it's a little complicated, but I want to try to
11 explain it a little bit. The first line is if you have
12 an effluent limit, when are you allowed to backslide, if
13 you will, in compliance with the Clean Water Act? Where
14 are you allowed to relax standards in compliance with
15 the Clean Water Act?

16 There's a couple paths. The one on the right side
17 over here, the 402A2 doesn't apply in those -- this
18 situation. None of those exceptions that are enumerated
19 in 402 apply in this situation.

20 But if you take down this path, this is for
21 non-attained waters, the ones that are highlighted in
22 red here. The lines that are highlighted in red apply
23 to non-attainment waters. And the question is: Is it
24 based on a TMDL to do the relaxation?

25 And where the answer is "no," again where we don't

1 have a TMDL, but the waters are not in attainment with
2 compliance with water quality standards, you cannot do a
3 revision in that context.

4 There's another path for waters that are in
5 attainment. These would be water that are not listed as
6 impaired and don't have a TMDL. There's two paths
7 there. One is if it's not consistent with
8 anti-degradation provisions, you can't backslide. If it
9 is consistent with anti-degradation requirements, you
10 can only backslide so long as you comply with water
11 quality standards.

12 Now, I think that Staff's position on this is, well,
13 these aren't effluent limitations. And if they're not
14 effluent limitations, then you must look, pursuant to the
15 same permit writers manual, to 40CFR122.44L. And under
16 that provision, again when a permit is renewed or
17 reissued, interim effluent limits, standards, or
18 conditions must be at least as stringent as the final
19 effluent limitations. And if they are, it's a condition
20 and you can't relax that condition.

21 Under the anti-degradation policy that's designed to
22 protect existing uses and water quality necessary to
23 support those existing uses, water quality may only be
24 limited or lowered in certain limited circumstances.
25 And in no case can water quality be lowered to a level

1 which would interfere with existing or designated uses.

2 Unfortunately, we view the proposal here from Staff
3 as violating the anti-degradation provision. In
4 particular where no TMDLs exist, it allows the lowering
5 of water quality during and after plan development, and
6 unimpaired waters -- waters that don't require TMDLs
7 that are not identified as 303D listed cannot -- you
8 cannot allow to lower water quality on those waterways.

9 So consider this scenario if you will. You have a
10 water body right now. There's no TMDL. There's no
11 impairment identified for that water body, but while
12 these plans are being developed, you could see
13 exceedances from cities for certain pollutants in those
14 waterways. And what Staff is proposing is: Well, we'll
15 give them a compliance mechanism or a safe harbor for
16 those exceedances.

17 Now, during that period of time, there's no question
18 that water quality will be lowered in that window of
19 time. And this can go on and on during the plan
20 development process as well as the plan implementation
21 process. Okay.

22 So in terms of inconsistency with TMDLs, all permit
23 terms must be consistent with the assumptions and
24 requirements of the wasteload allocations in TMDLs.
25 Unfortunately, there are a couple instances in this

1 revised tentative where that does not occur.

2 Particularly in the watershed management and enhanced
3 watershed management approach, there's a safe harbor for
4 violating interim water quality-based effluent limits
5 during and after plan development.

6 This is inconsistent with the deadlines that are set
7 in the TMDLs themselves with the exception of trash.
8 For some reason, Staff has called out trash as not being
9 allowed to have a safe harbor in this context, but the
10 other ones are. Now, the interesting thing here is so
11 you have an interim limit in a TMDL and while the plan
12 is being developed, Staff says you will be deemed in
13 compliance with that interim limit so long as you submit
14 a plan in accordance with the schedule to submit a plan
15 and that plan is ultimately approved.

16 But when you approve a plan after an interim limit
17 has been exceeded, haven't you completely undermined the
18 whole process of the plan being designed to achieve
19 interim final limits? So essentially the fallacy in
20 this process is for some reason, Staff could approve a
21 plan where they knew that an interim limit was missed,
22 and they would have been deemed in compliance with that
23 interim limit.

24 It's completely nonsensical, and you wouldn't need a
25 safe harbor or to be deemed in compliance with an

1 interim limit that you didn't exceed. So why is this
2 provision necessary unless it's violating this provision
3 about being consistent with the assumptions of the TMDL
4 itself?

5 The permit has -- EPA has -- has recognized also
6 allows final wasteload allocation compliance in areas
7 meeting the 85 percentile retention requirement that's
8 on page 147. We generally support the notion of
9 capturing the 85 percentile. We think that's a great
10 idea. It makes a lot of sense. But boy, it shouldn't
11 be deemed the same from a legal standpoint as compliance
12 with water quality standards. So while we should
13 encourage that type of activity, it's not the same from
14 a legal standpoint.

15 And then lastly, for EPA-established TMDLs, there's a
16 lot of BMP discussion in there. But unlike the other
17 TMDLs, Staff here hasn't established that numeric limits
18 are infeasible in this context. For the other TMDLs
19 Staff put, as you know, numeric limits in because they
20 determine that they were feasible.

21 Here they haven't made any sort of determination and
22 they just defaulted to a BMP-based approach for the
23 EPA-established TMDLs. We disagree with that approach.
24 So our recommendations on these provisions are to
25 eliminate specific safe harbor provisions, the ones

1 articulated here in sections 6C2 on page 52, 53; and
2 section 6C3 on pages 53 through 55; and then the TMDL
3 section 62D Roman M 4 and 6E2E Roman M 14 on page 147.

4 With that, I'm going to turn it over to Kirsten James
5 for discussion of the monitoring provisions. Thank you.

6 MS. JAMES: Good afternoon. I'm Kirsten James with
7 Heal the Bay. I'm going to discuss some of our concerns
8 with the monitoring program, and then touch upon some
9 miscellaneous concerns in several sections of the permit
10 based on the changes proposed.

11 So as shown here, a sufficient monitoring program is
12 required by the Clean Water Act. This map shows the
13 scale of the watersheds in LA County, and you can note
14 at the bottom of the watersheds you see those blue dots
15 which represent the mass emissions stations. For
16 example, the 51 mile stretch of the LA River has one
17 mass emissions station at its terminus.

18 It is critical that a monitoring program through this
19 permit adequately assess these many miles of water
20 bodies and the impact of the MS4 discharges. In general
21 as we mentioned in our previous comments and testimony,
22 we thought Staff did a commendable job in developing a
23 monitoring program in the draft permit that was released
24 back in June.

25 We did outline some of our concerns in our comment

1 letter and our previous testimony, but also supported
2 many of the elements that Staff had proposed in that
3 initial version, such as the coordinated receiving water
4 and outfall program, details that were provided on
5 monitoring parameters and the frequency of monitoring,
6 and the toxicity monitoring both in the receiving water
7 and the outfall monitoring which has now been proposed
8 to be removed.

9 We are very concerned, however, that the revised
10 tentative adds a complete off ramp to this program that
11 was initially by proposed by Staff. Again, as Steve
12 mentioned, this is yet another example of the way that
13 this permit allows the permittee to completely write
14 their own regulations. So as I mentioned in the current
15 draft, the permittees may propose their own monitoring
16 program as long as it meets some very general
17 objectives.

18 For instance, one of these general objectives is that
19 the new program must, quote, "characterize pollutant
20 loads in the MS4 discharges." So what does this mean?
21 "Characterize pollutant loads in the MS4 discharges."
22 This is completely subjective and can be open to
23 interpretation without a strong permit which specifies
24 what this means.

25 I can bet you that there will be 84 different

1 interpretations of what this means, and the precious
2 staff resources that you have will be spent trying to
3 make heads or tails of the many different proposals.
4 After all, what permittee would want to pursue Staff's
5 proposed detailed monitoring plan if they can make their
6 own based on their own interpretation?

7 So here before you on this slide is our proposal for
8 the monitoring program. It's pretty simple as a matter
9 of fact. Basically, we're asking that we delete this
10 off ramp from the draft. We need to get rid of this so
11 that we don't have that subjectivity in the various
12 monitoring programs.

13 At a minimum as an alternate proposal, we suggest the
14 following: We suggest language being added so that only
15 those large municipalities that are dealing with a large
16 number of outfalls would be allowed to customize the
17 outfall program.

18 And the reason we're focusing here on the outfall
19 program specifically is because this is what the
20 permittees have said is their main concern with the
21 monitoring program is there's -- the large jurisdictions
22 have complex outfalls and they need some customization
23 there.

24 So along those same lines, our proposal makes this
25 kick in for very large municipalities that have those

1 complex systems, and it specifies that it's only the
2 outfall program that can be customized. And then there
3 would also be opportunity for public review. In
4 addition to this, we would ask that more specificity be
5 added.

6 So here are some examples of the specificity that is
7 in Staff's original proposal to some extent that needs
8 to be added if this outfall off ramp is taken. You
9 know, things like the parameters that are monitored for
10 the number of -- the frequency of monitoring and that
11 sort of thing. So this outlines some of that
12 specificity.

13 So again, we urge you to remove the outfall -- or the
14 off ramp in the monitoring program; but at a minimum,
15 we ask that you consider this alternate proposal that
16 focuses on large municipalities and specifically their
17 outfall program.

18 Also before I leave monitoring, I did want to
19 respond to something that Manhattan Beach and Redondo
20 Beach brought up in terms of beach water quality
21 monitoring. I think there was some confusion from their
22 end. We see this requirement as just maintaining the
23 requirement of the existing permit, so I don't see how
24 they make the assessment that that's going to cost them
25 any more. And we believe that this more frequent

1 monitoring program is critical for public health
2 protection. So we support Staff's change in that
3 respect.

4 Now moving along to just some miscellaneous sections
5 of the permit that we think are really critical for
6 changes to be made. So here again, you know, you see
7 the case law that says that meaningful review needs to
8 be done by the regulating entities themselves. And here
9 we see two examples of, you know, substantive portions
10 of the permit where the EO would have discretion to give
11 the thumbs up or the thumbs down.

12 We mentioned this in our previous comments. A few of
13 the changes also go down this path that we think is
14 completely inappropriate. You know, there are many
15 complex sections of this permit as Steve mentioned, some
16 of which we have major problems with, and, you know, as
17 we stated, and should be eliminated. But we need to
18 ensure at a minimum that there is proper review by you,
19 the Board and the public.

20 So this is another section of the permit on page 67
21 that we recommend for deletion. So, you know, not only
22 does the permit set up an inappropriate scheme that the
23 watershed management plans, as Steve discussed, but it
24 also allows for the permittees to further weaken these
25 by having an extension of their own milestones and

1 deadlines that they themselves are setting. This just
2 seems ridiculous and completely inappropriate to us and
3 we ask you to delete this provision.

4 Okay. So moving on. Page 43, the re-opener
5 provision. This was mentioned previously before, but we
6 ask that you delete this provision. We believe that
7 subsection 4 on that same page, page 43, covers what I
8 believe is Staff's intent here and addresses any changes
9 that could be made in the Basin Plan Amendment. And we
10 believe that this language here is confusing and appears
11 to set up an inappropriate and illegal scheme for final
12 compliance with wasteload allocations.

13 The bottom line is that final wasteload allocations,
14 numeric wasteload allocations, must be met, and that's
15 the bottom line. So we ask that you delete this
16 re-opener. In this context under the permit scope, we
17 ask that you add this language to ensure that there's
18 absolutely no confusion with responsibility. We need to
19 make sure that in the case when this is talking about
20 what does and does not apply to the Flood Control
21 District, that it is clear that the rest of the permit
22 does in fact apply to the Flood Control District. So we
23 ask that you add this language on page 18.

24 And the final miscellaneous comment that I'll make is
25 on attachment M to the TMDL. We believe that it's

1 premature to include this language prior to approval by
2 the State Water Board, OAL, and EPA of this Basin Plan
3 Amendment.

4 We do appreciate Staff's minor clarification in the
5 change sheet provided today, but we still believe that
6 this is really incredibly confusing language and it's
7 not consistent with our interpretation of the Basin Plan
8 Amendment, and we believe that Staff should reject these
9 proposed revisions, maintain what's currently in effect
10 now, and when those are adopted, if they are adopted and
11 approved at that time, the permit can be reopened.

12 So with that, I'll turn the mic over to Liz Crosson.

13 MS. CROSSON: Good afternoon. I'm Liz Crosson from
14 Los Angeles Waterkeeper. I think there's one more
15 slide. So I hope that it's clear from our testimony and
16 the sentiment behind it that our three organizations
17 have been incredibly involved and have spent
18 considerable time and resources over the last month, but
19 really over the last year and a half on this permit.

20 And the reason we did this, we worked with you staff
21 and the permittees on developing permit language that
22 would not only provide a collaborative and regional
23 approach that we in concept support, but also so that we
24 could ensure that it prioritizes water quality and
25 public health.

1 And to us, that's what has been missing from, I
2 think, a lot of the discussion this morning, is that
3 we've, you know, over the last year and a half we've
4 been sitting in conference rooms and meeting halls while
5 thousands of residents and visitors in Los Angeles are
6 swimming and surfing and enjoying this unique warm
7 weather of October and November, when as recent as three
8 days ago, we were seeing exceedances at our beaches for
9 bacteria where those people are swimming with their
10 families.

11 We also haven't talked enough about the inland rivers
12 and the need to protect the creeks and rivers for fish
13 and for public health, for communities, for recreation,
14 and our failures to do that over the last couple
15 decades.

16 So that's why we're standing here with a little bit
17 different message, I think, than we stood before you a
18 month ago. Whereas we supported much of the language in
19 the June draft when it came to compliance with water
20 quality standards and a robust monitoring system is --
21 program is, as Kirsten has mentioned, as well as the
22 addition of the LID provisions, today we feel the
23 effectiveness of this draft permit has been completely
24 undermined by the inclusion of the proposed safe harbor
25 after safe harbor.

1 And I think it reflects a giant step backwards
2 instead of the path forward that we were really,
3 sincerely hoping to support.

4 And as I mentioned at the October hearing, this
5 permit is one of the most important decisions that you
6 as Board members will ever make. Stormwater is the
7 number one source of pollution and it's the area that we
8 haven't actually experienced significant improvements
9 that we talk about when we talk about the Clean Water
10 Act at year 40. We've seen a lot of improvement, but
11 not in stormwater. Stormwater is the one areas where
12 we still have a long way to go. And this is the type of
13 action that's needed in order to make that happen.

14 LA Waterkeeper, Heal the Bay, and NRDC have long been
15 involved in these issues with you and the State Board
16 and others, and we have been a voice for the people in
17 the environments in these rooms, and we have often
18 supported the efforts of you and your staff.

19 We defended the current permit when it was approved
20 in 2001 and challenged. We intervened on your behalf.
21 We also defended the Board's authority to promulgate
22 water quality standards when that was challenged for
23 stormwater. And again, we defended your action to
24 improve important bacteria limits at our beaches.

25 But now we're faced with a permit that brings us back

1 to the era before effective implementation of the Clean
2 Water Act, a permit that was essentially written by the
3 permittees. Watershed management plans do not equal
4 water quality standards, and that's a really important
5 point to make. You've heard the legal issues with this
6 approach from our team. You have also heard some pretty
7 serious concerns from EPA. So at this point, we do urge
8 you to make the changes that we've proposed and still
9 adopt this permit today.

10 It is the people of Los Angeles region that are
11 relying on you to ensure their public health,
12 communities, their waterways are actually truly
13 protected. Thank you.

14 I'd like to reserve the rest of the time for
15 rebuttal. Thanks.

16 MS. MEHRANIAN: Sure. Thank you. Moving on to the
17 next group. Los Angeles County and Los Angeles County
18 Flood Control District. Thirty minutes. Do you need
19 questions?

20 MR. STRINGER: I'm just wondering if there's --

21 MS. MEHRANIAN: Sure. I think it's good to do some
22 clarification.

23 MR. STRINGER: Yeah.

24 MS. MEHRANIAN: Yeah. Sure. Go ahead. Larry?

25 MS. GLICKFELD: Do you want to call people back up?

1 MR. YEE: Anyone from the environmental groups, I
2 just have a, I guess, a question about your meaning of
3 "safe harbor" because to me, "safe harbor" means -- you
4 know, in the old days, if there was a storm going on in
5 the seas and a ship would seek out a safe harbor to ride
6 out the storm. To me, the way that the safe harbor's
7 been used in the revised tentative, it's really a
8 transition harbor to me.

9 It's someplace that you go to take some extra time
10 to dry dock or whatever and get fixed up in order to,
11 you know, get back out there in the storm. But it's not
12 really a safe harbor, is it?

13 MR. FLEISCHLI: The way it's worded in here in terms
14 of deeming folks in compliance, for me, it is a safe
15 harbor. I -- the storm, I would disagree there's a
16 storm. I think what the cities' represent as the storm
17 is the potential for citizen litigation around
18 noncompliance. What they want is to be deemed in
19 compliance with water quality standards while they work
20 these things out.

21 And I would argue, well, they have had 22 years to
22 work it out and very clearly the last 11 to work out
23 water quality standards that they, you know, that they
24 have been required to comply with that whole time. Do
25 they really need another safe harbor?

1 I think there's a presumption here that the
2 environmental community is chomping at the bit to go sue
3 people. And, I think, you know, it's interesting to
4 hear a lot of people comment on the litigation that's
5 gone on.

6 There's only a couple people in the room that are
7 actually involved in the Supreme Court case, and yet
8 everybody everybody in the room seems to have an opinion
9 about it. There's a couple people in the room that were
10 involved in the Malibu litigation and yet everybody
11 seems to have an opinion about it.

12 The reality is these cases are not easy to bring.
13 It's not like -- I mean, I have better things to do with
14 my time than litigate these cases. From my perspective
15 and what we genuinely wanted to do with Staff was find a
16 compromise like we found in the trash TMDL. And that,
17 you know, there could be a mechanism to move forward.

18 But while there needs to be trust on our end that
19 these watershed management planning process is going to
20 work and that there are going to be meaningful actions
21 in those plans notwithstanding the problems we've seen
22 with this type of approach in this region. There needs
23 to be trust on the other side that just because they are
24 subject to complying with water quality standards
25 doesn't mean they're going to be sued willy nilly for

1 violations.

2 So I -- Staff calls this a compliance mechanism. If
3 it deems them in compliance or sort of waives violations
4 of water quality standards, it's a safe harbor. I --
5 you know, I don't know how to call it anything else.

6 MR. YEE: Thank you.

7 MS. MEHRANIAN: Board member Glickfeld?

8 MS. GLICKFELD: Let me try this in another way.

9 Let's not talk about lawsuits; let's just talk about
10 enforcement.

11 MR. FLEISCHLI: Sure.

12 MS. GLICKFELD: So if this were a world in which this
13 Board had all the authority and discretion about what
14 was something that was enforceable and what wasn't, it
15 would be one thing. But in fact, if we ask the
16 permittees to go ahead and make the investments in these
17 long term plans and they are subject to receiving water
18 limitations and they miss those receiving water
19 limitations, they're subject to minimum -- they're
20 subject to the MMPs, which we don't have discretion
21 over. We just to have to do it.

22 So is that an issue that is so important that we
23 should stop this process? I mean, I really -- I don't
24 really understand how we're supposed to move them
25 forward into this new intellect and new and different

1 way of approaching this, which is watershed way, which
2 is a multi-benefit which saves water we can't afford to
3 waste and also reduces pollution, but also takes a lot
4 of time and a lot of investment.

5 How can we motivate -- how can you motivate the
6 permittees to go ahead and take that harder route when
7 they're still subject to just automatic tolling on
8 minimum violation?

9 MS. FORDYCE: And -- I'm sorry.

10 MR. FLEISCHLI: First --

11 MS. FORDYCE: Can I just -- can I interrupt for one
12 second?

13 MR. FLEISCHLI: Yes.

14 MS. FORDYCE: I do want to clarify the receiving
15 water limitations violations are not subject to
16 mandatory minimum requirements.

17 MS. GLICKFELD: Effluent limits.

18 MS. FORDYCE: I just want to clarify that.

19 MS. GLICKFELD: Okay. Thank you.

20 MR. FLEISCHLI: So the receiving water limitations is
21 not -- the effluent limitation provisions would be the
22 TMDL-based provisions where we recognize where you
23 have -- I mean, this is the irony of ten years of
24 litigation that went on over TMDLs, the trash TMDL and
25 bacteria TMDL. If the cities really looked at the TMDL

1 process the way we looked at it, it actually gave them
2 more time to comply with things relative to just
3 complying with the receiving water limitations
4 schedules.

5 So I think that's a point well taken. You know, I --
6 one thing that I just have to say is, you know, from an
7 enforcement perspective from the Regional Board's duties
8 under the law, "a law not enforced is not a law." Bill
9 Clinton has said that many times.

10 And unfortunately, I mean, you don't have the
11 discretion to look the other way on the law. You're
12 just not allowed to do that. Now, we did want to try to
13 work with particularly the County. I think the County
14 really did come to the table and have some really
15 creative ideas and was really trying to think outside
16 the box about how we could move forward here, and I
17 think we found some good common ground there.

18 The problem in this dynamic is there are 85 engaged.
19 And, you know, we've seen over the litigation even when
20 the cities were challenging the permit itself, you know,
21 over that long period of time we couldn't find
22 compromise with all of the cities. And that's part of
23 the challenge in this process.

24 And so I think the enhanced watershed management
25 approach is preferable to the watershed management

1 approach because it encourages collaboration amongst the
2 cities. It forces them to work together. It forces
3 them to integrate their thinking on water resources the
4 same way this Board did with the wet weather bacteria
5 TMDL where you got extra time when you were integrating
6 your thinking around water, waste water reuse, those
7 issues.

8 I think there are ways to encourage that. It's just
9 the dynamic here with 85 entities you -- you cannot
10 reasonably expect there to be consensus with all those
11 parties when someone can always either play the bully in
12 the room or simply hold out because they know someone
13 else has got their back. It's just -- it's just not
14 workable in that context. Do you want to add something?

15 MS. CROSSON: No.

16 MS. MEHRANIAN: Questions?

17 MS. CAMACHO: I have a question. Can you just
18 explain to me what the current ways are that your
19 organization that, maybe Kirsten, your organization work
20 with cities aside from the County, but cities and
21 currently in working on different things that can be
22 reviewed or programs that can be implemented in an
23 effort for water quality now?

24 MR. FLEISCHLI: I'll let Kirsten go first.

25 MS. JAMES: There's so many examples. But to give

1 you a few, you know, NRDC and Heal the Bay were very
2 involved in a lot of the local low impact development
3 ordinances. We were at the table. We were at all the
4 meetings, council meetings helping push what the city
5 staff, you know, was hoping for in making that a
6 reality.

7 And, you know, so that's been exciting in cities like
8 LA and Long Beach, you know, the County, Santa Monica
9 have done that type of thing. Also when it comes to
10 working to get, you know, projects in the ground and
11 funding of those projects, I think we mentioned in our
12 testimony last -- at the last hearing, you know, our
13 involvement in things like Prop O, Measure V, our
14 extreme involvement in the upcoming Clean Water/Clean
15 Beaches initiative which is going to, you know, help
16 implement this permit.

17 So I think, you know, there's just, you know, so many
18 examples of that collaboration. But at the end of the
19 day, you know, we need to make sure that, you know,
20 those projects and programs get us to where we need to
21 be, and that's water quality standard attainment.

22 MR. FLEISCHLI: And I would just add in terms of
23 nationally, NRDC works with a lot of cities around the
24 country. Probably the best example is Philadelphia. We
25 did have the privilege of presenting at the White House

1 on the Philadelphia projects.

2 Some folks in the room, Del Hajicolio and others,
3 were there. And we talked about innovative financing
4 for green infrastructure in Philadelphia and how we're
5 working with the Nation Conservancy and the City to try
6 to find ways to induce private investments into green
7 infrastructure. How can we leverage that capital that's
8 out there looking to invest with some of the municipal
9 fees that are being charged to make sure we're really
10 leveraging that money for the bang for the buck.

11 And I think you'll probably hear from Tree People and
12 maybe others today about, you know, when you design
13 green infrastructure properly, you can do amazing
14 things. And you can get multiple benefits out of it.
15 So we are trying to find innovative ways around the
16 country to do that. Philadelphia is probably the best
17 example.

18 We've issued a number of reports. Nora Garrison was
19 a co-author on a number of them, Rooftops to Rivers Too,
20 sort of highlights around the country where folks are
21 being innovative with green infrastructure and the
22 techniques they're deploying on a green infrastructure
23 front.

24 But it's, you know, from our perspective they've --
25 and even in Philadelphia where they've committed to

1 getting one third of their sewer shed and they found
2 that they can save billions of dollars by doing that as
3 opposed to deploying gray infrastructure for their sewer
4 system.

5 Even better though, there is an underpinning and a
6 legal framework that encourages the cities to move
7 forward to do those activities, but they can find better
8 ways of doing it through the use of green
9 infrastructure.

10 MS. CAMACHO: So it sounds then that you would be
11 committed to working on programs like this that you've
12 been involved with in Philadelphia and just in the
13 current programs that you're working with, and aside
14 from propositions or various kind of other items in this
15 process of trying to move things forward through this
16 idea of watershed management plan or EWMP.

17 MR. FLEISCHLI: Yeah, and we strongly support the
18 provision in the permit on the technical advisory
19 committee for this process. That makes a lot of sense.
20 We're glad that's happening. We're glad it's a peer
21 review and supportive model of the process. We're
22 committed to participating in that.

23 We just don't like these other provisions that
24 include the safe harbors. It doesn't provide incentives
25 for the cities to listen and be as constructive as they

1 otherwise could.

2 MS. MEHRANIAN: Questions?

3 MS. MUNOZ: I'm a little confused when you think that
4 the 85 cities have to concur. Because my -- what I'm
5 thinking, I mean, is that all 85 cities don't share the
6 same watershed and they're all not located -- attached
7 by a nucleus. So isn't it -- the cities that are closer
8 together where they can work on a neutral watershed plan
9 that will benefit them as opposed to all 85 concurring?

10 MR. FLEISCHLI: Yeah. Maybe I wasn't clear on that.
11 In terms of the plans themselves, I think you're right.
12 They can be regionally approached without the 85 cities.
13 There can be a subset of cities that are engaged.

14 My criticism was the more in terms with the permit
15 itself, and Staff's approach to the permit is more of a
16 consensus process and what the permit language is going
17 to be. Because they don't, you know, we've already
18 heard a couple cities today threaten an administrative
19 challenge.

20 And I think Staff genuinely tries to avoid that type
21 of situation. Back to the trash TMDL, and maybe Shahram
22 from the City of LA can talk about this, there were only
23 a few people engaged in that negotiation, and it worked
24 because there were, you know, key stakeholders involved
25 and. We came to a conclusion and, you know, there were

1 a bunch of cities that still sued over the TMDL.

2 Fortunately, they lost.

3 But the way this permit is structured is really
4 trying to accommodate all of the cities. And
5 notwithstanding the criticisms you've heard today from
6 some of the cities, this permit is by and large,
7 particularly this watershed management approach and
8 these safe harbors, have been written to address the
9 cities' concerns.

10 MS. DIAMOND: I'd like to understand on the issue of
11 compliance with non-TMDL polluted -- pollutant
12 combinations as opposed to those that we have -- that
13 are listed 303D. There's a distinct difference of
14 opinion between Staff and -- and you and the other
15 environmental organizations about whether that would
16 lead to waters becoming polluted or possibly listed.
17 And our Staff believes it will encourage those waters to
18 be non-listed and to be -- to improve.

19 And I also would like you to address the issue of we
20 have -- we have the watershed management plans for the
21 303D-listed pollutants whether they're similar to other
22 TMDLs or just 303D listed and have TMDLs. My
23 understanding is at the end of the day the compliance
24 will end up being those -- the TMDL final limits. I
25 mean, the interim limits are with the watershed

1 management plans; but at the end of day, we need to have
2 them in compliance with the final numbers in the TMDLs.

3 MR. FLEISCHLI: Okay.

4 MS. DIAMOND: But in the non-TMDL non-listed, my
5 concern is why is there a difference between what the
6 staff is saying about those waters and what the
7 environmental community is saying about those waters,
8 and how do you feel about the two different kinds of
9 non-listed and listed pollutants?

10 MR. FLEISCHLI: So on the first question, you know, I
11 think if I understand Staff's point correctly -- and
12 Renee, you can correct me if I'm wrong -- but Renee's
13 testimony today basically that they have the assurances
14 that water quality will improve because of this process.
15 You know, the process that's been put into place.

16 One, for the window of time before a plan is adopted,
17 you know, the only assurances they seem to have are the
18 minimum control measures that were in while they, you
19 know, developed the plans.

20 Second, it doesn't assure that those are met. It
21 allows for exceedances. If it didn't allow for
22 exceedances in that context, you wouldn't need these
23 compliance mechanism or safe harbor provisions during
24 those certain windows of time. What's the point of them
25 but to allow them to have violations and for them not to

1 be subject to any sort of enforcement on this provision.

2 So basically, even though there's a process that
3 Staff believes has been set up to over time improve
4 water quality, in the meantime, it's allowing these
5 exceedances to happen and degrading our waterways. And
6 that's the problem we have.

7 Liz, do you want to add to that?

8 MS. CROSSON: No.

9 MR. FLEISCHLI: And can you explain the second issue
10 again? I was a little confused by that question.

11 MS. DIAMOND: Well, I wanted to know the non -- the
12 non-pollutant combination, non-TMDL.

13 MR. FLEISCHLI: Non-TMDL?

14 MS. DIAMOND: The non-TMDL. You come to a different
15 conclusion about what would be the end road of those
16 waters if we -- if we go along the way the staff is
17 recommending. Staff believes that those waters will --
18 will not become -- will stay because of the -- what --
19 because of the permit will continue to be pristine or be
20 improved, and your position is that they will not.

21 MR. FLEISCHLI: Right. And that's what -- I mean, I
22 was just saying in terms of the -- it -- it doesn't
23 create a path to say you can build a new pipe and
24 pollute at will. But what it does say is look, if
25 you're causing water quality problems, you're going to

1 be fined for five, ten, whatever years your watershed
2 management plan allows you to have those exceedances.

3 And during that window of time, there are water
4 quality problems. There could be such severe water
5 quality problems that would need to be listed. But
6 guess what? Are they in a watershed management plan,
7 and we have confidence that five, ten, fifteen years,
8 whatever the plan calls for, they'll eventually clean it
9 up.

10 Even though it's here today, it could go here in
11 terms of poor water quality, you know, over the next few
12 years. Oh, then we'll have to come back and comply with
13 water quality standards at some point in the future.
14 That's -- I mean, that's our concern on that side.

15 And it doesn't prohibit that type of activity. And
16 it essentially says you can do that and you won't be
17 subject to any sort of violations. You won't be
18 violating any terms.

19 MS. MEHRANIAN: Before we continue the questioning,
20 we have to make a decision if we continue the
21 questioning. Because if we are, then the staff, you
22 know, I would like to ask the staff to come in. So do
23 you want to --

24 MR. STRINGER: Yeah. I was just going to say, Renee,
25 I hope you're taking careful notes and others, because

1 we are going to -- we are going to want to hear your
2 perspective on this.

3 And it's going feel a little disjointed, but my
4 personal opinion is we hear from County and others and
5 then come back to this as a whole. I do just have one
6 question, and it's more of your use of language. We're
7 coming out of a precedential, so we're all used to
8 hearing some of what I consider hyperbole.

9 You stated that that you thought -- you think that
10 this permit puts us before the Clean Water Act. I find
11 that --

12 MR. FLEISCHLI: Yeah. I do. And the reason ask is
13 when the Clean Water Act was modified, you might
14 remember pre-1972, it was a water-quality-based
15 approach, but it wasn't effective. And it wasn't
16 effective because there weren't clear, enforceable
17 provisions in these permits.

18 And what the '72 act did is it said, look, you cannot
19 discharge unless you have a permit and you comply with
20 the terms of that permit. And the history is very
21 clear, and unfortunately, I've read far too much --

22 MR. STRINGER: I'm familiar with the history of the
23 Clean Water Act. I guess I just pictured a permit --

24 MR. FLEISCHLI: This permit --

25 MR. ETTINGER: -- fundamentally --

1 MR. FLEISCHLI: It's fundamentally -- when
2 Congress -- so you'll be familiar with this. Congress
3 said the enforcement was supposed to be simple, easy,
4 clear for MBDS permits. In the legislative history,
5 they talk about that.

6 And what this is -- what Staff is doing, is flipping
7 that whole thing around saying, "dischargers write all
8 these provisions on your own," and you -- their --

9 MS. MEHRANIAN: Can I --

10 MR. FLEISCHLI: It's not like you can just find an
11 effluent limit and enforce it.

12 MS. MEHRANIAN: Can I interrupt for a minute? I just
13 think that we should continue with the --

14 MR. STRINGER: No, that's fine. I understand what
15 you're saying. I guess maybe I shouldn't have posed it
16 as a question and more as a comment. I'm looking
17 forward to hearing Staff's perspective on this as well.
18 And, you know, I'm not convinced of that perspective
19 personally.

20 MR. FLEISCHLI: That's fair enough.

21 MS. MEHRANIAN: I think we can clarify these things
22 because we hear from City and County and after them we
23 have -- we will reserve some time for each of us to ask
24 questions and the Staff to come and clarify.

25 Because the similar question is in everybody's mind

1 that -- how could we arrive at such different and
2 opposing points? We don't think we're there. But
3 that's more discussion.

4 So why don't we proceed with the rest of the
5 testimonies. And with that, I think we move to the
6 County of Los Angeles County and Los Angeles Flood
7 Control District for 30 minutes.

8 MS. FARBER: Good afternoon. Gail Farber --

9 MS. MEHRANIAN: Ms. Farber, did you take the oath?

10 MS. FARBER: Oh, I need to.

11 MS. MEHRANIAN: If you're going to testify. Okay.
12 Do you swear or affirm that the testimony that you are
13 to give is the truth, the whole truth, and nothing but
14 the truth under penalty of perjury?

15 MS. FARBER: I do.

16 Gail Farber. I'm the director of Los Angeles County
17 Department of Public Works and Chief Engineer of the
18 County -- Los Angeles County Flood Control District.
19 Thank you, Chair Mehranian, and Board members, County of
20 Los Angeles.

21 On behalf of the County of Los Angeles and the Flood
22 Control District, we're committed to the highest quality
23 stormwater management. And as such, we support the
24 Regional Water Quality Control Board's adoption of the
25 new draft pollutant discharge elimination system permit

1 for LA County's MS4s.

2 This draft permit will provide and facilitate
3 increased collaboration amongst local municipalities and
4 the County Flood Control District to implement a
5 comprehensive region-wide stormwater management program
6 that protects the people and the property of Los Angeles
7 County and protects and improves our natural resources.

8 Last month, we outlined the reasons we believe that a
9 new permit is best served by providing a collaborative
10 approach to stormwater management, and we expressed our
11 hope that the new permit would move beyond a silent
12 business approach and would seize the opportunity to
13 create a more modern model that encourages cities and
14 agencies to engage in a more integrative regional
15 approach and partnership to addressing County's water
16 resource needs.

17 We have worked closely with your staff over the last
18 several weeks to ensure that these goals are
19 incorporated into the new draft permit. And with the
20 adoption of the revised permit that you have before you,
21 this Board will send a message that it has embraced the
22 that spirit and a paradigm of collaboration. And we
23 believe it will also serve as a model for region-wide
24 watershed management for the rest of the country as
25 well.

1 The proposed permit greatly improves upon the
2 outdated 2001 version and enables permittees to move
3 forward with the shared interdependent responsibility of
4 protecting and enhancing the health of the County's
5 watersheds.

6 We're wholly in support of the new -- of the enhanced
7 watershed approach included in the draft permit. This
8 heightened collaboration will ensure that there are
9 ample opportunities for stakeholders to work together
10 and develop community-focused solutions which provide
11 the greatest benefits to the regions served.

12 This draft permit reaffirms the Flood Control
13 District's integrated collaborative approach toward
14 developing sustainable stormwater management solutions
15 that meet the flood risk, water supply, water quality,
16 and recreational needs of all our local communities.

17 We recognize that our work is not done, but we
18 believe in and are committed to investing in consensus
19 to achieve water quality goals and permit compliance.
20 And we look forward to continuing to work with all our
21 regional partners, all 85 and 88 cities in the county
22 because we have -- and continue to build on this success
23 today and to move forward.

24 Additionally, I want to take a moment to thank and
25 acknowledge the hard work the Regional Board Staff has

1 put into this new draft, and we're ready to move
2 forward.

3 Now I'd like Gary Hildebrand to come forward and
4 present the details of our enhanced watershed management
5 program. Thank you.

6 MR. HILDEBRAND: Okay. Thank you, Gail. Good
7 afternoon, Chair Mehranian, members of the Board. My
8 name is Gary Hildebrand, and I'm an assistant deputy
9 director at the LA County Department of Public Works.

10 I'm here today on behalf of the County of LA and the
11 Flood Control District. Also with me in the audience is
12 my entire team, who will be available to answer
13 questions.

14 The County and the District would like to thank the
15 Regional Board Staff for their time and effort over the
16 last year and a half. At the October hearing, this
17 Board directed its staff to meet with key stakeholders
18 to resolve the highest-priority remaining issues in the
19 perms. Your staff has done that.

20 For the past several weeks, we and other key
21 stakeholders have met regularly to discuss the ultimate
22 approach we proposed at the last hearing and how to
23 incorporate it into the permit. We deeply appreciate
24 your Staff's dedication and patience in listening to
25 stakeholder concerns and finding a balanced way forward.

1 Though we were able to agree on some but not all the
2 issues, we do appreciate the efforts of Heal the Bay,
3 the NRDC, and the LA Waterkeeper to come in the table
4 and engage in a productive dialogue over the last
5 several weeks.

6 The permit before you today is of utmost importance.
7 As currently drafted, it represents a balanced approach
8 to improved water quality. For the first time in a
9 stormwater permit, we have the opportunity to integrate
10 supply planning with water quality improvements. This
11 is a new visionary approach.

12 Thanks to everyone's collective efforts, I'm pleased
13 to stand before you today to support the adoption of the
14 revised permit. My focus today will be on the proposed
15 alternate approach now called the Enhanced Watershed
16 Management Program in the revised permit.

17 I'll explain how this alternate approach works, why
18 we are excited about this new the paradigm in
19 stormwater permitting, one that is based on a strong
20 technical basis and has received stakeholders' support,
21 and for the first time provides the opportunity in a
22 stormwater permit to treat stormwater not as a waste,
23 but as a resource.

24 You've heard much today about the enhanced planning
25 process. Using that example, I would like to walk you

1 through the process for developing such a plan. On the
2 slide before you, you see a schematic of a simple
3 watershed. The watershed has two cities and has MS4
4 infrastructure that is owned both by the cities and the
5 Flood Control District.

6 In this example, the three permittees, being those
7 two cities and the District, will have notified the
8 Regional Board within six months of the effective date
9 of the permit of their intent to develop an enhanced
10 watershed plan.

11 Over the next 30-month period, the permittees will
12 engage in the extensive planning process that will begin
13 the assembling -- begin with the assembling of existing
14 available information on the hydrology and water quality
15 in the watershed. Also identification of the MS4
16 infrastructure and publicly-owned and other parcels
17 for consideration of placement of multi-benefit regional
18 projects.

19 Plan development will be a stakeholder-involved
20 process in conjunction with the Technical Advisory
21 Committee consisting of representatives from permittees,
22 the Regional Board, USEPA, and environmental
23 organizations. During the planning phase, permittees
24 will identify other stakeholders such as water
25 districts, Caltrans, et cetera, who would have a direct

1 benefit from the regional projects and could provide
2 additional resources and funding to the table;

3 Who would be coordinating with other watershed
4 planning efforts, such as Irwin, to consolidate efforts
5 and maximize benefits, evaluate the MS4 infrastructure
6 against parcels identified earlier to determine possible
7 regional project locations. We would conduct a
8 site-specific evaluation of each candidate parcel to
9 assess suitability for placement of a project.

10 Soil infiltration testing would be done as needed.
11 For feasible sites, concepts would be developed along
12 with economic analysis including cost estimates for
13 design and construction. Funding sources both from
14 permittees and other stakeholders would be identified.

15 For areas within the watershed where multi-benefit
16 regional projects are not feasible, other appropriate
17 BMPs would be identified to address pollutant sources in
18 the watershed.

19 As required under the revised permit, a reasonable
20 assurance analysis will be done to demonstrate
21 compliance with TMDL wasteload allocations for these
22 areas, all of which will culminate in a draft-enhanced
23 plan at 30 months that includes a prioritized list of
24 multi-benefit regional projects with concepts that would
25 be ready for detail design along with other BMP's

1 proposed for the remainder of the watershed.

2 The planning process that I've described would be
3 conducted throughout the various watersheds. This is a
4 very aggressive schedule given our experience in
5 planning these type of projects. As you recall during
6 the October hearing, we discussed the timeline for the
7 Sun Valley watershed plan, which took three years and
8 covered only about a four and a half square mile
9 watershed.

10 So coming back to our example watershed, after going
11 through the planning process I described, the permittees
12 in this case have identified the two multi-benefit
13 regional projects which are shown by the red triangles,
14 and the tributary drainage areas to those projects are
15 shown in blue. For the yellow areas of the watershed
16 where multi-benefit regional projects are not feasible,
17 other BMPs will have been proposed as part of the
18 enhanced plan.

19 The enhanced plan will be based on a sound technical
20 analysis and will include a reasonable assurance
21 process. The watershed model developed by the Flood
22 Control District I mentioned earlier will be a key tool
23 in performing the reasonable assurance analysis. It is
24 based on the same EPA model that was used to develop
25 many of the TMDLs being incorporated into this permit.

1 Our model has received national recognition and was
2 developed with extensive input from a technical advisory
3 committee that included regional board staff and USEPA.
4 During the past month, we had the opportunity to discuss
5 the model with the Dr. Richard Horner, Board staff, and
6 others.

7 Now I'd like to take a minute to explain how this
8 model works. When we embarked on the process to develop
9 a model, we set out to develop a model that can be used
10 as a decision-making tool for stormwater managers. We
11 needed a tool to help guide our planning efforts and
12 answer questions such as what is the most optimal
13 combination of BMPs to reduce (inaudible)? Regional
14 distributed BMPs? How would BMPs and where should they
15 be placed? How much water must be treated and
16 infiltrated to meet standards? And lastly and most
17 important, what is the cost of implementing these BMPs?

18 The model works by simulating the natural hydrology
19 of Los Angeles County. It also takes into account
20 parameters such as rainfall, land cover and soil
21 perfidiousness, land use, and BMP performance and cost
22 information based on established national BMP data
23 bases.

24 The model runs through thousands of permeations for
25 each different scenario to identify combinations of BMPs

1 that can reliably achieve water quality standards. The
2 scale and level of detail of this model is
3 unprecedented. It is the first decision-making support
4 system of its kind to account for parcel-level details
5 of hydrologic pollutant transport BMP processes while
6 encompassing a 3,000-square-mile coastal watershed area
7 which is covered under the revised permit.

8 This model is available at no cost to all cities for
9 their planning efforts and will support the water
10 quality improvements anticipated by the permit. There's
11 been much discussion today about the design storm and 85
12 percentile design storm. And this is an issue we did
13 discuss at the last hearing and I'd like to sort of go
14 through again the process under which we went to help
15 validate the size of this event.

16 After the model was completed, one of the first
17 efforts that we used the model for was to identify an
18 appropriate design storm for use in BMP planing and
19 design. The design storm is an important concept in
20 stormwater management. This concept involves the
21 identification of a storm of specific size, the
22 intensity, and/or duration for use in design stormwater
23 controls to achieve water quality standards that
24 balances cost with pollutant removal efficiency.

25 Back in 2005, the Regional Board directed staff to

1 convene a wet weather task force comprised of key
2 stakeholders to address the most important issues
3 related to achieving water quality standards during wet
4 weather; one of which being the development of a design
5 storm standard for water quality.

6 Unfortunately, the wet weather task force was not
7 able to complete its work to identify a design storm due
8 to lack of funding. But in turn, the Flood Control
9 District agreed to take on this task and work with its
10 technical advisory committee which is comprised of EPA,
11 the Regional Board, local cities, NGOs, and the Southern
12 California Water Research Project to determine the
13 appropriate size stormwater design storm event.

14 The results of that analysis is on the slide before
15 you. As can be seen, the optimal size storm is the 85
16 percentile event. In other words, this is the size of
17 storm that would provide on treatment of 85 percent of
18 the storm events in the county. And this is the design
19 storm that has been incorporated into the proposed
20 permit before you you.

21 There's been much talk about how this design storm
22 will be utilized and I think what's important is for the
23 permittees to embark on these multi-benefit regional
24 projects to invest the tens or hundreds of millions of
25 dollars that will be needed to construct these kind of

1 projects.

2 The permittees do need certainty that constructing
3 these type of facilities will result in compliance.
4 There's been much discussion this morning about the LA
5 River trash TMDL and the fact that it was a very
6 successful TMDL. The reason it was one of the most
7 successful TMDLs is the fact that you've developed in
8 that TMDL a method for the permittees to clearly
9 identify how they come to compliance. They implement
10 particular measures and they know their compliance
11 within that BMP.

12 That's been -- those TMDLs have been clearly embraced
13 by all the permittees and there -- I think there's no
14 issue with the implementation of the required programs
15 to comply with that particular TMDL.

16 I mentioned the technical advisory committee in
17 describing the enhanced watershed approach earlier.
18 This is a new concept that we've proposed over the past
19 month. We agree that collaboration, transparency, and
20 rigorous technical analysis are essential for the
21 success of the watershed planning process.

22 The region-wide pact was proposed to accomplish these
23 goals. The pact will include representatives from
24 permittees, Regional Board, USEPA, and environmental
25 group.

1 Now I'd like to turn it over to Tracy Egoscue.

2 MS. EGOSCUE: Good afternoon Madam Chair, members of
3 the Board. My name is Tracy Egoscue, and I'm legal
4 counsel appearing on behalf of the Los Angeles County
5 and the Los Angeles County Flood Control District.

6 The County and the Flood Control District support the
7 permit in front of you because it contains several
8 important features. For the first time in a stormwater
9 permit, permittees have the opportunity to do integrated
10 planning on a watershed scale that can lead to
11 multi-benefit regional projects.

12 Because the multi-benefit regional projects are
13 highly complex and expensive, those permittees that
14 choose this approach need certainty regarding compliance
15 which, as Gary explained, is currently provided in the
16 85th percentile design storm.

17 The enhanced approach would also facilitate
18 collaboration amongst permittees and other stakeholders.
19 Successful watershed planning requires true
20 collaboration amongst the permittees. Lastly, those
21 permittees that choose this approach would be able to
22 leverage the resources with other funding sources.

23 You have heard from other stakeholders including the
24 NGOs and EPA that major edits are warranted to your
25 tentative draft. Further changes are not necessary and

1 will actually threaten the incentivized approach that
2 your staff has crafted.

3 The revised draft is currently supported by the law.
4 The Regional Board may exercise its best professional
5 judgment in establishing permit terms. You'll see the
6 citation there on the slide is the NRDC versus USEPA
7 case and then also cited in the City of Arcadia case,
8 which this Board knows as well.

9 As the water boards have argued, the very nature of
10 best professional judgement dictates that the permitting
11 agency used its best judgment to interpret a standard in
12 the absence of regulatory guidance. And this
13 necessarily requires the use of discretion.

14 This discretion today is exercised by the Board in
15 choosing among the various approaches presented to you
16 today. You heard one from EPA. You've heard some from
17 the cities. You've heard it from the NGOs.

18 But using its considerable expertise, your staff has
19 evaluated the different approaches and is recommending a
20 revised permit that will accomplish the goals of the
21 Clean Water Act.

22 Additionally, this permit will enhance our community
23 and our environment. This is the most rigorous
24 municipal permit in the nation. I wanted to turn very
25 quickly briefly to the anti-backsliding claims that

1 we've heard from Steve Fleischli and the NGOs.

2 And in particular, I want to speak to just the issue
3 that he brought up about permits and in particular, this
4 permit granting additional time to comply. That was his
5 interpretation of the anti-backsliding. On a basic
6 premise, this permit as currently drafted does not
7 violate anti-backsliding provisions.

8 And it's clear from reading not only state water
9 board precedential orders regarding anti-backsliding and
10 the interpretation of the same but also permit
11 guidelines -- permit writer guidelines established by
12 EPA that this permit does not violate anti-backsliding.

13 But because I only have ten minutes left, I'm going
14 to follow through and keep going and let you know that
15 instead of additional time, this permit actually
16 provides a compliance plan or as Renee referred to it,
17 a compliance mechanism.

18 It's not a safe harbor. A safe harbor is where
19 essentially you just do your best efforts in perpetuity
20 and that's enough. This is actually an extremely
21 ambitious and beneficial approach to compliance with all
22 water quality standards this Board and this community
23 has spent many years putting into place.

24 And I'm glad that Steve actually brought up the
25 Philadelphia example, although it was done in response

1 to a question, because the Philadelphia example is the
2 leading example of an integrative watershed management
3 approach. It was actually approved by EPA, signed by an
4 anti-stoner who's the assistant -- acting assistant
5 administrative water.

6 And in September of this year, couple months ago,
7 Philadelphia and EPA resolved an enforcement order
8 pertaining to stormwater. In the order, Philadelphia
9 was given 25 years to install green infrastructure
10 throughout the city or at least part of the city that
11 they chose.

12 So in other words, Philadelphia has until 2016 to
13 develop this plan. As a comparison, Philadelphia is
14 approximately 134 square miles compared to the 3,000
15 square miles covered by this permit.

16 Significantly, Philadelphia was given four years to
17 develop their implementation plan under this agreement,
18 whereas 84 cities currently in your permit are given two
19 and a half years under the proposed plan. Here is a
20 quote pulled out from paragraph 16 of the order.

21 "The city in this order is going to manage the
22 first inch of rainfall by utilizing green
23 infrastructure. The plan will achieve the
24 elimination of the mass of the pollutants that
25 otherwise would be removed by the capture of 85

1 percent by volume."

2 Paragraph 18 in the same agreement sets forth EPA
3 support for the cities integrated plan. And I think
4 it's useful to quote. I quote,

5 "In seeking efficient, sustainable, integrated
6 solutions to wastewater and stormwater issues, the
7 city has fully embraced the application of green
8 stormwater infrastructure, asset management,
9 comprehensive integrated engineering alternatives
10 and analyses, triple bottom-line goal setting, and
11 a number of approaches suggested in the EPA's
12 integrated planning framework."

13 What's this integrated planning framework, you may
14 ask? This integrated planning framework can actually
15 be used as guidance to regulators and in this case the
16 regulated community. This slide shows you a copy of the
17 front page of this framework.

18 And as recently as June of this year, EPA issued this
19 guidance promoting an integrated framework that, quote,

20 "allows municipalities to balance Clean Water Act
21 requirements in a manner that addresses the most
22 pressing public health and environmental protection
23 issues first."

24 Again, I'll quote from this document signed by the
25 assistant administrator of water:

1 "Green infrastructure approaches and related
2 innovative practices that provide more sustainable
3 solutions by managing stormwater as a resource should
4 be considered and incorporated where appropriate where
5 they provide more sustainable solutions for municipal
6 wet weather control."

7 So this guidance from EPA recent not only encourages
8 the multi-benefit approach, it actually endorses your
9 staff's watershed management planning process. I will
10 now turn it back to Gary to close.

11 MR. HILDEBRAND: Okay. Thanks, Tracy. In closing,
12 although there are two future events that could affect
13 this permit, the State Water Board Receiving Water
14 Limitations workshop and the US Supreme Court case which
15 could result in the reopening of the permit, I wish to
16 state again that the County and Flood Control District
17 support the draft permit.

18 The permit provides and environmentally sound and
19 appropriate regulatory approach. It offers a
20 responsible approach for the permittees to meet water
21 quality requirements and also provide other benefits to
22 the community. We look forward to working with your
23 staff, environmental groups, cities, and stakeholders to
24 implement this integrated management plan process.

25 We believe this permit is a model for a visionary

1 stormwater management. It is a unique opportunity to
2 provide permittees the incentive to undertake these
3 highly ambitious projects. We urge your board not to
4 lose this opportunity and adopt this permit as proposed
5 by your staff. With that, I conclude and thank you. I
6 would like reserve our remaining time for any rebuttal
7 or closing statement.

8 MS. MEHRANIAN: I just want to see if any questions
9 that have to be clarifications, not discussions. Okay.
10 So thank you. Thanks a lot. We're going to move to the
11 City of Los Angeles. They have 25 minutes.

12 MR. KHARAGHANI: Good afternoon Madam Chair, Board
13 members. My name is Shahram Kharaghani, and I represent
14 City of Los Angeles. Actually, I have PowerPoint.
15 Before I start, the PowerPoint is designed -- before I
16 start my PowerPoint, actually I wanted to say -- I want
17 to say a lot of thanks to you, Regional Board and your
18 direction to Staff, you know, based on my two permit
19 negotiation. Mr. Unger, Ms. Smith, Renee, Aybar, and
20 the whole staff.

21 They have created a very transparent system, have
22 spent, you know, countless hours, you know, to meet with
23 every city just from to 2001 to 2012. I think this was
24 a paradigm shift in my mind. Just my two cents comment
25 there. Thank you to all of you.

1 The PowerPoint is prepared to provide you a
2 foundation and also, you know, why the City of Los
3 Angeles supports the watershed management plan. What
4 you see the first few slides is the journey that the
5 City of Los Angeles has taken with help of everyone
6 behind me. My environmental friends and also a lot of
7 municipalities.

8 This is city of Los Angeles, our beautiful city. As
9 you see, water is important part of our existence and
10 what we have to come. And in city of Los Angeles, we
11 take water seriously, and planning for water as one
12 water is the important part of our strategy.

13 We have embraced the green infrastructure and
14 watershed management plan. And as you can see, the
15 solutions and the benefits of watershed management plans
16 has, you see, it helping and augmenting of water supply
17 with use in flooding.

18 No more having weak pipes. We are having green
19 infrastructure. Energy was reduction, so there IRP, as
20 we have been doing in the city of Los Angeles for the
21 past 15 years, those already include some of the things
22 your staff is proposing. Integration, inclusion,
23 innovations, collaboration. What we call IRP.

24 This is the past how the system works. And as you
25 can see, this is the present. As Renee mentioned in a

1 section of all of these different interests coming
2 together for us to create an effective watershed
3 management plan. And I have heard it from previous
4 speakers coming together, both from financial perspective
5 and also from watershed management plan, is the way to go
6 and is the most cost-effective manner to move forward.

7 And that's what I see in the permit. We have a
8 number of green initiative. And as you can see, they
9 have not been in good market there because they talk
10 about Philadelphia. And when I see the things that we
11 have done in the City of LA is not done elsewhere, so
12 for the City and County, these are the things we have
13 done.

14 A green manner was that we have green streets, green
15 standards. These are standards 52 streets that
16 everyone -- somebody wants to do it and if they live in
17 city of Los Angeles, they have to follow our LID, second
18 to none. Almost zero tolerance for everything.
19 Rainwater harvesting, water quality matrix that we work
20 with everyone, you know, our NGO friends and others to
21 make sure that when we make the pollutive water a
22 resource, we have these standards to use it for
23 irrigation and other beneficial uses. Stream
24 protection.

25 These are some of our manuals. All of these are

1 online right now for people to use if they wish to.
2 Green street again is also one of the examples we have.
3 Again, these are the foundation why the City of LA is
4 embracing the watershed management plan as has been
5 proposed by your staff.

6 These are some of the streets that we have in the
7 city of Los Angeles using our green street standards.
8 These are standards that based on my knowledge, has not
9 been done in nation, and these are the ones we have here
10 on Internet for people to use.

11 Low impact development. Working with our friends and
12 partners, we created the LID that is almost, as I
13 mentioned, zero tolerance. 500 square feet or more,
14 they have to catch three-quarter inch of rain. And
15 infiltrate first or a strategy implementation.

16 If not, infiltration is not feasible because of
17 technical infeasibility; they must catch it and use.
18 Those are what we do in city of Los Angeles. Rainwater
19 harvesting program we have citywide right now that
20 people can advantage. Because often people ask us what
21 can they do. These are some of the things they could
22 do, everyone, in the watershed.

23 Example of rainwater harvesting. This is the water
24 quality standard we have for rainwater use, as you could
25 see. That we did with Department of Health that has

1 been sign for everyone to use. Stream protection.
2 There are few streams left -- natural streams left. We
3 have the standards right now. We have policy to protect
4 them.

5 These are again some of the example of green streets
6 that we have done. And these all incorporate the
7 integrative planning that I mentioned to you from
8 Oso Street to South Park. All of them you capture
9 rainwater, group the rainwater, and infiltrate and
10 cleanse the water.

11 And this green street again. This is the combination
12 having a street that used to be flooding. Using with,
13 again with our partners and the neighborhood, we made
14 the project not that only deals with the water quality
15 flood protection, it actually creates, you know, a
16 healthy neighborhood and the neighbors have taken pride
17 to take care of, you know, the -- take care of the
18 street themselves.

19 Another example of green street as you see over here,
20 before and after pictures. Garvanza Park rainwater
21 capture and harvesting. You know, another one, one
22 million gallons of infiltration gathering underneath the
23 park to capture the rainwater and use it for irrigation
24 and use.

25 South Los Angeles transforming a yard to a

1 constructed wetlands, you know, and making sure that not
2 only the project cleans the polluted water, it's
3 educational center plus couple of high schools that are
4 nearby and provides both park and habitat for a park for
5 the residents and habitat for the wildlife.

6 West Side Park rainwater assistant. Using the
7 easement underneath the Los Angeles Department of Water
8 and Power easement, creating a park again while capturing
9 and infiltrating rainwater. These are some of the
10 examples just to show you the foundation and when we
11 support watershed management plan, it's based on these
12 type of projects we have done for the past 15 years.

13 Other completed projects as you can see. Not to go
14 to all of them, but these are some examples future
15 projects that we are collaborating. Again, it mentions
16 (inaudible). We're working with the County of
17 Los Angeles and others. That's another, you know, market
18 projects that we have.

19 We have Machado Lake projects at \$120 million of your
20 tax money. We have Echo Park project at \$80 million of
21 your tax money. And the other, you know, and the
22 natural park. All of these are capturing rainwater from
23 tributary areas that are up to this side, infiltrate and
24 feasible. Otherwise, capturing and using for the
25 beneficial uses.

1 Proposition O, as you see, \$500 million for the past,
2 you know, since 2000 -- 2004, and we have number of
3 projects, you know. All of these have made the city of
4 Los Angeles beaches from F to D's (inaudible) throughout
5 the year. This is what Prop O has done and cities with
6 other projects we have used Prop O.

7 Now, as I said, this project shows that we have been
8 doing integrated planning. And we continue doing that.
9 Our interpretation of permit as it is before us right
10 now, it is continuation of what we have done in the city
11 and having everyone else also involved.

12 This is the issue of post-water quality, you know.
13 This is leveraging all of our funds right now, as you
14 see the slides, water quality, street improvement, water
15 funding, park funding, and others that we have been
16 using to leveraging all of resources for these projects.

17 Again, some of the matrix to show you that we have a
18 lot of parties in each project. And that's what we
19 intend to do for future. Same goes for that project,
20 you know. These are, again, matrix of the projects to
21 show that we have been doing this. This is the
22 foundation that we know we're taking off for this new
23 permit.

24 Now, as a result of that foundation and as a result
25 of what the city has done for the past, you know,

1 15 years, we are supporting the watershed management
2 plan or enhanced watershed management plan. Our
3 intention is that we start with all of our
4 municipalities, with all of our environmental
5 organization, with all of our friends, whoever wants to,
6 you know, come in and help us, you know, we would not
7 exclude them to bring them in to make sure that, you
8 know, we work together to create a plan.

9 And the plan would be based on very similar concept
10 that I showed you right now. When feasible, we would
11 make sure that we do enhanced watershed management plan.

12 When not feasible, we would make sure we have
13 evenly-distributed projects through scientific rigorous
14 monitoring to make sure that those distributed projects
15 in addition to what we call, you know, the minimum
16 control measure in the permit collectively work together
17 to meet those interim limits for TMDLs for what I called
18 bucket one. And non-TMDLs and expedite -- and expedite
19 meeting those non-TMDL universe even faster in my mind
20 while creating this watershed management plan or
21 enhanced watershed management plan.

22 A lot of the speakers already talked about that. It
23 was intake rates, the water supply, water quality. And
24 repeating that again, I think the (inaudible) sometimes
25 makes people, you know, to think about these things a

1 little bit more, comprehend more.

2 This is what USEPA has endured. We sat down, City --
3 like myself and the other -- with Mrs. Stoner not too
4 long ago. And John and also Cindy, and we talked about
5 intake rate in the watershed management plan and using
6 green infrastructure. That's what we're following,
7 heeding to that voice, and that's what we're doing.

8 Efficient effective plan is again -- this is the
9 business model right now. The watershed does not, you
10 know, does not recognize, you know, political
11 boundaries. So working together, obvious it seems, you
12 know, intuitive in my mind that would be more
13 cost-effective, encourages various MS4 permit, you know,
14 to collaborate work together.

15 It provides that flexibility every watershed is a
16 little bit different, provides the flexibility to
17 customize the MS, but we are not -- we are not missing
18 the end point.

19 The end point is meeting the water quality standards
20 that we have an objective and TMLs, water quality based
21 effluent imitations. So those are our goals for and I
22 believe we have the scientific, you know, regular for us
23 to prove it. For what's consistency, I have given you
24 number of TMDLs already that I have used the same
25 approach so the watershed management plan or enhanced

1 watershed management plan brings all of them under one
2 umbrella.

3 And then, you know, we have obviously the funding as
4 you know before -- before the waters in that shed and
5 hopefully, you know, being optimistic person I am, that
6 would also pass so we had a good source of funding so
7 the issue of cost would go away.

8 Now, as far as the issue of the how we are going to
9 get a look at the plan. We already went through the
10 detail, you know, is model drawing. Now, we have
11 similar model. We have also access to county model. I
12 want to again repeat what -- how these models are going
13 to come together.

14 We going to have technical to ensure this
15 (inaudible). This is reasonable assured analysis. In
16 my simple language, it means that we are going to do
17 quantitative analysis to make sure the plan element that
18 we have submitted to are going to meet the water
19 quality, you know, wasteload allocation.

20 That's what it means; the first one, reasonable
21 assurance. We have the technical advisory committee,
22 you know, of whoever wants to participate from whatever
23 agencies to help us if they want to input.

24 The process is going to be transparent; is going to
25 be coming before you; is going to have, you know,

1 members of our, you know, communities and together we
2 could create that plan and ultimately come before you
3 for you to, you know, to come approve or modify.

4 So the process to deliver watershed management plan
5 and enhanced watershed management plan based on the same
6 rigor, both of the plans are going to meet the water
7 quality standards. So as a result of that, both
8 processes include the same level of technical rigor.

9 These are completed modeling that went through the
10 details. It includes inclusive public participation
11 that technical advisory members are involved in approval
12 process.

13 These are the rigor that both plans are going to go
14 through. As a result of that and the story and journey
15 of the city of LA, we are supporting the watershed
16 management plan. So this is just what I just indicated
17 that is strongly support the plans because we believe
18 that the plans meet the water quality wasteload
19 allocation both for what I call the Bucket 1 TMDLs
20 Universe.

21 And for the bucket 2 and 3, which is non-TMDL, the
22 303D list, and other pollutants, in my view the water
23 management plan is expedited. Meaning those numbers, in
24 case there is any kind of, you know, any kind of
25 variation and exceedance.

1 Now, as far as the City of Los Angeles also supports
2 the flexible monitoring program. Because of our size,
3 I've already indicated in my last, you know, testimony
4 to you, we are just -- just huge, you know. Los Angeles
5 in 2000, you know, outfall right now. June and dry
6 weather at any given time, any of them can have a run
7 off.

8 So as a result if that, we want a flexible
9 integrated, you know, watershed-wide monitoring plan
10 that supports our watershed management plan or enhanced
11 watershed management plan that I described to you. So
12 that's what is required to support that plan. And this
13 would also provide a real opportunity for
14 cost-effectiveness for us to monitor 2005 that are dry
15 and not spend the money for the implementing project
16 that's not make sense.

17 This is some of the time. Just so you understand,
18 obviously there is all of these within the
19 municipalities within the watershed. We have to create
20 some kind of, you know, agreement. And all of these
21 things within the bureaucracies that we have to take
22 side.

23 This is what happened in Proposition O. Any other
24 projects that we do in this work we call capturing
25 improvement program. We create concept report. Those

1 concept report goes to predesigned that identifies
2 alternative ways of, you know, implementing concept
3 reports. Then we prepare design and specification. We
4 go through advertise public, you know, public, you know,
5 competitive bidding. We go to out board construction
6 and the project is completed. Then we have to go to a
7 phase (inaudible) for a phase green and new technology
8 what we call optimization. It takes time to do all of
9 this.

10 And obviously, last comment is that, you know, when
11 the funding initiative, you know, will pass in next
12 year, hopefully, you know, we could get -- come back
13 together and prioritize or expedite some of the actions
14 we are doing.

15 In summary, we support the watershed management plan
16 and enhanced watershed management plan as it is
17 according to the -- written by your staff. Because of
18 the same standards have to be made by both plans. In my
19 mind, there is no different standard. There's only one
20 standard, which is the standard of water quality.

21 Standards are objective. Both plans are intended to
22 meet them. They go through the same technical rigor as
23 far as computer modeling and technical and quantitative
24 analysis. They have the same technical advisory
25 requirements. Whoever else wants to participate, our

1 processes are always open and transparent and include
2 public participation same level of what go through your
3 Board right now.

4 As a result of that, they should enjoy the same
5 standard. Does not make sense to have double standards
6 for the two plans that have the same requirements. So
7 the request, you know -- and, of course, the last request
8 is implementation. Coming back to get the -- pending
9 the result the AB2554. And that's the negotiation that
10 we had participated once a year with the kids that we
11 educate almost in June 1st of every year. That
12 concludes my remarks. Thank you.

13 MS. MEHRANIAN: Thank you very much. Thanks for your
14 testimony. Now, we have just persons' comments that
15 we're going have two minutes from here on for each
16 testimony. So I'll call you. First speaker will be --

17 MR. UNGER: (Inaudible)

18 MS. MEHRANIAN: Yes, that's separate. For now, we're
19 just going with the testimonies. Ron Bow, City of
20 Monrovia.

21 MR. KHARAGHANI: Madam Chair, I -- I want to reserve
22 the remainder of my time just in case. Thank you.

23 MS. MEHRANIAN: Sure. The next person should line up
24 probably. Is Elroy Kiepke.

25 MR. BOW: Good afternoon Madam Chair, Board members.

1 My name is Ron Bow. I'm the public works director for
2 the City of Monrovia.

3 The City believes that the County's proposed enhanced
4 watershed management program looks promising as a
5 potential cost-effective means of complying with the
6 permit. However, in order to be supportable, the
7 thought that the permit must contain certain provisions
8 that operate to immunize permittees against permit
9 violations and third-party lawsuits during the entire
10 term of the permit so long as permittees are complying
11 in good faith with terms of the permit's watershed
12 management group program.

13 The Regional Board staff has proposed such a change
14 regarding watershed management plans and protection for
15 the permittees that file a notice to intent. Notice of
16 intent to create a watershed management plan. That
17 change should be adopted because it protects permittees
18 who are acting in good faith.

19 While we believe the watershed management program as
20 currently proposed is a major step in the right
21 direction, the City still believes the best course of
22 action for determining compliance with the permit to be
23 an unconditional BMP-based iterative process that's not
24 tied to the watershed management plan.

25 We feel we're close, but we're not quite there yet.

1 The City requests 30 to 60 days extra time to continue
2 to work with staff to make sure the permit is complete
3 and perfectly coherent and harmonious regulation. We
4 have come a long way, but we need a little more time to
5 finish the job. If the permit is adopted today, we hope
6 that the terms of the second revised draft tentative and
7 adopted permit approach is sensible and creates a clear
8 standards for cities have -- for cities to have a hope
9 of actually being able to comply with.

10 I thank you for your time and attention, and I would
11 personally like to thank staff for all their hard work.
12 Thank you.

13 MS. MEHRANIAN: Thank you, Mr. Bow. The next speaker
14 actually will be Andy Lipkis. If you want to come up,
15 please.

16 MR. LIPKIS: Madam Chairman and members of the Board,
17 I, too, would like to thank staff Mr. Unger, Renee, and
18 Aybar for meeting with me after the last hearing on
19 October 5th.

20 Several of your members asked questions about cost.
21 And as Mr. Unger and Dr. Horner had mentioned today,
22 there's no clear answer on what the cost is, but there
23 are some examples of what costs have been for cities
24 during this current permit process.

25 As John Dettle from Torrance mentioned, his city has

1 gone through a watershed management plan for a very
2 limited topic such as nutrients and toxics, and that
3 plan cost his city of Torrance \$364,000. It was a
4 three-year contract, and that's a substantial amount of
5 money for one city to go through.

6 The Malibu Creek watershed also prepared a watershed
7 management plan dealing primarily with bacteria. That
8 plan cost the city about -- or the cities in the
9 watershed about \$800,000, and they have an additional
10 \$300,000 that they're facing to upgrade the watershed
11 management plan to address the additional requirements
12 of this new permit.

13 In addition, at the last hearing the gateway project
14 was mentioned several times. In that project, we put in
15 over 9,300 inserts to capture trash in 16 cities. That
16 money was granted -- a grant though the state water
17 board, but the cities are faced now with a maintenance
18 cost that will range each year from \$100 to \$250 a year
19 based on the amount of rain. So thank you.

20 MS. MEHRANIAN: Thank you. For the record,
21 Mr. Kiepke was representing Paramount, Rosemead, and La
22 Canada. Mr. Lipkis representing TreePeople.

23 MR. KIEPKE: Good afternoon. Thank you for this
24 chance to hopefully quickly address some of the
25 concerns.

1 I think the controversy is not about the approach of
2 green infrastructure. As someone who's been a partner
3 for the city, the county, a proud partner in helping
4 develop the watershed management LID approach for the
5 last 20 years. We have extremely high confidence that
6 this can work.

7 The challenge is a technical one that we have to
8 design these to achieve standards. Without saying that
9 they must achieve a standard of water quality as laid
10 out in the permit, this potentially becomes green
11 washing.

12 We have to understand that all these incredible BMPs
13 of green infrastructure can and do function, but they've
14 got to be designed to perform the water quality
15 objectives, the water conservation objectives, the flood
16 protection objectives. And they can be.

17 But if we don't have standards to reach, it's kind of
18 like playing a football game, but without a clear goal in
19 mind. How do we know if we've achieved the touchdown or
20 not after spending millions or hundreds of millions of
21 dollars? And so the issue is how do you hold everybody
22 accountable to the game?

23 We know this challenge well; we couldn't have done
24 this Sun Valley project knowing it was going to cost
25 \$200 million until the Regional Board came to the table

1 as a partner to make sure that the design would in fact
2 reach the water quality objectives. But we have to have
3 those objectives, and it's your job to make sure that
4 we're held to them.

5 So that's the key issue. You can't let go of the
6 performance objectives and the plan. And if you do,
7 then we risk designing beautiful, wonderful BMPs that
8 aren't built designed at scale to get the job done.
9 Thank you.

10 MS. MEHRANIAN: Thank you. Mr. John Hunter
11 representing Downey, Norwalk, South Gate, Monterey Park.
12 Followed by Dr. Jason Wen from City of Downey.

13 MR. HUNTER: Good afternoon, Madam Chair, members of
14 the Board. I've got a brief slide presentation, but I
15 think I will probably forego that although I'll leave
16 that slide up there because I do have only two minutes.
17 If I have some extra time, I will go through that.

18 And I'm up and here basically to address one item. I
19 want to speak in support of the changes to the
20 compliance with receiving water limitations. And on my
21 red line version, that is page 53, item 2D and page 54,
22 item 3D.

23 And basically, I think we all recognize that the
24 watershed management programs are going to be extremely
25 costly for cities, and the are -- obviously to all those

1 that have been listening to this today -- can be very,
2 very expensive.

3 I want to talk about one very small item. We've
4 heard Gary Hildebrand from the LA County Flood Control
5 and the City of LA talk about the big picture. I want
6 to talk about just small picture. Right now under the
7 current phrase -- the current wording of the permit, if
8 I go out and take a sample of a discharge in the street,
9 I don't know where it's coming from; I don't know what's
10 in it.

11 If I take that sample and I can't identify a source,
12 the City is going to be responsible for that. Will the
13 Regional Board issue me a notice of violation for one
14 sample? Probably not, but they could. Am I going to
15 get sued by the environmental community for that one
16 sample? Probably not, but they could.

17 So when I want to take that one sample to find out
18 what my -- how my BMPs are working, how efficient my
19 program is, I go to my director and I say, "I'm going to
20 take one sample." And he says, "Is there a likelihood
21 I'll get sued?" Not likely, but you could.

22 And that's why we have to have this new wording in
23 there. This new wording protects me because as part of
24 watershed management plan, I can take that sample
25 without fear. I can see how things are working. I have

1 a better ability to investigate elicited discharges. We
2 have to have this wording in there. It makes a program
3 better. You cannot have a -- I'll leave it at that.
4 Thank you.

5 MS. MEHRANIAN: Thank you. Jason Wen, followed by --

6 MR. WEN: Good afternoon. Jason Wen from the City --

7 MS. MEHRANIAN: Sorry. You'll be followed by

8 Mr. David Nahai.

9 MR. WEN: -- City of Downey utility superintendent.
10 You know, I put a title over here as (inaudible)
11 numerical standards kind of key since I listen to many
12 talks. I didn't see any kind of chemical data. I'm
13 trained as a chemist. I want to share something to
14 propose question, make everybody sick.

15 You imagine -- fast forward. Now is the year 2024.
16 January 11th, I woke up; try to take a sample. Sorry.
17 My time's -- stop the clock.

18 I'm year 2024, you can tell. Yeah. Is it backward?
19 Okay. On page two LA River, there's a cover standard
20 have to meet. It's 22PPB. Okay. Next. Help me.

21 Okay. So I grab a sample from outfall. I don't
22 think there's any -- that much of outfall monitoring.
23 But again the water is from, you know, from the outfall.
24 Go ahead. Well, the basic question: Where does water
25 come from in the dry weather days? Either from hydrant

1 flushing, irrigation loss, water pipeline leaks. Bottom
2 line: Is from discharge of drinking water system.

3 Okay. What's happened? Backward. Okay. Here's the
4 data. Drinking water in cities has been sampled for
5 lead and copper for 20 years. This is the data we have
6 2011, the lead and copper example. These samples
7 throughout the whole drinking water system.

8 I ranked copper from highest to lowest. You look at
9 a number over there. Lowest among the 50 side is 16.
10 Highest is 380. Number two lowest side is already over
11 standard. In the dry weather, standard is a 22. The
12 main question next is: Does dry weather pretty much --
13 question is: Salt water already exceeded standard in
14 dry weather. How are we going to comply with the limit?

15 So I hope I have an answer, but again I want to be
16 have enough brain here to put an answer to make
17 everybody in compliance. So there's zero discharge BMP
18 or benefit of use thank you.

19 MS. MEHRANIAN: Mr. Dave Nahai, followed by Mr. Gold,
20 Mark Gold.

21 MR. NAHAI: Good afternoon Madam Chair, members of
22 the Board. Thank you for giving me the privilege to
23 address a few comments to you today. I'm here to urge
24 you not to adopt the so-called safe harbor language and
25 not to change the receiving water limitations language

1 that appeared in the 2001 permit. And I'm here as a
2 member of the Board at the time that adopted the 2001
3 permit.

4 You have a fantastic staff, diligent, hard working
5 and longsuffering. They put up with a lot every day.
6 And they've crafted here today a compromise, but I
7 believe that in their heart of hearts, they would rather
8 you stuck to the 2001 language and for a number of good
9 reasons.

10 First, we have a backsliding issue here. It's
11 undeniable. Either the new language weakens the 2001
12 RWL verbiage, in which case it constitutes backsliding or
13 it is designed to accomplish exactly the same results, in
14 which case the language -- the new language is
15 unnecessary.

16 But there's also the issue of certainty. Deutsche
17 Bank said that the hallmark of a successful regulatory
18 program of any market are transparency, longevity, and
19 certainty. Certainty. The 2001 language has been
20 around now for 11 years. Everybody knows what it is.

21 It's been challenged in court numerous times. Some
22 of the permittees have poured millions of dollars of
23 taxpayer money down the litigation drain really to no
24 avail. That language has stood the test of time. It
25 has stood the test of the law.

1 To tinker with it at this point raises the scepter of
2 a patchwork of individualized programs and regimes which
3 may prove impossible for staff to vet, monitor, and
4 enforce. It will engender confusion in the marketplace
5 from one regime to another, and it also opens the door
6 to additional wrangling, argument, and do I dare even
7 say the word "litigation." I urge you not to adopt the
8 safe harbor language. Thank you.

9 MS. MEHRANIAN: Thank you. Thank you. Mr. Mark Gold
10 followed by James Alamillo.

11 MR. GOLD: Hello. Before I get started, can I bum
12 two minutes off the enviros?

13 MR. FLEISCHLI: We're fine with that if the Board is.

14 MS. MEHRANIAN: Okay.

15 MR. GOLD: Okay. Jut checking. Fine. I'm Mark --
16 thank you. I'm Mark Gold. I'm seeking help for my
17 ongoing addiction to regional water board hearings.
18 Thank you for your indulgence.

19 We've come so far on water quality over the last 25
20 years. No more dead zones in the Bay, no more fish with
21 tumors or fin rot, and cleaner and safer beaches during
22 the summer months. However, the lack of progress in
23 water quality problems caused by stormwater has been
24 both disappointing and damaging to public health,
25 aquatic life, and the coastal tourism economy.

1 Although this permit has some admirable elements, my
2 comments briefly focus on a couple of areas. All
3 applicable TMDL requirements must be included in the
4 permit. Although your staff has inserted completed TMDL
5 requirements within the permit, they have not made the
6 interim TMDL limits just as enforceable.

7 Both final TMDL and TMDL interim limit requirements
8 and WLAs must be clearly required and enforceable in the
9 permit with no safe harbors or iterative processes to
10 postpone compliance deadlines. The stormwater permit
11 is not the place for TMDL deadline relief. That's why
12 TMDLs can be reopened by the Board at time which you
13 guys have done on the beach bacteria TMDL.

14 The second area is the area of receiving water
15 limits. Complying with all receiving water limits 100
16 percent of the time during wet weather is indeed
17 difficult. However, allowing a safe harbor under a few
18 too generalized wimps is a recipe for continued
19 inaction.

20 Really, wimps? Is that what we are? The wimp must
21 require how cities will meet TMDL/WLAs interim TMDL
22 limits by legally required deadlines. That's not stated
23 clearly within this. Also, the wimps must require
24 compliance programs with milestones and time frames on
25 how receiving water limits will be met. That's not

1 required in this permit.

2 Without true accountability with enforceable
3 milestones, these wimps provide a safe harbor for
4 discharges. Wimps can't be open-ended. That's how it's
5 written within the permit. A strong, enforceable permit
6 that your staff can provide compliance assurance for is
7 critical to achieving clean water and clean beaches.

8 I'm sure you're aware that this is basically going to
9 quadruple the workload of your staff on dealing with
10 these wimps. Just as importantly, this permit will
11 catalyze efforts to change our stormwater
12 infrastructure from gray to green thereby providing the
13 additional benefits of augmented local water supply,
14 improve flood control, and more livable and sustainable
15 communities.

16 So obviously, the importance of today's decision
17 cannot be underestimated. And I'm sure everybody in
18 this room -- even though we can't agree on the permit --
19 can agree we all support the Clean Water/Clean Beaches
20 Initiative. So obviously funding would really make a
21 big difference here.

22 Another thing I wanted to point out was the LA's
23 national award-winning IRP is an enhanced win. And so
24 that's been in place for over a dozen years. And as
25 admirable a job as the City has done in many elements of

1 this, nobody can tell that you they have actually
2 implemented it.

3 And so it does tell you that planning is great and
4 frankly, planning should have occurred over the last
5 22 years, but the creation of a plan does not protect
6 public health or protect the environment. And so please
7 realize that the way this is written right now is far
8 too general and does not do what's necessary to reach
9 those long overdue goals. Thank you.

10 MS. MEHRANIAN: Thank you. James Alamillo, followed
11 by Jason Weiner.

12 MR. ALAMILLO: Good afternoon, Board. Thank you for
13 the time. My name is James Alamillo. I'm a resident of
14 Culver City. Please view my comments today as more of a
15 cautionary tale. I'm deeply wary of the permit's
16 proposed watershed management plan or alternative
17 enhanced watershed management plan to actually protect
18 the beneficial uses of this region. And why is that?

19 I doubt that these plans can be effectively developed
20 and implemented to achieve their objectives. And why
21 again? Because let's look no further than the Regional
22 Board's OR4-2010-0021WDR and water quality certification
23 for Los Angeles County Flood Control District. In that
24 permit, it required that a feasibility study be completed
25 every year for five years for each watershed that it was

1 going maintenance in.

2 That means one study plan per year with the first
3 study plan being the LA River. These studies were, in
4 theory, supposed to determine impact from channel
5 maintenance to water quality, TMDL compliance, habitat,
6 restoration opportunities, amongst other things. Yet
7 we're now in the third year, 2012/2013 of that permit,
8 and not one of those studies has been completed.

9 I would suggest you ask your staff -- even ask the
10 LA County Flood Control Department to come up and state
11 where in this plans and where are the studies? Because
12 they are in fact watershed management plans, in theory.

13 So we can't get these studies or work plans in
14 another permit. What makes me believe that the MS4 will
15 be achievable? So I caution the Board and the staff on
16 the reliance of watershed management plans and enhanced
17 watershed management plans as a mechanism to address,
18 solve, or protect water quality resources because such
19 efforts have yet to be materialized or produced, and no
20 meaningful data to inform your other programs such as
21 the four one. So -- thank you:

22 MS. MEHRANIAN: Thank you. Jason Weiner, followed by
23 Gerold Greene.

24 MR. WEINER: Hi. Good afternoon, Regional Board.
25 I'm Jason Weiner on behalf of Wishtoyo Foundation; its

1 the Ventura Coastkeeper program. We're commenting in
2 opposition for the safe harbor provisions in the most
3 recent tentative permit because of these not only LA
4 County waterways exposed, but also Santa Clara River
5 waterways downstream -- the Santa Clara River downstream
6 and LA County as well.

7 We feel that there's a lack of mechanisms for
8 enforceability of the receiving water limitations due to
9 the inclusion of the safe harbor provisions that are not
10 only illegal under the Clean Water Act and not
11 protective of the waterways for two reasons.

12 First, there's no teeth in the watershed management
13 plans to make them enforceable. They're just plans
14 about enforceable limits that contain no real incentive
15 to protect waterways and no assurance BMPs will work.
16 Secondly, waterways that are not 303D listed are not
17 prioritized for protection in the watershed management
18 plans.

19 So in effect, there's no known mechanisms to protect
20 them in the permit. Keep in mind that waterways that
21 are not 303D listed aren't necessarily not impaired.
22 For instance, oftentimes we run a process in Ventura
23 County. I'm sure it's the same issue in all the LA
24 counties, streams, and coastal waterways. But
25 oftentimes, there's a lack of water quality data for

1 rivers and streams in coastal waters.

2 For instance, Ventura Coastkeeper's most recent 2012
3 submission for 303D listings to the state water board
4 submitted enough data to support listings for 29
5 additional 303D-impaired waterways. And what this
6 means, it takes essentially four to six years from the
7 time a waterway first starts -- or from the time a
8 waterway is first detected as impaired.

9 Or first starts to be detected. Four to six years to
10 get that waterway listed on the 303D list. So -- and in
11 fact this permit does not provide any protections for
12 those waterways that are yet to be 303D listed either
13 because the data hasn't been collected yet or because
14 there's a new impairment.

15 And specifically to Ventura County, this Board just
16 approved a WER401 surf, a Newhall project. And as you
17 all know, the Newhall project's going to add 66,000
18 more people to the river if a new impairment's detected.
19 There's no mechanism in this permit to protect the Santa
20 Clara River downstream from LA County, and we feel
21 that's illegal in that sense as well. Thank you.

22 MS. MEHRANIAN: Thank you. Gerald Greene and then
23 after this, we're going to take a break for five minutes
24 and then come back.

25 MR. GREENE: Two minutes? I'll be brief. First,

1 thank you to staff. I appreciate that Leg Lake is
2 heading downstream into the right watershed. Thank you
3 for the change. Modify resource -- my major concern is
4 dealing with the resource assurance assessment.

5 I am concerned that the program that is being
6 suggested is a little too complex for most of the cities
7 to be utilizing. I appreciate today hearing that the
8 county will make it available to the cities.

9 To the best of my knowledge, that has not happened
10 yet, so we really don't know what we're getting into
11 yet. And I hope that very soon we can find out where it
12 will be available and that we get the help of having a
13 manual to help deal with the programs.

14 Having worked for a city for a long time, I got to
15 see many watershed level as well as local level plans
16 come through. And unfortunately, they keep coming back
17 with ideas such as we're going to put the BMPs on public
18 property right under city hall, right under Department
19 of Public Works headquarters, right at the school
20 district, which has no motivation to participate in the
21 process. So there needs to be more than one way.

22 Signal Hill earlier today suggested some revised
23 wording that would allow a little more flexibility.
24 It's fine that that program be used, but there should be
25 a wider variety of choices that can be used and accepted

1 in doing these RRA -- RAAs. Excuse me.

2 Let's see. I am -- also would like to make sure that
3 we have an ability to deal with modeling at the local
4 catchment levels. They -- a watershed model is truly
5 important, but when you're thinking about drainage so
6 often you're thinking of a catchment, a city a couple of
7 blocks to maybe a square mile or two.

8 We need to be able to model at those levels, not just
9 the whole watershed level. Finally, as a very quick
10 statement to something that was said by Mr. Fleischli
11 earlier, there actually is a lot of cities who are very
12 concerned about the litigation between the County and
13 NRDC because they have to sign the tolling agreements,
14 so they don't know the results of that tolling agreement
15 signature until after the suit's done. Thank you.

16 MS. MEHRANIAN: Thank you. We're going take a
17 five-minute break, and we'll back be back at 3:30 to
18 continue.

19 (Recess)

20 MS. MEHRANIAN: Please take your seats so we can
21 continue. We'll continue with the testimonies. We have
22 Vivian Castro from City of Covina, followed by Andre
23 Monette, City of Claremont.

24 MS. CASTRO: Good afternoon, Madam Chair, Board
25 Members, and staff. My name is Vivian Castro. I'm the

1 environmental services manager with the City of Covina,
2 a city of 47,000 in the San Gabriel Valley and almost to
3 the eastern border of that.

4 I want to thank staff first of all for their
5 commitment to making this the best permit possible.
6 City of Covina does support the alternative watershed
7 management and the enhanced watershed management plan.

8 But to be honest with you, we don't know which of
9 these avenues, various compliance avenues we're going to
10 pursue. As Mr. Dettle explained and also Mr. Horner, we
11 don't really know what the costs are of the proposed
12 permit. So it's very difficult. I won't reiterate all
13 of the budget constraints that cities are under.

14 But let me point out to you -- I mean, in the City
15 of Covina, I have three people in my office including
16 myself who are responsible for air quality, trash,
17 recycling, hazardous waste, industrial waste, and
18 stormwater and energy programs. We did ten programs
19 just this year.

20 So just to give you an idea what cities are really up
21 against, and as you go through this permit, just take a
22 look and think of the average city -- and I think Covina
23 is pretty much an average city under this permit -- what
24 challenges we're under. Not just physical challenges,
25 but challenges in terms of staff resources and

1 knowledge.

2 So although it does sound like these enhanced
3 watershed management programs program is a good
4 alternative, as I see the presentations up there from
5 the city and the county, I can assure you we don't have
6 that in-house expertise to do the analysis that's
7 required.

8 So we would appreciate more time to be able to sit
9 down and talk and analyze and understand really what our
10 alternatives are, what our options are. So we thank you
11 for your time and we do ask -- like to weigh in with the
12 other comments made by the LA Permit Group. Thank you.

13 MS. MEHRANIAN: Thank you. Andre Monette from City
14 of Claremont, followed by Gerhardt Hubner, Ventura County
15 Stormwater Program.

16 MR. MONETTE: Good afternoon, Madam Chair, members of
17 the Board. I'm Andre Monette on behalf of the City of
18 Claremont. I'm just here very briefly to talk about a
19 corporation of middle Santa Ana River bacteria TMDL
20 into this permit. Portions of the City of Claremont
21 drain to the Santa Ana River watershed. And as a result
22 of that, the city was included in the bacteria TMDL that
23 was developed by Region 8 for the middle Santa Ana River
24 watershed.

25 The TMDL has been incorporated with this permit, the

1 Draft LA Regional Permit through attachment R, and we've
2 been working with staff and I think we've been very
3 successful with working with staff from both regions on
4 having regulation of discharges and bacteria that end up
5 in the Santa Ana River watershed regulated by Region 8.

6 However, there's a couple milestones that we still
7 need to cross before that can be completed. The way the
8 permit is drafted at this point, it looks like those
9 milestones would come after permit adoption. And so we
10 need to make sure that we are maintaining our position
11 and our overall objection to the corporation of a Region
12 8 permit and a region -- or a Region 8 TMDL -- excuse
13 me -- in this region before the current permit.

14 So we appreciate the time staff has dedicated to
15 this, and believe we have a very positive relationship
16 on this. And we believe everything will work out, but
17 again we had to voice our objection. Thank you.

18 MS. MEHRANIAN: Thank you. Gerhardt Hubner, followed
19 by Joyce Clark and Dan Guillory of MLUD.

20 MR. GERHARDT: Good afternoon Madam Chair, Board
21 members, members of the audience. I'm Gerhardt Hubner,
22 deputy director of Ventura County Watershed Protection
23 District, representing again today Ventura countywide
24 stormwater program. It's ten cities, the County
25 incorporated and, district.

1 Thank you for the opportunity to speak today and
2 kudos to your staff and executive officer for where
3 you've gotten to today. It's really quite an
4 accomplishment.

5 I'm here to talk about some of the lessons learned
6 in Ventura County and our stormwater permit, how they
7 apply to this draft permit you have before you today,
8 and perhaps some unintended consequences. You heard
9 about the need for more time with provisions.

10 To the degree that you can get the permittees more
11 time for ordinance changes, staffing, agreements,
12 watershed management plans, that's very helpful. It
13 was very helpful to us in being successful with what
14 we needed to accomplish.

15 Second, you heard a lot about watershed management
16 plans. Let me emphasize, that's the future. We're
17 doing part of that in Ventura County. We need to
18 have -- to continue that, but it needs to be
19 incentivized, not disincentivized.

20 For example, in our permit, we had a provision for an
21 offsite mitigation program. There was also provisions
22 for offsite criteria because of the way those were
23 prescriptive. In one of the minimum management measures
24 permittees focused on that. I could not have an
25 offsite mitigation program anymore.

1 That's similar to your enhanced program the LA County
2 Flood Control District is a promoting. So again,
3 unintended consequences. So incentivized, not
4 disincentivized. It was a missed opportunity.

5 In our county, we would have love to have an enhanced
6 watershed management program. We don't. I'm going have
7 to wait three years. Again, we support staff's proposal.
8 Your staff gets it. We have a lot of exciting things
9 going on in Ventura County. We welcome you and hope to
10 see you there again. I'm happy to answer any questions.
11 Thank you.

12 MS. MEHRANIAN: Thank you. Joyce Clark, Dan Guillory
13 of MLUD, followed by Jewel DeGuzman, Generation Water.

14 MS. CLARK: Good afternoon. Joyce Clark,
15 Metropolitan Water District for Southern California.
16 I'm here to provide a letter that that's from our chief
17 operating officer, and I'll just quickly read the letter
18 for you. It's addressed to Mr. Samuel Unger.

19 "The Metropolitan Water District for Southern
20 California appreciates the consideration that you and
21 your staff took to to address the changes to the
22 tentative MS4 permit that provides operational
23 discharge capabilities for drinking water suppliers.

24 Additionally, Metropolitan supports and
25 acknowledges the extensive MS4 staff/stakeholder

1 process that and your staff implemented. The
2 tentative MS4 permit helped provide the needed
3 protections for the coastal watersheds of the County
4 of Los Angeles."

5 Thank you for listening to and addressing
6 Metropolitan's concerns and for the consideration given
7 to the water community. Metropolitan believes that a
8 satisfactory solution was reached, which will allow
9 Metropolitan to operate reliably and continue to service
10 the Southern California region with high quality water.
11 Metropolitan looks forward to working with you on
12 implementing the permit. I'll provide copies for the
13 Board.

14 MS. MEHRANIAN: Thank you. Jewel DeGuzman, followed
15 by Jerry Burke.

16 MS. DEGUZMAN: Thank you for the opportunity to
17 address the Board. My name is Jewel DeGuzman and I am
18 representing Generation Water. Generation Water is a
19 social entrepreneurial organization that provides water
20 use efficiency services to water agencies, large
21 landscape managers, and homeowners.

22 Over the past two years, Generation Water has trained
23 and employed over 250 local youth and young adults in
24 low impact development practices like installing run off
25 capture systems, native landscaping, water efficient

1 irrigation systems, and rainwater gardens at the bargain
2 price of \$3 per square foot.

3 We've also conducted over 35 campus retrofits and
4 installed over 140 rain gardens for LADWP customers
5 alone. Based on the multiple benefits that low impact
6 development yields, our partners help us identify
7 further LID opportunities and the economic stimulus
8 inherent in our work.

9 For example, community conservation solutions
10 identified over 300 public parcels in the upper LA River
11 watershed that were either public schools or vacant and
12 suitable for run off capture and treatment. They
13 focused only on public lands, but the possibilities for
14 LID opportunities on private lands and across watersheds
15 are exponentially greater.

16 Additionally, we teamed up with Public Works
17 Department agencies and the economic roundtable to
18 assess the economic stimulus. We looked at 55 local
19 water efficiency programs, 24 four of which were
20 strictly stormwater management projects.

21 We found that these investments generate anywhere
22 from 13 to 17 jobs, along with yielding \$2 of economic
23 stimulus for every \$1 spent. Given the opportunities
24 and benefits Generation Water has experienced, we urge
25 the Board to adopt the permit with stringent parameters

1 for stormwater capture and treatment. Thank you.

2 MS. MEHRANIAN: Thank you. Jerry Burke, followed by
3 Ricardo Moreno.

4 MR. BURKE: Thank you, Madam Chair, members of the
5 Board. My name is Jerry Burke. I'm the city engineer
6 for the City of Glendora. And the permit has come a
7 long way thanks to your staff. I'm glad I came today
8 because now I know more about the enhanced watershed
9 management program than I could tell in the permit.

10 And I'm still not certain I have enough information
11 to go back to my counsel and talk to them how this will
12 affect us. There are too many variables. I would like
13 to know more about it before I can do that.

14 Also, I can't believe we had so much back and forth
15 today about "please strike this out" and "please add
16 that." I would certainly hope that we would not adopt
17 today based on just some back and forth from the
18 audience. This is much too serious a permit.

19 I would hope we would extend the permit another 90
20 days days, so we'd have time to review all of these
21 comments. We kind of went back and forth today so that
22 we could comment on them and make good decisions about
23 the future that's going affect all of us. Anyway, thank
24 you for your time.

25 MS. MEHRANIAN: Thank you. Ricardo Moreno, followed

1 by Joe Geever of Surfrider Foundation.

2 MR. MORENO: Good afternoon members of the Board.
3 My name is Ricardo Moreno. I represent the Southern
4 California Edison. You may ask why is Edison here?
5 We're here to make a small request, yet very important
6 to the reliability and safety of our equipment and our
7 staff. And this is in regards to the smallest
8 stormwater discharges to -- especially the utility fall
9 discharges to portions of the MS4 that are directly
10 connected to the ASBS's.

11 So first of all, let me start by saying that utility
12 of all discharges are authorized by a separate and
13 standalone MPBS permit and therefore are allowed.
14 However, in order to prevent safety hazards, to protect
15 equipment, and to provide a timely access to repair and
16 (inaudible) of the infrastructure for the provision of
17 the creek services that we provide, it is vital for the
18 communities to have a viable efficient -- cost efficient
19 option to pump accumulated water out of the vaults.

20 Due to the MS4 adoption in August 19th, the state
21 water board introduced a change sheet with the language
22 that allows to clear all the discharges to segment of
23 the Caltrans MS4 with a direct discharge to an ASBS
24 provided that we discharge -- provided that the
25 discharge is authorized by MPDS permit.

1 At this point, the state board -- the State Water
2 Resources Control Board is renewing that permit. That
3 language was introduced by the State Board, not
4 petitioned to us. They recognize the importance of
5 those discharges being authorized.

6 I have the change sheet -- the copy of it here. Our
7 request today is to include -- to please include this
8 same language that the state board come up with and
9 introduce and add it into the Caltrans MS4 permit to
10 authorize those discharges to connect it to MSBS.

11 MS. MEHRANIAN: Thank you.

12 MR. MORENO: So I --

13 MS. MEHRANIAN: Thank you.

14 MR. MORENO: -- before I leave, I talked to Renee, I
15 believe, about this and I move to please direct your
16 staff to add this language to this MS4.

17 MS. MEHRANIAN: You have to conclude your comments.
18 We have to move on.

19 MR. MORENO: Thank you very much.

20 MS. MEHRANIAN: Thank you. Joe Geever, Surfrider
21 Foundation, followed by Patricia Elkins.

22 MR. ROSEN: Good afternoon Madam Chair, members of
23 the Board. My name is John Rose, and I'll be presenting
24 on behalf of Joe Geever, water manager at the Surfrider
25 Foundation. Also, I have not yet been sworn in.

1 MS. MEHRANIAN: Do you swear or affirm that the
2 testimony that you are about to give is the truth, the
3 only the truth so under penalty of perjury?

4 MR. ROSE: I do. Thank you. I have to say, like
5 Yogi Berra once said, "This seems like déjà vu all over
6 again." Really, in all seriousness, we beg you to
7 finalize this permit and get it right.

8 Today, like my colleagues, I want to focus my comments
9 on two key areas of the permit: Receiving water limits
10 and TMDL compliance and ask you that make several
11 critical changes to the draft permit. First, regarding
12 receiving water limits. Federal law prohibits
13 discharges that cause or contribute to violation of
14 water quality standards as independently enforceable
15 provisions.

16 The original draft permit issued in June maintained
17 the receiving water limits as appropriate. We're
18 extremely concerned that the current draft creates a
19 safe harbor for receiving water limits. Although this
20 is created in the watershed management plan section of
21 the permit, it is still crating a safe harbor to
22 receiving water limits. The adopted permit must require
23 compliance with water quality standards with no safe
24 harbor or other restriction placed on per additions of
25 this section.

1 Thus, we ask the Board to remove this safe harbor
2 language and require strict compliance with receiving
3 water limits. Second, the numeric TMDL wasteload
4 allocations must be included within the permit. As you
5 know, Surfrider Foundation supported the TMDL wasteload
6 allocations being in the permit from the beginning. So
7 we're anxious to have the Board make it enforceable.

8 The permit must reflect the numeric TMDL wasteload
9 allocation interim and final that were developed and
10 adopted to ensure that they're enforceable and that
11 we're making progress toward the water quality
12 standards. We are very concerned that several of the
13 recent changes to the draft permit allow for various off
14 ramps to compliance with the TMDL.

15 For instance, page 147 of the draft permit, it
16 appears that staff is suggesting that if a project
17 captures the 85th percentile storm, they're deemed in
18 compliance with the TMDL. In addition, page 43 a new
19 provision discusses a new re-opener to include BMP-based
20 compliance with the TMDLs. These provisions are not
21 consistent with the adopted Basin Plan Amendment. I
22 urge you to remove these off ramps and clearly create
23 enforceable numeric limits. Thank you very much.

24 MS. MEHRANIAN: Thank you, sir. Patricia Elkins. I
25 think she's spoke here and you're speaking for yourself

1 now because you were representing the mayor.

2 MS. ELKINS: Yes, I'm speaking as a concerned
3 taxpayer.

4 MS MEHRANIAN: And followed by Leslie Tamminin of
5 Seventh Generation Advisors. Please go ahead.

6 MS. ELKINS: As Dr. Horner indicated at the beginning
7 of the hearing each city or agency must prepare a CAFR,
8 a Certified Annual Financial Report. The CAFR has very
9 strict guidelines. It has nothing to do with an MPDS
10 annual report. It goes without saying then that each
11 city should be able to accommodate or prepare
12 cost-accounting of MPDS-related costs.

13 The MPDS permit does not define or require a detailed
14 accounting of MPDS expenditures. Current cost
15 accounting is discretionary. For example, my timesheet,
16 if I were a stormwater manager, would be charged a
17 hundred percent to MPDS budgets. But what if a code
18 enforcement officer, a public works employee, responds
19 to a spill? How is that charged?

20 If you ask every city in this room, they'd probably
21 give a different answer because every city accounts
22 differently. So my point is in order to have
23 consistent cost accounting, you must have a legal of
24 detail and criteria specified and required in the
25 permit. I believe cities would welcome the specificity

1 and the opportunity to define it.

2 Finally, I'd like to add that transparency, i.e.,
3 documenting costs, will become even more important at
4 the county's water quality funding initiative is
5 approved by the voters. I spoke with Aybar this morning
6 during the first break. He agrees that cost accounting
7 is very needed. A clear, well-defined cost accounting
8 MPDS permit-related expenditures is needed and should be
9 developed and included in the permit beginning for
10 fiscal year 2013. Thank you.

11 MS. MEHRANIAN: There's a question for you --

12 MS. GLICKFELD: Actually --

13 MS. MEHRANIAN: Board member Glickfeld has a
14 question.

15 MS. GLICKFELD: Ms. Elkins, you just spoke on behalf
16 of yourself, but you spoke as a city person.

17 MS. ELKINS: I said, "if I were."

18 MS. GLICKFELD: If you were. And then you spoke this
19 morning, and you talked -- you read a letter from the
20 mayor.

21 MS. ELKINS: Yes, ma'am.

22 MS. GLICKFELD: And the letter basically said the
23 permit was not acceptable as it was. You know, it would
24 have to have some relief. And then I heard the city
25 permit -- the Permit Group speaking on their list of

1 cities is the City of Carson.

2 And then I heard Ray Tahir speak, and on their list
3 is the City of Carson. So which of those four different
4 testimonies actually represents the position of the city
5 of Carson?

6 MS. ELKINS: As Ray says, it's complicated. Every
7 single statement that has been made here today is
8 supported by the city of Carson. And I will be glad to
9 answer that question that you answered to John Dettle.
10 The City also drains to three separate watersheds.

11 MS. GLICKFELD: Well, I didn't ask you that question
12 yet. I just -- I'm really having a -- I think I asked
13 this question because I'm having a hard time given the
14 various positions that people have been taking
15 representing cities as to exactly what cities think
16 about this permit because it's varying and depending on
17 who's speaking. So thank you.

18 MS. ELKINS: You're welcome.

19 THE CHAIR: Thank you. We have Leslie Tamminen,
20 followed by Meg McWade of City of Pomona.

21 MS. BENZ: Good afternoon. My name is Katherine
22 Benz. Unfortunately, Leslie had to leave so she asked
23 me to read her statement into the record.

24 "As an environmental nonprofit director and concerned
25 citizen, I'm deeply disturbed by the permit's failure to

1 include numeric TMDL wasteload allocations. There must
2 be clearly enforceable numeric limits. Otherwise, water
3 quality is like the guy who jumps off of a 100 story
4 building. And as he falls and passes the 50th floor, he
5 says, "Well, so far, so good."

6 I've heard the comments that the trash TMDL BMP
7 approach is a good precedent for extending a BMP
8 approach to all TMDLs, the so-called apples to apples
9 analysis is misguided oversimplification. A blanket BMP
10 off ramp for compliance is not well-advised.

11 Further, cooperative waste management plans might
12 sound good in theory, but my practical experience is
13 that most of the permittees can barely cooperate, let
14 alone timely cooperate, even when they are under a court
15 order. There must be the backstop of numeric TMDL
16 wasteload allocations.

17 Finally, it is critical that the permit include a
18 strong monitoring program. Please do not throw water
19 quality out of a hundred story window. Do not
20 backslide. Be consistent with the adopted Basin Plan
21 Amendments and include numeric TMDL wasteload
22 allocations and strong monitoring. Thanks you.

23 MS. MEHRANIAN: Ms. McWade from City of Pomona,
24 followed by Karen Flores, Friends of the LA River.

25 MS. MCWADE: Good afternoon. My name is Meg McWade

1 and I'm here on behalf of the City of Pomona. I want to
2 thank you for this opportunity to speak to you today and
3 also to thank the Board staff for their cooperation and
4 help in this permit.

5 Particularly, I think we've made a lot of progress.
6 We would like to support the comments made by LA Permit
7 Group, but would also like to thank Renee and Nicole for
8 their help in terms of the Santa Ana River and us
9 working to do the designation agreement.

10 As mentioned at the October hearing, Pomona's
11 interested in protecting the environment. Our issue
12 really is funding. The permit, as drafted, has not been
13 analyzed from a cost perspective. And we know from our
14 involvement in the Santa Ana River, we participate in the
15 bacteria TMDL task force that funding is necessary and
16 will be an issue.

17 At the most recent meeting, there was an agency that
18 was talking about trying to trace an exceedance and they
19 had tested and hit an exceedance. They found out that
20 it was a protected bird species. Once that migration
21 ended, they had to go back and test again. They had
22 another exceedance, were able to find out it was from a
23 grocery store. They cleared that issue up. And then
24 they went out and tested because then they thought it
25 would be clear, and they had another exceedance; only

1 this time, they couldn't even tell where this was from.

2 That three-week period cost that city between 17 to
3 \$27,000. For a city like Pomona where our measure --
4 our proposition and measures failed recently, we don't
5 have the funding to proceed to implement something. And
6 so we're looking for the Board's assistance in letting
7 us know what the costs are of this program to implement
8 and to advocate for cities like Pomona that don't have
9 the funding to implement it, but would be implementing
10 it if we did. Thank you.

11 MS. MEHRANIAN: Thank you. Karen Flores, Friends of
12 the LA River.

13 MS. FLORES: Good afternoon. My name is Karen
14 Flores. I'm speaking on behalf of Friends of LA River.
15 I'm here to give support to the environmentalists who
16 have spoken to you today; LA Waterkeeper, NRDC,
17 Surfrider, Heal the Bay, TreePeople.

18 Our goal is a swimmable, fishable, boatable Los
19 Angeles River. I personally have witnessed citizen
20 swimmers up to their necks at Taylor Yard. I have
21 witnessed citizens fishermen with their young children
22 fishing for sustenance in the LA River. I have seen
23 many maintenance workers getting wet in the LA River
24 from government agencies and contractors.

25 I've seen nonprofit programs paying people such as

1 LA Conservation Corps to go in and do maintenance in the
2 riverbed. And I personally have gotten wet up to my
3 waist being a guest speaker in a kayak on the Paddle
4 LA River program. I know this is a complicated issue,
5 and there's a lot of money at stake, but water quality
6 cannot be replaced. It's so invaluable to us as human
7 beings. Please do everything you can for a strong
8 permit. Thank you.

9 MS. MEHRANIAN: Thank you. The last testimony is
10 Mark Gray of Southern California Construction Industry
11 Coalition on Water Quality. And with that will be the
12 last testimony that we have. For eight minutes that you
13 have reserved.

14 MR. TAHIR: There's one more speaker who had to leave
15 who wants to read a letter on behalf of the mayor of the
16 City of Lawndale.

17 MS. MEHRANIAN: There was no cards.

18 MR. TAHIR: A card was submitted.

19 MS. MEHRANIAN: What was that? I'm sorry.

20 MS. GLICKFELD: A card was submitted.

21 MR GRAY: Madam chair, members of the Board, I'm Mark
22 Gray. I'm the director of environmental affairs for the
23 Building Industry Association of Southern California and
24 the technical director for the Construction Industry
25 Coalition on Water Quality. Glad to be here. I have

1 two opening remarks.

2 I think it's as I've said before, I -- you know --
3 we're in a much different place than we were during just
4 a few years ago in the Ventura permit hearing, and it's
5 really encouraging to cooperative solutions to
6 stormwater management. And as I've said, we're in a really
7 exciting place.

8 And second, I think it's real apropos I'm last
9 because -- today because the contractors that I
10 represent, we're the folks who show up to build these
11 projects. We're the folks who make this happen. I
12 represent those folks, the men and women who build much
13 of Southern California. In fact, the BMP project of the
14 year award that CASCA just awarded, the contractor, the
15 Griffith Company, is Associated General Contractor
16 California Member.

17 So yesterday or the day before when they won the
18 award, we were delighted because it was a regional
19 stormwater capture project in Pasadena. So that was
20 really, really, really cool. And speaking of regional
21 stormwater capture, those are two of the three things that
22 I want to talk about today and some changes that we hope
23 you will consider as we move forward to adoption.

24 First off, there was a brand new provision in the
25 regional mitigation program retention standard. And for

1 your information, I've got, I think, four slides that
2 are all laid out the same way and a couple red lines
3 suggested changes. And I'll take just few minutes to
4 go through this and try to be as clear as I can.

5 As I said, the first issue is with the regional
6 mitigation program retention standard. There's a
7 newly-inserted provision that's inconsistent with the
8 established hierarchy of LID BMP consideration and
9 implementation which is clearly defined in the
10 alternative compliance measure part of the permit.

11 And basically what it is, is on a regional basis you
12 have to have complete retention of the 85th percentile
13 storm, but -- and so what you've done is created a
14 separate retention standard for regional mitigation at
15 the watershed subregional scale. It could be five
16 acres. It could be ten. It could be twenty.

17 So this is unnecessary and redundant with the same
18 provision 6B that's in the regional stormwater
19 mitigation program that requires improved stormwater
20 quality. So at the eleventh hour, we see this insertion
21 of this strict retention standard. And when you -- on
22 an individual project scale, if you doing it within that
23 same watershed, if you have a finding of technical and
24 feasibility which is rigorous, that would allow
25 implementation of bio-filtration at one and a half times

1 the stormwater design capture volume.

2 So we have a very simple suggested red line change to
3 correct this, what we view as a very unnecessary and
4 redundant provision. And that is, in instances of
5 technical infeasibility again on a watershed scale, the
6 regional or subregional program must result in
7 bio-filtration of one and a half times the portion of
8 the water quality design volume that's not reliably
9 retained.

10 Because what we don't want to do on a watershed scale
11 is put development where we have the most infiltrated
12 soil. We want to do it where we have the least
13 infiltrated. We want to put development where -- in
14 those areas. And what this does -- to go back, what
15 this does is it really creates a higher -- it creates
16 a -- I wouldn't say a higher bar, but it creates a
17 different standard, and I just don't think we want to
18 take unintended consequences is the work I was looking
19 for. So it creates an inconsistency and some
20 unintended consequence.

21 Okay. So that was -- that's a very simple fix and
22 I've got it right there in red line form. Okay.
23 Second, we feel that the groundwater replenishment
24 projects are restricted to only those that are
25 identified in watershed management programs. And as you

1 heard today at length, these are complex; these are
2 timely; they take a lot of cooperation, and the
3 time frame is very long.

4 So what we're asking for is -- and it's somewhat in
5 our opinion as the contractors and builders, it
6 restricts and inhibits creation of groundwater
7 replenishment projects. Especially in this early
8 time frame. Especially after adoption and when you move
9 here -- when you move in these next several years, we
10 don't want to wait for a watershed management plan to
11 be done. If people want to move, we need to move now.

12 We have another suggestion under the groundwater
13 replenishment provision. Permittees may propose
14 regional projects to replenish groundwater supplies.
15 You can read the rest. And strike in a watershed
16 management program or enhanced watershed management
17 program. Allow that outside of it. To the same
18 provisions that you would have within it, but just allow
19 those projects outside it it.

20 And lastly, this is a fair -- we think another we
21 hope relatively easy fix. On page 106, there's no
22 evidence of an isohyetal map that exists for a one year
23 one hour rainfall intensity storm in Los Angeles.
24 There's a two year one hour, and you have to extrapolate
25 to get to that number.

1 Let me tell you the practical reality of this. When
2 you can install LID BMPs -- any type, even bio-filter
3 and to the one and a half and use one and a half times
4 the design capture volume and you got to install
5 treatment control.

6 Then there's some provisions on page 106. One is to
7 use 0.2 inches per hour intensity. And then the other
8 is to use this isohyetal map that we cannot find. The
9 provision's inconsistent with the su-sum treatment
10 standards. What that does, it results in supersizing
11 your BMP up to two to five times larger than it would
12 have to be.

13 And we've had our engineers look at this. We've gone
14 back and Aybar's been very -- we've got a lot of
15 dialogue with staff which has been wonderful, but I
16 don't think we've reached full resolution.

17 So what we're asking for you today is to delete that
18 and instead implement clearly the su-sum treatment
19 control standards for rain -- for various flow though
20 rates that are found in the 2001 permit. So that sums
21 it up. Good luck. We appreciate the input and
22 involvement.

23 MS. MEHRANIAN: Thank you. Have a nice life.

24 MR. GRAY: Have a nice life. And hey, as I said,
25 we're ready to build these projects, and we're happy to

1 do it, and we're looking forward. It's going to be an
2 exciting time. Thank you.

3 MS. MEHRANIAN: Thank you. Thank you. We have the
4 environmental community and the LA Permit Group reserved
5 time, and I want to know if we want to do this now.

6 MR. FLEISCHLI: Yes, we would.

7 MS. MEHRANIAN: Yes, please.

8 MS. MOFFETT: Madam Chair, the court reporters need to
9 switch out for about two minutes.

10 MS. MEHRANIAN: Sure.

11 (Recess)

12 (Whereupon Andrea M. Rinker, CSR No. 13437, reported
13 the remainder of the proceedings)

14 MS. MEHRANIAN: We're ready. You can come back. So
15 there are four groups that have time left. NRDC, you
16 guys have ten minutes. L.A. County has five minutes
17 left. Permit Group has 20 minutes left and City of L.A.
18 has 18 minutes left.

19 UNKNOWN SPEAKER: Chairwoman Mehranian, we still have
20 the City of Lawndale, three minutes to read the letter.

21 MS. MEHRANIAN: You think that there was a card for
22 this?

23 UNKNOWN SPEAKER: I know there was. I saw them fill
24 it out at 9:00 this morning.

25 MS. MEHRANIAN: Okay. We'll allow you, but not more

1 than two minutes. It can't be three.

2 UNKNOWN SPEAKER: Thank you.

3 MR. GARRISON: The question is whether you prefer to
4 go in the order the presentations were made or --

5 MS. MEHRANIAN: It doesn't matter.

6 MR. GARRISON: Okay. In that case, Madam Chairwoman
7 and members of the Board, thank you. My name is Noah
8 Garrison. I'm speaking on behalf of NRDC and in
9 conjunction with Heal the Bay and the Los Angeles
10 Waterkeeper.

11 I'll try to keep this brief, but in response to
12 the many of the comments that have been made, this has
13 been a two-year exhausting process that we've been
14 through. It's the most incredible attention to detail on
15 trying to draft this permit. And the end result of this
16 is going to be that we're effectively telling the
17 permittees take another 18 months to 30 months and go
18 draft another set of permit terms.

19 This really does take us back before 1972 in
20 many ways. We're letting the permittees dictate the
21 terms by which they're going to meet the requirements of
22 the permit. It's going to be incredibly hard to enforce
23 and it's going to be incredibly time-intensive for staff.

24 And as of drafted right now, while many of the
25 approach is taken and certainly trying to find watershed

1 solutions are things that we would support, the permit as
2 drafted is just not a viable process or doesn't present a
3 viable process.

4 I want to start with saying that the permittees
5 have the opportunity to do collaborative projects now or
6 to take prioritized approaches. And you saw many
7 projects that were put in place by the city of Los
8 Angeles that certainly go towards this approach. They
9 put in place a number of prioritized projects and we
10 certainly support a lot of the efforts that they're
11 taking.

12 But playing off of that, the County has stated
13 that this is the most rigorous stormwater permit in the
14 nation. And board staff earlier stated that this is more
15 stringent than the prior permit. And it simply isn't.
16 And I know that because it doesn't require all permittees
17 to meet the water quality standards from the date of
18 implementation and that's what the prior permit required
19 and that's what other permits in this country should
20 require. It's simply not the most stringent or the most
21 rigorous permit. And there's really no argument
22 otherwise if these safe harbors are in place that would
23 remove responsibility for meeting water quality
24 standards.

25 In particular, one of the largest problems is

1 there's an 18-to-30-month period after the permit is
2 adopted where there is no plan in place. There are
3 interim deadlines or interim requirements that are to be
4 set by the permittees. They have to determine what they
5 can do to comply. But there's no responsibility to meet
6 water quality standards during this period.

7 So to that end, you absolutely have discretion
8 in crafting a permit. You absolutely should be using
9 your professional judgment. But you have to do it within
10 the bounds of the law. And the laws that the county
11 decided to state -- said that you should use judgment and
12 discretion in the absence of regulatory guidance or
13 regulatory authority. And there is an abundance of
14 regulation and abundance of guidance on how this permit
15 has to be implemented. And the permit ultimately adopted
16 must meet those requirements.

17 One of the issues or the examples that was
18 raised was Philadelphia and how they have this agreement
19 that was reached. But that was reached under an
20 enforcement order. And that's certainly a path that this
21 board can take. The board can reach an enforcement order
22 or a compliance schedule or time schedule with the
23 permittees, but you don't do that by removing your
24 authority to require compliance. You do that in
25 conjunction with your authority.

1 And for that reason, the safe harbor permits
2 absolutely need to be removed. You have to maintain your
3 authority. You have to maintain the authority for the
4 prior permit. And you can take a number of approaches to
5 exercise that authority or that enforcement, but it
6 doesn't -- it doesn't justify removing the authority so
7 that they feel that they can proceed.

8 With regard to anti-backsliding, as Mr. Nahai
9 pointed out earlier, it absolutely is backsliding if we
10 allow these safe harbors into the permit. And it's
11 either -- it weakens an effluent limit or a condition of
12 the permit or the language is unnecessary and
13 superfluous. And in this case, it absolutely weakens the
14 language of the prior permit and, therefore, constitutes
15 a backsliding from the prior permit.

16 We've raised significant concerns with this.
17 EPA has told you that they're concerned with it and that
18 the approach being taken here represents a significant
19 departure from what's been done previously or regulatory
20 guidance points to. And that should really give you
21 pause in looking at and potentially approving this
22 language. The safe harbors absolutely have to be
23 removed.

24 With that, I do want to touch on one specific
25 term of the permit that was just addressed by Mark Rae of

1 BIA. We have concerns over the -- the stormwater
2 mitigation plan that was recently put into the permit;
3 not just the 85th percentile which we think is absolutely
4 necessary, but the fact that this clause was inserted
5 into the permit only recently and allows for permittees
6 to come up with a plan that effectively replaces the
7 entire new development and redevelopment section of the
8 permit, including its hydro modification controls,
9 including all the LID controls -- that absolutely has to
10 have numeric standards for the development and planning
11 section to have in place. It needs the 85th percentile
12 retention standard.

13 It could refer to the overall numerics of the
14 section, but we would actually just prefer that this
15 entire section be struck from the permit. It seems
16 duplicative. They already have the opportunity to go and
17 do regional projects. In the water sub-management
18 planning process, they can do regional projects there.
19 They can propose regional groundwater replenishment
20 projects for off-site use. It doesn't seem that this
21 section really adds anything, but it absolutely needs the
22 numeric standards that are part of the LID section in
23 place.

24 Ultimately, I think we made our argument clear
25 that the safe harbors and the TMDL safe harbor sections

1 need to be removed. This is -- it's going to be
2 incredibly difficult to enforce otherwise and it's going
3 to be the public that suffers. It's going to be our
4 water quality that suffers and people that go to the
5 beach, people that fish in our waters, people that swim
6 and surf in our waters.

7 And the Board should do everything in its power
8 to make sure that the protections from the prior permit
9 are voiced in the current permit and remove those safe
10 harbors from the language. Thank you.

11 MS. MEHRANIAN: Thank you. The other parties, L.A.
12 County for five minutes, do you need your time?

13 UNKNOWN SPEAKER: We'll hold off.

14 MS. MEHRANIAN: Hold off, okay. And then Permit
15 Group, 20 minutes. Are you going to wait? You're
16 holding off your time or do you need to use it now?

17 MS. MALONEY: We can -- we have further comments,
18 yes.

19 MS. MEHRANIAN: Yes. Go ahead then.

20 MS. MALONEY: Would you like us to go now?

21 MS. GLICKFELD: Just a point of information, when is
22 the county holding its comments off too? I resumed we
23 were going to close the hearing.

24 MS. MEHRANIAN: Yeah.

25 MS. GLICKFELD: So it's either now or not.

1 MS. MEHRANIAN: Sure. Go ahead, L.A. Permit Group.

2 MS. MALONEY: Before we get started, there's a
3 collection of pens up here. So if you're missing a
4 writing utensil.

5 Thank you again.

6 Again, for the reporter, this is Heather Maloney
7 with the L.A. Permit Group.

8 We just want to reiterate again how we feel that
9 the watershed management plans and the enhanced watershed
10 plans are the tools that will help us to meet our water
11 quality goals in this region. And as Renee testified
12 earlier in her opening presentation, it was important for
13 permittees to be able to concentrate on this plan. And I
14 think that the elements that this revised draft has laid
15 out, you'll really -- really lay out those tools for us
16 to be able to concentrate on those plans.

17 There's been a lot of talking about SUSMP plans
18 themselves to get us to water quality. I mean, in all
19 reality, a plan itself on a shelf does not equal water
20 quality. The same, as a number written in the plan is
21 put on the shelf, it does not equal water quality. But
22 to get to water quality, what we need is action. I think
23 we all understand that you have to do something to get to
24 water quality.

25 What these plans are that are talked about in

1 these watershed management plans and the enhanced
2 watershed management plans are -- are exactly the plan
3 for those actions to get to water quality. You know,
4 Mr. Yee -- Board member Yee indicated these are -- these
5 are kind of a transitional course for us. These are the
6 plans to get us there. Without that, you just have a
7 number and a document that sits on the shelf or saved in
8 a computer. And we really need these plans to be able to
9 outline exactly what we're going to do.

10 You know, as we discussed in our presentation
11 earlier, these plans have to go through a rigorous
12 reasonable-assurance process. These are vetted, peer
13 vetted modeled and furthermore, they go through a
14 technical advisory committee. Once these plans are
15 completed, the watershed management plans outline our
16 implementation measures, interim milestones that we have
17 to meet -- those are enforceable. We have to meet those
18 milestones.

19 So to say that we're just -- that we're taking
20 this long-term risk and it may or may not achieve water
21 quality is just simply not true. If you read the
22 provisions within the permit, the permittees understand
23 that it is a very rigorous process that has a great deal
24 of accountability for us. So once you go through this --
25 the implementation or begin your implementation, our

1 monitoring programs kick in, the implementation of those.
2 We start monitoring.

3 Those -- the flexibility -- there's been
4 flexibility of the monitoring program that's been
5 discussed. It's really essential to keep the flexibility
6 in the monitoring program and it really needs to line up
7 with our watershed management plans. And we know that
8 each region is unique in its own way and has specific,
9 you know, points of concern that we need to address and
10 we need to plan. So those monitoring programs should
11 really be tailored to those regional plans.

12 We then use the monitoring data to feed into the
13 adaptive management process. This adaptive management
14 process is basically used to see if the measures that we
15 put in place so far, are they getting to where we thought
16 they would get. If not, then there's very good
17 directions in this permit that directs us to go back and
18 revise the plan.

19 And that -- I think that's -- you know, we're --
20 that's really important to note that it's not just a plan
21 that we implement from start to finish and we never make
22 any revisions in the middle. There's really a key
23 feedback mechanism in there that allows for that -- for
24 that adaptive management approach to happen. That's
25 really clearly outlined in the permit exactly what that

1 adaptive management approach details and requires.

2 And I just wanted to touch again on the
3 technical advisory committee that some speakers have
4 talked about today. This really creates the oversight
5 and consistency between all these plans. I know there's
6 some concern on the -- the staffing that it will take to
7 go through these plans.

8 And I think this is really where the importance
9 of the technical advisory committee comes in. They're
10 tasked with overseeing the development of these plans and
11 making sure that they -- they meet the requirements that
12 the permit sets out. So they're going to be vetted
13 before they ever get to -- to the Board for -- for
14 approval. So that -- that process is not -- is not borne
15 directly on the shoulders of your staff; rather, it's
16 really the responsibility of the technical advisory
17 committee and the watershed management groups to make
18 sure that they meet those.

19 And then the -- the last thing I want to talk
20 about is there's a lot of discussion on backsliding and
21 anti-degradation. And I by no means am an attorney
22 myself, but I do understand that this permit, as a
23 permittee, has great compliance and accountability and
24 control measures and monitoring requirements within it.
25 So to say that this permit is backsliding, it's just -- I

1 just don't see it. We see a tremendously more robust
2 permit that's being proposed and we understand that that
3 entails a lot more responsibility and action on the
4 permittees.

5 So just the idea of over 30 TMDLs being
6 integrated into this permit says alone that this is
7 bigger. This is a lot bigger permit than the previous
8 one was and I don't believe that we're backsliding.

9 I do want to have Andrew Brady from Richards,
10 Watson & Gershon. He's an attorney for some of the
11 permittees, just describe very briefly some comments
12 regarding the backsliding and anti-degradation comments
13 and I promise it will be brief.

14 MR. BRADY: Good afternoon, Ms. Mehranian, members of
15 the Board, staff.

16 I think looking at anti-backsliding and
17 anti-degradation -- just anti-backsliding first. The
18 receiving water limitation language in the permit is
19 still there and it hasn't changed from the last permit.
20 Waste load allocations are not less stringent on this
21 permit than the last one.

22 As indicated by Ms. Egoscue, you have the
23 discretion to determine how these standards are achieved.
24 Again, look at NRDC versus Browner, look at the 2010 EPA
25 guidance. You have the discretion to determine whether

1 numerics or BMP-based approach is the best way to achieve
2 water quality standards. The environmental groups want
3 to tell you no. You have to apply -- you have to apply
4 numeric. That's not what the law says. You get to
5 determine how this permit is complied with.

6 And I think we highly touched on it. 33 TMDLs,
7 new minimum control measures, a more robust monitoring
8 plan and the watershed management plans themselves, this
9 permit does not require less of permittees than the last
10 permit. It requires a lot more. But to say that this
11 permit will reverse the course of obtaining water quality
12 standards is certainly untrue and discredits the great
13 efforts of the regional board staff in crafting this
14 permit and crafting the program the way they did and I
15 think it's wrong.

16 Anti-degradation is not an enforceable legal
17 standard. It's a national policy that requires any
18 regulation that causes the degradation of designated
19 quality waters to be sufficiently justified with economic
20 or social benefit.

21 What was missing from the earlier presentation
22 is how this permit will cause waters that are --
23 higher-quality waters to be degraded. What's going to
24 come along and do this? There's simply no indication
25 that that's going to happen. While permittees are

1 developing watershed management plans, there are
2 standards in place, there are already existing BMPs in
3 place. There's simply no reason here to suggest that the
4 permit as fashioned in the second revised draft tentative
5 will cause the degradation of any quality waters. The
6 mechanism of how that occurs was missing from the
7 presentation because there's no indication to believe
8 that will occur.

9 And that's all I got. Thanks a lot.

10 THE REPORTER: Can you spell your last name for me?

11 MR. BRADY: B-r-a-d-y.

12 MS. MALONEY: And just in closing, I want to
13 reiterate that we do feel that these watershed management
14 plans and enhanced watershed management plans -- each of
15 these -- each of these versions of the watershed
16 management program provide effective tools for us to
17 reach our water quality goals.

18 There's been some concern talked about as well
19 that the numerics are not included into this permit and
20 that, you know, we just create a plan, what if the cities
21 don't implement our plan. And although we fully intend
22 to implement our plans, we want to point out that there
23 are still numeric standards in this permit.

24 While there's some discussion about the interim
25 limits and those are tied to specific milestones in these

1 plans, the final wasteload allocations are still numeric
2 in this permit. So you always have that backstop. So if
3 we're not meeting what we said we would do in these
4 plans, then you have that numeric backstop. So I just
5 want to provide that reassurance and to clarify that that
6 proposition is in the permit.

7 And again, on behalf of the L.A. Permit Group,
8 we just want to thank you very much for this opportunity.
9 We really enjoyed this collaborative process and this
10 opportunity to participate in these hearings and
11 workshops with you and we just thank you for your time.
12 Thank you.

13 MS. MEHRANIAN: Thank you.

14 Okay. L.A. County and City of L.A., if you want
15 to use your time that you reserved.

16 UNKNOWN SPEAKER: Not right now.

17 MS. MEHRANIAN: We're closing the public hearing.
18 That's okay.

19 Okay.

20 Well, city and county.

21 Okay. We're closing the -- the public hearing
22 section.

23 UNKNOWN SPEAKER: You can't leave me out.

24 MS. MEHRANIAN: I'm sorry. He has to have the last
25 word.

1 UNKNOWN SPEAKER: I get paid for this. I don't know
2 about you guys, but after this I'm going to need a drink.

3 But anyway, "Dear Chairperson and members of the
4 board: For the official record, the City of Lawndale
5 wishes to present to the California Regional Water
6 Quality Control Board the following information regarding
7 the proposed appeal submitted.

8 "Although the county's plan has a great deal of
9 merit and that it attempts to provide for a simple way to
10 comply with the TMDLs, the City of Lawndale and all the
11 cities and agencies here today need time to review and
12 decide whether it should commit to this water quality
13 decision without knowing more about" -- "know more about
14 it before this has even been adopted. Time is to needed
15 to review and comment on the proposed plan and to allow
16 the council, the governments and its municipal planning
17 entities to participate in this critical review.

18 "We only learned of the county's plan a few days
19 ago. It's clear that we will need more information. We
20 urge the Board to provide 90 days to review the revised
21 permit and the county's plan. Should the regional board
22 decide to adopt the revised permit today, effective
23 agencies would be required to examine other options to
24 allow for needed, additional review of the permit.

25 "Sincerely, Steven Mandoki, city manager on

1 behalf of Harold Hoffman, mayor of the City of Lawndale."

2 Thank you very much.

3 MS. MEHRANIAN: Thank you.

4 I suggest that going forward -- the public
5 hearing -- they just mentioned to me that has to remain
6 open because we're still getting -- gathering
7 information. So I'm suggesting that if Board members
8 agree, that to invite the staff and we can ask all our
9 questions. And then from there on, we invite the
10 different groups and each person gets a chance to ask the
11 questions.

12 UNKNOWN SPEAKER: Can we go last? Whatever you want.

13 MS. GLICKFELD: No. We need you to come --

14 MS. MEHRANIAN: No. I think you should go first and
15 then we'll let you go last again --

16 UNKNOWN SPEAKER: Thank you.

17 MS. MEHRANIAN: -- because you worked so hard.

18 Yeah. They're going to respond.

19 MR. UNGER: So do you want us to go?

20 MS. MEHRANIAN: Yeah. And then each Board member is
21 going to take time to ask all the questions that we have
22 for you. And then we'll ask if you have different
23 questions for different groups, then you can come back
24 again.

25 Do you need a break before --

1 MS. CAMACHO: But I thought they were going -- yeah.
2 Aren't they going first?

3 MS. MEHRANIAN: They're answering questions.

4 MR. UNGER: If you have legal questions --

5 MS. MEHRANIAN: Do you want us to --

6 MR. UNGER: -- do you want us to respond to --

7 MS. CAMACHO: No. I think they were going to give
8 responses.

9 MS. MEHRANIAN: No, no, no. I want the Board members
10 to ask questions because they held all their questions
11 for like nine hours now.

12 MS. GLICKFELD: Hold on a second. I also hope that
13 we were going to have a response from our legal counsel
14 to some of the legal issues that were raised.

15 MS. MEHRANIAN: Yes.

16 MS. DIAMOND: Can I also suggest -- there might be
17 some things that the staff may already be thinking about
18 responding to. And so if they do that first, it might
19 save some of our questions and be a little bit more
20 focused than our questions could do.

21 MS. MEHRANIAN: Okay.

22 Go ahead. Sam, Renee, is that the -- do you
23 want to start?

24 MR. UNGER: Yes. Board member Diamond, I would hope
25 that we could answer some of your questions and things

1 before knowing what they are exactly, but we're coming
2 into this right now and we're recommending no changes
3 based on the testimony that we heard today for the permit
4 that is before you.

5 So with that moving forward, I would suggest
6 that you ask questions. I can give a brief description
7 as to why we have come to that conclusion and we'll go
8 from there if you like. So would you --

9 MS. CAMACHO: Was there also -- I thought before we
10 went to lunch, was it, that there was a discussion going
11 on between what some of the BMP, the environmental groups
12 were asking about. So I didn't know if there was going
13 to be that response that we wanted to hear from staff.

14 MS. DIAMOND: And EPA as well.

15 MS. CAMACHO: Right. So I thought that was
16 happening.

17 MR. UNGER: It did, but our -- our understanding is
18 from talking with the parties that there was no agreement
19 that was reached.

20 MS. DIAMOND: Is that true with the EPA as well?

21 MS. SMITH: That was the focus of the discussion.

22 MR. UNGER: Yeah. Yeah. That was the focus. That
23 was the focus, yeah. Yeah, the focus of the discussion,
24 I don't know -- I don't know exactly how the discussion
25 took place between the county, the L.A. Permit Group and

1 the city and EPA, whoever else might --

2 MS. MEHRANIAN: I would strongly suggest that we go
3 through each Board member and ask questions from you.
4 And then we'll go to the rest of -- who agrees with who.

5 Okay. Larry, do you want to start?

6 MR. YEE: What kind of response do you have to BIA's
7 suggested changes? There are three small ones. They
8 seem pretty practical to me.

9 MR. UNGER: We're going to ask Ivar to step forward.
10 But I think a large part of my understanding of the BIA
11 request was that some of the regional retention standards
12 should not be part of the watershed management plans.
13 And we think that that's where they're best suited.
14 We'll have the most information in those plans about
15 other areas on the site that may or may not be subject to
16 technical feasibility. We will know areas on sites that
17 are Brownfield sites, tank sites, places like that that
18 we don't think that infiltration is a suitable solution.

19 So in general, we think -- we think that the
20 requirements are in the right place within the permit.
21 So I don't know --

22 Ivar, do you want to add some of the details to
23 that?

24 Because I think some of the details may have
25 been --

1 MR. RIDGEWAY: Yeah. I'm -- just to ward off any
2 questions, I would just like to point out that that
3 regional stormwater mitigation program, the one -- I
4 think that was the (inaudible) the engineer pointed out
5 that was new. It's actually section 49 of the 2001 L.A.
6 MS4 permit so it's nothing new. The only thing that has
7 tie with it this time is the 85th percentile retention
8 standard.

9 My feeling on opening it up to biofiltration --
10 the reason that we actually included that section is
11 there's a groundwater replenishment section that I think
12 Noah brought up that is open. It's open as an
13 alternative to the permittees, but it's tied to
14 groundwater replenishment. This section opens up
15 regional LID implementations on areas that don't
16 necessarily have a groundwater source that's, you know,
17 been designated as beneficial use.

18 The rationale for using required retention on
19 site is if you're going to forego, you know, retaining,
20 you know, individual project sites, having to retain
21 water on site -- if you're going to do that on a regional
22 basis, you have the opportunity to have greater
23 flexibility to pick up larger-scale areas, meaning you
24 can have large regional facilities that can actually
25 retain the volume. So the retention staff feels that's

1 appropriate.

2 Regarding the flow-through treatment criteria,
3 BIA suggestion, I'm amenable to that. The one year,
4 one hour (inaudible) that BIA said they couldn't find is
5 actually an attachment as part of the L.A. River Trash
6 TMDL. That's the source. Not knowing the numbers, being
7 familiar with the numbers knowing that we have standards
8 already for flow-through in 2001, I'm fine with using the
9 current standards.

10 MR. YEE: Thank you, Ivar.

11 MS. MEHRANIAN: Board member Camacho, we'll go back
12 to you.

13 MS. CAMACHO: Okay. There was an -- Edison made a
14 comment regarding allowing the discharge -- I believe it
15 was to ASBS -- for the language of the state board. Does
16 the staff have a response to that comment?

17 MR. UNGER: This is the first that we've seen that
18 language. I think we would have to take a short break
19 and take a look at it before we could give you a
20 recommendation.

21 MS. PURDY: Yes. I'm sorry. I actually did speak to
22 the gentleman who spoke. I haven't had a chance to look
23 carefully at that language. But generally, I think that
24 the issue is we have a -- basically some general coverage
25 for discharges from utility vaults for de-watering. And

1 that's covered in part three, the non-stormwater
2 discharge prohibition section of the permit.

3 I think his concern is to make sure that that
4 same accommodation is provided in what we refer to as
5 areas of special biological significance. We have one of
6 those in the northern part of the county from Lando
7 (phonetic) Point up to Point Mugu. And he just wanted to
8 make sure that the same accommodation is provided in that
9 area.

10 I haven't actually had a chance to read closely
11 the proposed language that he provided us with, but I
12 think that it's actually already addressed under the
13 general section related to the non-stormwater discharge
14 prohibition. But perhaps if we have a break a little bit
15 later on just for a few minutes, I can take another quick
16 look at that language.

17 MS. CAMACHO: Okay. And then the -- can you explain
18 how the enhanced watershed management plan would be
19 implemented? Would it be -- I guess in reading the
20 tentative order -- the revised order, I was just trying
21 to kind of picture it in my head as to how it would
22 proceed and whether it would be by L.A. County, by
23 watershed -- or watershed by watershed, with
24 sub-watersheds. And obviously it has to go -- it would
25 apply once permittees elect to go through with the BMP.

1 But I just want to make sure that these EWMPs
2 are fully supported throughout the process and that
3 there's not any opportunities for people to or for
4 permittees to or key decision makers to start
5 implementing it and then find an exit route out which
6 then would be -- BMP would then kind of fall behind. So
7 I just can't necessarily picture how it would work.

8 MR. UNGER: Maybe I can try to take a look at that or
9 answer to that question. I think what you're talking
10 about is the planning period that we have for the EWMPs
11 being 30 months and the other -- the watershed management
12 be 18 months. And the question is maybe perhaps a
13 permittee may essentially commit -- submit a notice of
14 intent that they would like to participate in the EWMP,
15 presumably with the County Flood Control District or the
16 county, possibly with other permittees. And then we get
17 to month 29 and then all of a sudden that permittee drops
18 out of the process.

19 What happens at that point -- or the month 20 or
20 19 and a half they drop out of the process. Essentially
21 what's happened -- and then they lose the coverage that
22 they have. They -- they lose this compliance mechanism
23 with the receiving water limitations. They will be
24 subject to strict interpretation of the receiving water
25 limitations for their discharges because essentially,

1 they haven't completed all of the steps that they needed
2 to complete in order to run through the planning process
3 and get us a plan.

4 MS. CAMACHO: And what happens if other permittees
5 needed that permittee in order to create and implement,
6 you know, a watershed management plan or EWMP that's kind
7 of like a little bit -- it's not as strong.

8 MR. UNGER: Yeah. The participation of a WMP or EWMP
9 is voluntary. It's -- it's in the permit. I mean, I
10 don't think we have jurisdiction to enforce them to stay
11 in or anything like that if they wanted to -- to move.

12 But I would think at that point the incentives
13 are fairly strong. We talked about the advantages of it.
14 The whole idea here is to incentivize, if you will, and
15 certainly the cost incentive that Dr. Horner talked about
16 by being part of the larger group are available with
17 multi-benefits that would accrue to those cities. Things
18 like that will also incentivize them to hopefully stay in
19 the plan that they first started.

20 We would think that the plan is going to be
21 robust enough that -- and large enough that hopefully the
22 one or few stakeholders, if they decide to abandon it,
23 that there's still enough critical mass to keep moving
24 forward.

25 MS. PURDY: Just a few other comments on that which

1 is one, that part of the notification process is to
2 develop and submit to us a draft Memorandum of
3 Understanding among the participating permittees and then
4 finalize and, you know, fully execute that MOU. So the
5 notification is meant to be a robust process where the
6 permittees -- participating permittees and other partners
7 actually need to execute a memorandum of agreement
8 amongst themselves that they are committed to
9 implementing this. So I think that will help.

10 Additionally, the plans need to be very clear
11 about what the permittees -- each individual permittee's
12 roles and responsibilities are with regard to that so it
13 will be clear.

14 If the unfortunate circumstance happens where
15 somebody did drop out, it would be clear what their roles
16 and responsibilities had been versus others. And I think
17 there also is -- again, if -- if it was necessary,
18 there's a process by which the watershed management
19 program can be modified. And so if it truly was
20 necessary to modify it because of a participating
21 permittee dropping out, there's a process for doing that
22 and -- and adjusting on the basis of the -- the lack of
23 participation by that entity.

24 So I think there are a couple ways in which
25 that's addressed. But we do think, as Sam said, that

1 there's going to be a very strong incentive for
2 permittees to stay engaged in this process. And I think
3 there will be milestones along the way where the -- part
4 of that incentive is if at any point a permittee drops
5 out, then they don't get the benefits that these
6 watershed management programs provide in terms of cost
7 efficiencies and flexibility and so forth.

8 MR. UNGER: Did that answer your question?

9 MS. CAMACHO: Yeah.

10 MR. UNGER: I think we're done.

11 MS. CAMACHO: You're making a motion to make a
12 comment.

13 MS. PURDY: I'll -- I'll reiterate that one other
14 thing that was -- Deb was mentioning and reminding me to
15 say which is that if at any point a permittee does drop
16 out during the program development period because they
17 haven't met one of the interim milestones that they were
18 required to, then at that point from the point of view of
19 the compliance mechanism that they're afforded, they no
20 longer have that. And, you know, in fact, at that point
21 we can look back to six months and -- from six months
22 forward to see whether the permittees were in compliance
23 with just the provisions that are in 5-A and the
24 provisions in 6-E to implement the TMDL provisions.

25 MS. CAMACHO: Okay. This -- these two next questions

1 I think go to -- well, actually, one goes to you all
2 standing up there so I'll ask that one.

3 Do we have any or do you all have a response to
4 the environmental groups' concern for this -- the
5 violating the anti-backsliding or the anti-degradation?
6 I know we were saying -- I heard various responses by
7 the -- by the Permit Group and the county, but I just
8 wanted to hear it from staff, if possible.

9 MR. UNGER: Yeah. I think what we would like to do
10 is -- I'm going to have -- Renee will take the first stab
11 at it from a technical standpoint. I may want to fill in
12 some technical details as to why we don't think this
13 permit represents either backsliding or degradation, and
14 then we would like to turn it over to our attorneys to
15 answer more from a legal manner. So I'm going to return
16 to Renee.

17 MS. CAMACHO: Thank you.

18 MS. FORDYCE: Or you can do it the other way around.

19 MR. UNGER: Let's -- at your pleasure, Board member
20 Camacho.

21 MS. CAMACHO: Let's do it.

22 MR. UNGER: Yeah. Let's do it.

23 MS. CAMACHO: Because then I have a question for
24 legal counsel.

25 You're not off the hook, legal.

1 MS. SMITH: I guess I'll start off and Renee can
2 address the comments.

3 Folks, Mr. Fleischli, I believe, spoke to Bay
4 Water Action Section 40201 and that is the primary part
5 of the act that talks about anti-backsliding. But it talks
6 about it in terms of effluent limits. And we're talking
7 about receiving water limitations. And I'll get to the
8 second part of --

9 MS. MEHRANIAN: A little bit louder.

10 MS. DIAMOND: Can you speak up again?

11 MS. MEHRANIAN: Speak up.

12 MS. SMITH: Yeah. Okay. That section -- I'm first
13 starting to talk about Section 40201 which is in the
14 Clean Water Act and talks about anti-backsliding. But it
15 talks about backsliding on effluent limits and not
16 receiving water. So that's -- that's one area.

17 The graph that was shown to you which was from
18 the Permit Writers Guide which is used to write our
19 typical, industrial and POTW permit -- not MS4 permits.
20 But -- and the top box at the top of that graph -- and,
21 you know, Mr. Fleischli, again, was showing some paths
22 down through that graph with some red lines. But the
23 very top of that graph is the first question is the
24 effluent limitation based on the state (inaudible). So
25 it's all referring to effluent limitations, not receiving

1 water limitations.

2 But then I'll shift to another citation in the
3 implementing regs, 12244, and that deals with relaxation
4 of final effluent limits and it does include standards
5 and conditions of existing permits. But we -- the
6 receiving water standards, receiving water limits would
7 be considered a conditional permit.

8 But we are not changing them. That language has
9 not changed. We are not changing the standard. That
10 standard is still the goal. All we are doing -- and it's
11 not just the compliance -- mechanism is not just a path
12 with no action, but it's very -- it's a highly
13 conditioned process that we have laid out provided during
14 the pathway to compliance. So we feel like even with
15 that provision and implementing regulations that there's
16 not anti-backsliding.

17 MR. UNGER: Can I just -- I would like to just add
18 one thing to add on to what Deb said about effluent
19 limitations.

20 The existing permit contains a set of effluent
21 limitations for trash and the new permit, we're bringing
22 in 33 other effluent limitations that are based on the
23 TMDLs that are being brought into the permit. So to say
24 that there's fewer effluent limitations in this permit
25 than the existing permit, we're puzzled by that and we

1 can't understand that statement.

2 MS. PURDY: And I have one more thing. I can't help
3 myself. Because the one last thing that I did want to
4 say -- and it is just from an overall perspective. So
5 Deb talked about the effluent limitations and the
6 receiving water limitations, but also I would just say
7 that from an overall prospective when you look at this
8 permit overall, the permit provisions are much more
9 stringent than the previous permit. And this is with the
10 addition of new and enhanced minimum control measures
11 within the stormwater management program, more robust
12 and rigorous provisions to implement the non-stormwater
13 discharge prohibition.

14 And also just as Sam said, provisions to
15 implement 33 TMDLs which are addressing hundreds of water
16 body pollutant combinations that are impaired and also at
17 the same time as we're implementing these 33 TMDLs, that
18 is actually going to be addressing other pollutants as
19 well that are not covered by TMDL.

20 And then finally, the fact that we have much
21 more rigorous and extensive monitoring requirements. So
22 I think when you look at the permit as a whole, it
23 clearly is a much more stringent permit than the previous
24 permit.

25 MR. UNGER: Jennifer -- would you like to add --

1 Jennifer, Francis or Nicole?

2 MS. FORDYCE: You said most of what I was going to
3 say.

4 MR. UNGER: We learned.

5 MS. FORDYCE: But I took two pages of vigorous notes.

6 All right. So let me just -- I'm going to go
7 through kind of a --

8 MS. MEHRANIAN: Go through your notes.

9 MS. FORDYCE: I'm going to go through my notes just
10 to sum it up a little bit.

11 The first -- you know, it is unclear what are
12 the anti-backsliding provisions in the Clean Water Act
13 and the federal regulations apply to receiving water
14 limitations. So that's unclear. So first of all.

15 But second, even if the anti-backslide
16 provisions do apply, you know, there is no backsliding
17 here. As you heard, the provisions are still there.
18 Part 5 is still there which previously was part 2 of the
19 existing permit. And so they're still included in the
20 permit.

21 The permittees who do not -- do not submit and
22 get an approved watershed management program are still
23 subject to those provisions. So that's existing
24 requirements. Only the implementation and the compliance
25 mechanisms in a watershed management program have

1 changed. And so it -- there's no backsliding. It's just
2 a different way of implementing existing requirements.

3 And then lastly, I think what's really important
4 to note is -- and Renee sort of touched upon it -- is
5 there are some exceptions to the anti-backsliding
6 provisions. One of them is new information that was not
7 known at the time of the previous permit issuance. And
8 so if something that was not known at the time of the
9 2001 permit was, you know, at least there's 33 TMDLs.
10 There were no TMDLs at that time. So this permit
11 includes 33 TMDLs. Had in 2001 been 33 TMDLs, it's
12 possible the Board might have done something very
13 different than what they did.

14 And then -- okay. So I just want to add that
15 the inclusion of the TMDLs does reflect a paradigm shift
16 to the watershed management. And so the watershed
17 management program does allow the permittees flexibility
18 on how to use their resources to address the highest
19 quality -- or highest priority water quality issues while
20 allowing both a technical and cost effectiveness.

21 And then the last thing I was just going to
22 mention -- and maybe Renee can add on more or Sam and
23 Deb -- is there is a -- you know, anti-backsliding is
24 somewhat linked to anti-deg. And so this permit does not
25 allow the water quality to get worse than what it is now.

1 Even if they were to get the benefit of the compliance
2 mechanism through an approved watershed management
3 program, they still have to implement their existing MS4
4 program.

5 So they're going to keep doing what they're
6 doing right now. And so it's not -- the water quality is
7 not going to get worse. It's sort of a technical
8 response so maybe Renee can add on.

9 MS. PURDY: I think you pretty much said what I was
10 going to. But just to reiterate -- I mentioned this in
11 my presentation as well -- that there is a requirement.
12 There are requirements throughout the permit where
13 watershed -- where permittees decide to develop watershed
14 management programs or enhance watershed management
15 programs, that during development of those programs, they
16 are obligated to continue to implement their existing
17 stormwater management program to the maximum extent
18 practical.

19 So that provision is still there, also to
20 continue to implement the non-stormwater discharge
21 prohibitions provisions with the permit. So there won't
22 be any change in terms of the current implementation such
23 that there would be any degradation of water quality as
24 they're implementing or developing those programs.

25 Additionally, I think the other thing that's

1 important that's going on is not only will they be
2 implementing their existing stormwater management
3 programs, but there also are some things, as I discussed,
4 that are not going to be covered by the compliance
5 mechanism that's provided by the watershed management
6 programs. So there are going to be a number of watershed
7 control measures that need to be implemented to achieve
8 the final water quality based effluent limitations that
9 are coming -- that have either passed -- the deadlines
10 have passed or the final deadlines will happen during the
11 course of program, their development of their program.

12 Additionally, the interim and final trash TMDL,
13 water quality based effluent limitations are there's no
14 change in the timing or pace of implementation of those.
15 So there are a number of things that are going to be
16 continuing to go on as they're developing these programs
17 that will prevent any degradation of water quality and
18 will actually ensure that water quality continues to
19 improve while they're developing these programs.

20 MS. MEHRANIAN: (Inaudible) your legal part of the
21 question?

22 MS. CAMACHO: Yeah. There was another question for
23 legal, if you don't mind.

24 The -- I believe it was Mr. Tahir who was
25 talking about a revised order public hearing. Can you

1 explain what your response would be to the -- I don't
2 know if it was a threat or -- potential concern for there
3 to be a requirement or a need for a revised -- a revised
4 order of public hearing because of the revised order that
5 was -- and the response to comments that were just
6 created and returned for people -- for permittees to
7 review. So I don't know if you have a response to that.

8 MS. JOHNSON: I can take a shot if I understand the
9 question correctly. I think Mr. Tahir had objected that
10 there should be an additional comment period.

11 MS. CAMACHO: That's what it sounded like.

12 MS. JOHNSON: And this was addressed in the sheriff's
13 ruling that was issued yesterday. And basically under
14 state and federal law, responses to comments are
15 required, but no additional rounds of responses to
16 comments are required in this case because the changes
17 are not sufficiently significant. They would have to be
18 very significant to trigger that type of requirement.
19 Under state law, there's no such requirement for an
20 additional comment period.

21 There's some case law that's analogous that we
22 have from rule-making proceedings. This is not a
23 rule-making proceeding. But I think that case law is
24 helpful and it's cited in the order. And in those cases,
25 as long as the changes to the rule are the logical

1 outgrowth of the rule as it was initially proposed, then
2 no additional comment period is required.

3 So I think we can say analogously in this case,
4 because the changes to the permit were the logical
5 outgrowth of that original permit and the comments
6 that -- that the Board did receive, that no additional
7 comment period would be required.

8 MS. FORDYCE: And if I could just add one more thing.
9 As I explained last time, the Board could have made all
10 the changes in the revised tentative and the second
11 revised tentative and on the change sheet on the day of
12 the first hearing. Now, obviously there's a number of
13 the changes and so that would have taken a very long
14 time. And so doing this bifurcated process really allows
15 more process than what the Board normally has to do.

16 And so these -- the revised tentative order was
17 released a couple of weeks ago and so the permittees had
18 a chance to look at these revisions in advance of the
19 hearing and the Board provided a pretty good comment on
20 them today and the Board did not have to do that. The
21 board did not have to allow opportunities for oral
22 comments on those changes.

23 MS. CAMACHO: Those are the end of my questions. I
24 have general comments, but I can hold those until later.

25 MS. MEHRANIAN: Yeah. We'll come back.

1 MS. CAMACHO: Thank you.

2 MS. MEHRANIAN: Vice Chair Stringer.

3 MR. STRINGER: Thank you.

4 I think we're going to be bouncing around,
5 Larry. So do you want to --

6 MR. YEE: No, go ahead.

7 MR. STRINGER: Okay. I really -- for now, anyway --
8 just want to focus on the things we heard from the
9 environmental community. I'm just generally hearing
10 what -- what we heard from our friends in the
11 environmental community was obviously taken on its face.
12 It's concerning, to me, anyway. And I just want to make
13 sure that we all understand in what places their comments
14 may be in error in terms of the conclusions that they're
15 drawing based on the way the permit is written. Because
16 I tell you, based on how I read the permit, I'm not
17 seeing the things that -- that they seem to be seeing and
18 concluding from it.

19 And to the extent that there are very specific
20 things that we can hone in on and maybe talk about
21 whether there's opportunity to make some adjustments, I
22 would like to talk about the implications of doing that
23 as well.

24 So with that, I think I would like to start
25 with -- with David Nahai's short comments. He -- he

1 seemed to -- to say that this permit was actually putting
2 us back before the 2001 permit that he was around for.
3 And in -- what I took from his comments was that we were
4 actually undermining the standards that were established
5 in that particular permit. I don't -- I don't see that
6 and I just want to make sure that -- that -- that David
7 and other people hear your thoughts specifically on what
8 he said.

9 Renee or -- I want you to respond to what David
10 said.

11 MR. UNGER: Well, I think -- I mean, clearly I think
12 the issue is -- is the -- one of the receiving water
13 limitation language and how it's handled in this permit
14 versus how it's handled in the 2001 permit. And as Renee
15 said, the language hasn't been changed. It still is the
16 backstop for this permit. If watershed management --

17 MR. STRINGER: Just to be really specific, can you
18 show us where in the permit that language is still there?

19 MR. UNGER: Yes. We'll get you the -- yes, we can.
20 Page 38 of the revised, part five in the middle of the
21 page.

22 MS. DIAMOND: What page?

23 MS. SMITH: Page 38.

24 MR. STRINGER: Page 38 where?

25 MS. PURDY: It's page 38, paragraph 5-A and in

1 particular, paragraphs 1 and 2 under that.

2 MR. STRINGER: Okay. So that's our backstop and
3 that's what sets the floor at --

4 MR. UNGER: Right. Right. And we talked about the
5 terminology of compliance mechanism versus safe harbor.
6 At the very least, if we use that analogy, at most, the
7 watershed management program speaking to this is
8 conditional at best. Permittees have to be in compliance
9 with the milestones and the activities set out in
10 developing the plan for the watershed management program.
11 And if they're not, then the operative part of the permit
12 that would take place is these receiving water limitation
13 languages.

14 I would also say several other things as well.
15 The monitoring -- as everyone has said, the permit has
16 been difficult to enforce. This provision of the permit
17 has been difficult to enforce. It -- I find it somewhat
18 confusing to the extent that everyone is saying well,
19 hey, you know, water quality has not gotten better, that
20 we need to do something more, yet we're hanging on to a
21 mechanism that is clearly enforcement related.

22 So we -- it is -- it is in the permit. It
23 states in the permit. As you said, it serves as the
24 floor. I'm going to let Renee take it from there.

25 MS. PURDY: Thank you. I just want to, yeah, follow

1 on some of what Sam said because I would say even more
2 than being the backstop of this permit, I mean, it is --
3 the receiving water limitations that are in part 5-A
4 continue to exist within the watershed management
5 program.

6 So if permittee -- if a group of permittees
7 choose to develop a watershed management program, it's
8 very clear if you look at page 47 where the watershed
9 management programs are introduced and you specifically
10 look at C(1)(d), it talks about what the watershed
11 management programs need to ensure. And the second thing
12 there is that the watershed management programs must
13 ensure that discharges from permittees' MS4s do not cause
14 or contribute to exceedances of receiving water
15 limitations in part 5-A. And it also refers then to part
16 6-E which is where all of the numeric water-quality based
17 effluent limitations for implementing TMDLs reside in
18 this permit.

19 So one thing that I want to make clear which I
20 think has not been made clear by the environmental
21 organizations is there are very clear numeric standards
22 for the receiving water as well as now in this case for
23 the discharges themselves. And those need to be met
24 through the watershed management programs.

25 Liz Crosson said that the watershed management

1 programs did not equal water quality standards. We would
2 agree with her. They don't. But they provide the
3 mechanism to ensure that the MS4 discharges will meet
4 those water quality standards. So there's nothing about
5 these watershed management programs that in any way take
6 away the receiving water limitations in this permit. The
7 receiving water limitations are still the goal and the
8 objective of the watershed management programs. And
9 watershed management programs need to be developed to
10 ensure that those will be met.

11 But as Deb said, it's that we really have had a
12 process over the last decade where we've had receiving
13 water limitations, but we've had an iterative process --
14 as we refer to it -- that really has been ineffective.
15 And part of the evidence of that, I would say, is the
16 fact that we have 33 TMDLs that need to be implemented in
17 this permit. And so we're trying to find with the
18 watershed management program or the enhanced program a
19 much more proactive way of addressing MS4 discharges to
20 ultimately achieve what all of our goals is which is to
21 ensure that the discharges aren't causing or contributing
22 to exceedances of receiving water limitations.

23 MR. STRINGER: And what about Mr. Nahai's comment
24 about the need for certainty? Can you address the
25 certainty that's provided by the revised?

1 MS. PURDY: Well, I would say -- and if I -- if I
2 understood his comment regarding the need for certainty,
3 I mean, I think part of that is addressed by the fact
4 that in the watershed management programs, those have to
5 include enforceable milestones and deadlines for their
6 achievement. So -- and some of those enforceable
7 milestones are actually the interim water-quality based
8 effluent limitations that have been established in the
9 TMDLs and the final water-quality based effluent
10 limitations and the compliance schedules that correspond
11 to the implementation schedules that this Board has
12 adopted.

13 And so there are going to be enforceable
14 milestones. And if at any point a permittee fails to
15 achieve those, then the watershed management program
16 mechanism does not exist for the permittee at that point.

17 So I think there's certainty in those interim
18 milestones. I think there's also certainty by the fact
19 that we've -- all along we've tried to create with this
20 permit essentially a dual path for compliance. And we're
21 trying to give permittees the opportunity to develop
22 these watershed management programs and enhanced programs
23 which we think are going to be more effective at getting
24 our desired water quality outcomes.

25 However, the baseline provisions including the

1 provisions of 5-A continue to exist as another pathway
2 that permittees can either choose to take; or if they
3 fail to do what's needed in the watershed management
4 program, then that is the pathway that they are required
5 to take in that case.

6 So I think there are a number of ways that
7 certainty is built in in terms of certainty of ensuring
8 progress and compliance with the permit provisions.

9 MS. MEHRANIAN: If you'll allow us to have a few more
10 and come back to you again?

11 MR. STRINGER: Sure.

12 MS. MEHRANIAN: Board member Glickfeld, did you want
13 to -- I just want to give a chance for everybody to ask
14 their most important questions and then come back again.

15 MS. GLICKFELD: So I would go to two issues that I
16 wanted to address with you which is I want to give -- get
17 you to summarize for us separately all the incentives
18 that we're giving the permittees to comply. What are
19 they getting in terms of assurances, compliance
20 interpretations where they're deemed to have complied?
21 What are we giving them to -- up to the point of them --
22 up to the point of approving the watershed management
23 plans and after the watershed management plans? What are
24 they getting? Besides what you deemed approved
25 consistent with the receiving water limitations, what

1 else?

2 MS. PURDY: In terms of what they're getting, I mean,
3 I would say that -- and you're asking about incentives.
4 So let me -- let me start -- maybe I'll end with a little
5 bit more detail on the -- what constitutes compliance.
6 But, I mean, I would say --

7 MS. GLICKFELD: If I might, actually, one of the
8 things that I didn't think was in there was any kind of
9 waiver of the interim TMDL that Mr. Gold mentioned that
10 there was a waiver of the interim TMDL. So if you could
11 address that as well as anything else.

12 MS. PURDY: Okay. Then let me start with that one.

13 So it depends on whether permittees are
14 implementing a watershed management program, a standard
15 watershed management program or an enhanced watershed
16 management program. So to the extent that they're
17 implementing a standard watershed management program or,
18 for that matter, they're implementing an enhanced program
19 but it's in an area where they can't retain the 85th
20 percentile 24-hour event, they're required to show
21 upfront through the reasonable assurance analysis that
22 they will meet those interim water-quality based effluent
23 limitations that are going to be during planned
24 implementation.

25 Now, let me --

1 MS. GLICKFELD: These are the TMDLs?

2 MS. PURDY: Right.

3 MS. GLICKFELD: Thank you.

4 MS. PURDY: Let me split it up between before-plan
5 approval and after-plan approval. But after-plan
6 approval, they need to demonstrate that the measures that
7 are in their approved program will achieve those interim
8 water-quality based effluent limitations consistent with
9 the compliance deadlines that this Board established for
10 those interim requirements. The difference and the need
11 for the difference when it comes to the enhanced program
12 where they're going to be doing retention of the 85th
13 percentile 24-hour event is typically when we've
14 developed these TMDLs, we've provided interim deadlines
15 that are very much sort of step-wise in faith.

16 So trash is a good example where it steps down
17 by 10 percent each year, for example, in a very equal way
18 over a certain period of time. But with these enhanced
19 programs that are going to be multi-benefit regional
20 projects, they require a long planning horizon. And then
21 all at once once they're done and they're built, they're
22 going to be addressing that volume from the 85th
23 percentile 24-hour event.

24 So initially I think as we were starting
25 developing TMDLs and setting interim deadlines, we were

1 envisioning a set of distributed BMPs throughout a
2 watershed where it would be maybe implementing some BMPs
3 in one sub-watershed and then doing some in another. So
4 having certain percentage reductions makes sense.

5 But if you're going to be doing a large regional
6 project and you're going to have a long planning horizon
7 and then all of a sudden when that planning is done and
8 the project is built, you've addressed everything, those
9 step-wise interim water-quality based effluent
10 limitations don't work as well in that sort of situation.

11 So that's why we're saying in that case, so long
12 as the permittees are doing all of the other interim
13 milestones that they will have to propose and will be
14 then approved as part of their enhanced program, then we
15 would give -- we would basically say that they're in
16 compliance with those interims. In recognition that
17 these larger projects need more planning time, but once
18 they're built, they will be addressing all of the flows
19 from that sub-watershed area and all of the pollutants.

20 MS. GLICKFELD: Okay. So now we talked about the
21 receiving water limitations. We talked about the interim
22 TMDL standards. What else?

23 MS. PURDY: Well, in terms of other incentives -- I
24 mean, the other incentives -- I'll let Deb or Sam jump in
25 at any point. But I would say the other incentives are

1 the opportunity for permittees to customize some of their
2 core programs that they've been implementing in very
3 prescriptive and standardized fashion. And the idea, of
4 course, is to achieve the -- you know, the efficiencies
5 in implementing those programs based on the water-quality
6 priorities in the watershed.

7 So, for example, with their industrial program,
8 if they're very concerned about industries that are
9 producing plastics and they're concerned about achieving
10 the Santa Monica Bay debris TMDL, they may want to focus
11 during a certain period of the permit term their
12 inspections on facilities that manufacture or handle
13 plastics, preproduction plastic.

14 So it gives them the opportunity to really look
15 at their water-quality priorities and customize their
16 programs.

17 MS. GLICKFELD: So is that the reason why you don't
18 require them to implement the minimum control measures
19 right away, so that they can do their watershed plans,
20 customize them and then -- because it seems like we have
21 a really -- you've done a really, really good job of
22 improving that dramatically over the 2001 and then say
23 oh, it's much better, but we're going to let you do the
24 old one for the next 30 months seems not right to me. It
25 concerns me.

1 MS. PURDY: And that -- I mean, part of the reason is
2 to give them the opportunity to look -- basically
3 identify what their water-quality priorities are for the
4 watershed and take that opportunity to look within their
5 individual jurisdictions and municipal governments at
6 ways that they can customize those programs and give them
7 the opportunity to do that and the time to do that while
8 at the same time continuing to implement their existing
9 programs.

10 And we have in the permit said that permittees
11 should target their implementation of their existing
12 programs as much as possible, even during the planning
13 period so that -- I mean, most of the permittees know
14 what many of the water-quality priorities are because
15 many of them are driven by TMDLs. And so to the extent
16 that they can start targeting implementation of existing
17 programs now, the permit specifies that. But we feel
18 they need the time to plan and optimize their programs
19 through the watershed management program in a very
20 comprehensive way. So that is why they're provided that.

21 MS. GLICKFELD: So that -- is there another one? And
22 then talk about the regional monitoring customization and
23 the concerns that -- that Heal the Bay raised about the
24 lack of detail in that, in that customization. They
25 provided you with suggestive language that would provide

1 for more detail. Can you respond to why you don't want
2 to include that?

3 MS. PURDY: We did include, actually, some of the
4 suggestions that the environmental community made with
5 regard to monitoring. We did indicate -- in both the
6 first -- the revised tentative and the second revised
7 tentative -- in the first revised tentative, we included
8 a screening for all parameters. I talked about that in
9 my presentation that we had initially cut back to
10 focusing on constituents where there was a TMDL or it was
11 listed as impaired.

12 But we added back the full sweep of parameters
13 during the first year of monitoring so that we can be
14 sure that if there are other problems that haven't been
15 identified, that we identify those and then monitoring
16 continues during the permit term for those constituents.

17 Additionally, we did add language to say that
18 primarily, the customization is intended to be focused on
19 the outfall monitoring program because that clearly was
20 the area where there was the largest increase in the
21 monitoring requirements. But I think the other thing
22 that I want to be clear about is we do require -- and the
23 customization still requires -- that the monitoring be
24 representative of the permittees' discharges and of the
25 receiving waters too which the permittees are

1 discharging, as well as meeting all TMDL monitoring
2 requirements.

3 And I think that's one thing that is also
4 another big change from the 2001 permit to this one.
5 With the advent of these 33 TMDLs, each of those TMDLs
6 also has a coordinated monitoring plan associated with
7 it. And those monitoring plans include receiving water
8 monitoring and in many cases, monitoring of the MS4
9 discharges. And even with customization, we're clear
10 that those monitoring requirements still need to be met.
11 So --

12 MS. GLICKFELD: If I can just ask this and then you
13 can respond further -- one of the things that I found so
14 frustrating about the 2001 permit was the fact that there
15 was only one mass emission station per watershed. In the
16 middle of 52 miles of the L.A. River, there's one place.
17 And since 2005, there only have been 15 samples taken in
18 each one of those places. So what do we know about
19 what's going on? I need to hear from you immediately
20 what's going to change about the monitoring system that
21 will move us to something where people are more
22 accountable.

23 MS. PURDY: So I think moving us towards something
24 where the permittees are more accountable is really the
25 outfall monitoring. Because the permit in 2001 -- I

1 would agree it was -- I think it was frustrating for many
2 of us that the monitoring was so limited and it was
3 focused just on receiving water monitoring. And so now
4 we are going to have much more outfall monitoring as a
5 part of this, both under storm-water conditions and
6 non-storm-water conditions.

7 And in addition, we are going to have many more
8 receiving water monitoring stations. The L.A. River, as
9 an example, has TMDLs for metals, as you know, and for
10 bacteria as well as for trash. And so there's much more
11 monitoring going on now in many of the reaches and
12 tributaries of the L.A. River to demonstrate compliance
13 with those TMDLs.

14 So we're going to see many more receiving water
15 monitoring stations as well as monitoring now with the
16 outfall which will really help us do a better job of
17 assessing the impacts of MS4 discharges on the receiving
18 water.

19 And the other thing that I want to point out is
20 those stations need to be linked. So we really do want
21 to pay careful attention to how we're selecting outfall
22 monitoring and receiving water monitoring so that we can
23 make the linkage between the MS4 discharge and the
24 quality of the receiving water.

25 MS. GLICKFELD: So does the current program provide

1 for the kind of -- the kind of distribution of outfall
2 monitoring, the frequency, the number of different
3 monitoring locations that will allow us to enforce this
4 permit?

5 MS. PURDY: I believe that it will, yes.

6 MS. GLICKFELD: And why wouldn't you simply do what
7 Heal the Bay suggests and limit the customization to
8 permittees that have more than 200 major outfalls which
9 are the ones that are really struggling with the outfall
10 monitoring program? Why would you just not limit it to
11 that?

12 MS. PURDY: I mean, I don't know that those are the
13 only permittees that are struggling with the outfall
14 monitoring program. I don't know that I would agree with
15 that -- that conclusion. I think that some of the other
16 permittees, even some of the smaller cities, you know,
17 will -- will struggle with this monitoring program. It's
18 a large increase.

19 And I just -- I think that customization through
20 the watershed management program makes the most sense.
21 It gives permittees the opportunity to work together and
22 we do require that those objectives of the monitoring
23 program are met and we require that the outfalls that are
24 selected must be representative of the permittees'
25 discharges, including -- and so that includes looking at

1 their land uses and to the extent that they're going to
2 need multiple outfalls -- which I'm sure they will -- to
3 characterize that, then that provides, you know,
4 certainty that they will need to do that monitoring.

5 MS. MEHRANIAN: Can we come back?

6 MS. GLICKFELD: Yeah. We can come back. I guess
7 that's my time. Thank you.

8 MS. SMITH: If I could add one more thing, Member
9 Glickfeld, we're also going to have a public review of
10 the monitoring plans when they come in. So we'll be able
11 to have opportunities to sit down with the watershed
12 groups and other interested parties to really craft as
13 robust a plan as we can that meets all those objectives.
14 And, you know, it might be 190 outfalls versus 200, but,
15 you know --

16 MS. MEHRANIAN: Go ahead.

17 MS. DIAMOND: I have a couple of questions.

18 One on the issue of the incorporation of the
19 TMDLs which, of course, we're very happy about having
20 been here for every single one of them, 33 that we're
21 going to be incorporating. That's a real -- that's a
22 real accomplishment and a real measure of success. That
23 is certainty not backsliding. And I think that's --
24 that's one of the things that we'll be -- one of the
25 strongest parts of this permit is that we have 33 TMDLs

1 incorporated. And as was said, this is a backstop for
2 the final receiving -- the numbers that are required, the
3 numerics in the TMDL.

4 But I'm interested in -- also in the -- it's
5 under -- it's on page 51 which is under 2-A, I guess,
6 Roman (inaudible) III. For pollutants there are
7 exceedances of receiving water limitations in part 5-A,
8 but for which the water body is not identified as
9 impaired on the state's clean water act, section 303(D)
10 list.

11 Those don't have numbers. I mean, they're
12 pollutants and they're not listed, but we don't know
13 whether, you know, those -- those particular water bodies
14 are going to become impaired to the point where perhaps
15 they should be listed. Hopefully not.

16 What is the backstop for these pollutants that
17 don't fall under 303(D) but which we are -- is part of
18 the watershed management plan? How do we deal with that?
19 What is the backstop?

20 MS. PURDY: Okay. Well, first, I -- I do want to
21 clarify that for those pollutants, that -- as we talked
22 about earlier, they do have receiving water limitations
23 associated with them. Those receiving water limitations
24 are essentially the water-quality standards that are in
25 the L.A. region's basin plan. So there are numbers that

1 need to be achieved in those cases for those pollutants.

2 And the -- the process for addressing those --
3 so if there's an exceedance of a pollutant, it's not
4 risen to the level of impairment at this point, but there
5 is an exceedance of that, then permittees need to
6 identify that through their watershed management program,
7 either up front as they're developing the program to the
8 extent that they -- you know, they'll need to be
9 evaluating historical data that's been collected and
10 identify exceedances of these receiving water
11 limitations.

12 Or otherwise, if it's an exceedance that occurs
13 during the implementation of the watershed management
14 program, they'll identify it at that time, assess how
15 much the MS4 discharge is contributing to that exceedance
16 and where the MS4 discharge is contributing -- causing or
17 contributing to the exceedance, they'll need to at that
18 point identify the watershed control measures that they
19 will implement, and they'll need to then identify a
20 schedule for implementing those measures that's as short
21 as possible to address those exceedances that are caused
22 by the MS4 discharges.

23 So there is a process to identify, like I said,
24 the watershed control measures if -- it may be perhaps
25 that some of those exceedances might be addressed by

1 watershed control measures that have already been
2 proposed. But if not, they need to identify those and
3 they need to identify interim milestones and dates for
4 their achievement to ultimately achieve the receiving
5 water limitations as soon as possible.

6 MR. UNGER: And can I -- I would like to just add
7 something to what Renee said. I thought it was a very
8 good explanation. Just to compare that to the existing
9 permit now, what you have when we have some of those
10 violations. And we've gone back -- as part of developing
11 this permit, we've looked at the receiving water
12 limitation exceedance report back to 2002 that there are
13 some that do crop up here and there.

14 Right now they're subject to the interim
15 approach and we know how ineffective that has been in
16 addressing these types of claims. So there's a much
17 better process in the permit that's before you now than
18 the process that is in the existing permit.

19 MS. DIAMOND: What is the time frame though? I mean,
20 when we do a TMDL, we -- we give a certain amount of
21 time. They're very generous. But how do we -- I mean,
22 what -- what is it -- what if it's without -- you know,
23 beyond the scope, sometimes they will be of the permit or
24 beyond the length of the permit. What is -- how do we
25 address these in terms of a time frame if we find that

1 there are exceedances and we need to -- and they need to
2 address them?

3 MS. PURDY: And I think that is -- really needs to be
4 addressed on a case-by-case situation because of the fact
5 that we -- we specify that those need to be addressed as
6 soon as possible. But the idea, of course, is that with
7 these watershed management programs, we want permittees
8 to look at all the water-quality priorities that they're
9 faced with and identify how they're going to achieve all
10 of those water-quality priorities in the most effective
11 way possible.

12 And so I think it's difficult to put a set time
13 frame on -- on that for every situation because I think
14 it will depend on whether it's a pollutant that -- you
15 know, that can be addressed on a shorter schedule. It
16 may be -- if it's a -- you know, if it's a pollutant and
17 the exceedance is happening during dry weather and it's a
18 non-stormwater discharge prohibition, that it would be
19 possible to address that in a much more expeditious
20 manner. If it's a pollutant that's in stormwater, it
21 may take longer.

22 So I think it's difficult to provide a set time
23 frame, but the -- the expectation is that that will be
24 evaluated as part of the watershed management program and
25 that there is a requirement to do that as soon as

1 possible.

2 MS. DIAMOND: I want to just --

3 MS. MEHRANIAN: Do you have more?

4 MS. DIAMOND: Yeah. I just -- yeah. I wanted to
5 just -- I have one.

6 MS. MEHRANIAN: Okay.

7 MS. DIAMOND: One more. One of the commenters -- and
8 I don't think he's still here -- was Andy Lipkis and he
9 said something that I think was very cogent. And that
10 was that the whole -- the challenge is going to be to
11 develop, design for the water-quality standards and
12 that's really -- that's -- I mean, that's -- that is a
13 mark of really what we're all trying to achieve. We want
14 to meet those water-quality standards.

15 And so it's going to be very important for the
16 staff no matter what modeling we use to be able to have
17 some certainty before -- you know, we were talking about
18 certainty. We want to be certain as regulators as much
19 as the regulated want to be certain that what's being
20 designed and money being spent, years being spent
21 actually is going to be something that works. And after
22 all, at the end of the day, we're about restoring and
23 protecting water quality. So how do you see that claim
24 in this?

25 MR. UNGER: I -- first of all, I fully agree with

1 you. I thought Mr. Lipkis had some of the most cogent
2 comments that -- that I heard this afternoon.

3 Basically -- and I'm just bringing back to the
4 Sun Valley Project which you heard about in the
5 previous -- the hearing earlier this month. He said it
6 was stuck, essentially. It was not moving forward until
7 the regional board came in and essentially, it wasn't so
8 much an issue of the engineering design. What we
9 provided was the reasonable potential analysis -- or
10 excuse me -- the reasonable assurance analysis that that
11 project was going to essentially meet water-quality
12 standards and to give that project essentially a thumbs
13 up so it could proceed.

14 We're doing the same thing in this permit as
15 what was done there. We have reasonable assurance
16 analyses. We've -- we've made the conditions for those
17 reasonable assurance analyses -- very robust. It turns
18 out that there's going to be peer review models, there's
19 going to be a technical advisory committee, there's going
20 to be water quality data that is all brought into it and
21 there's going to be BMP performance criteria that's
22 well -- peer reviewed as well.

23 You also heard John Dettle earlier this morning
24 showing you that this analysis is exactly the same
25 analysis that goes into developing the TMDL. I feel very

1 confident that regional board staff can do that analysis.
2 We've participated with -- in several of the phone calls
3 and looked at the county's watershed management model.
4 It's a very robust model.

5 We've had our expert in-house, Dr. C.P. Lie talk
6 with Richard Horner. He was on the phone call where it
7 was all explained. He's been in the meetings since the
8 inception of that model. And the model shows that by
9 capturing that throughout the county, water-quality
10 standards are obtained at that 85th percentile. We
11 think we can do -- over the 24-hour storm.

12 We think we can do the same analysis with other
13 BMPs in the distributed BMP realm that some cities will
14 not be able to take advantage of. City of L.A. told you
15 they needed both. We can do that analysis. We've been
16 writing 33 TMDLs, as you know, and our staff is
17 well-versed in they type of -- bringing you the best
18 professional judgment so that we can be sure that the
19 projects that are going to be built under this permit --
20 under this new permit which is going to incentivize the
21 building of projects for water quality will maintain the
22 water-quality standards.

23 I feel very confident that we can do that
24 because -- if I was in any other regional board, I
25 wouldn't say so. But we felt -- as you said, 33 of them.

1 There's a dozen more in Ventura County as well. Our
2 staff is well-versed in this type of analysis. And I
3 agree with what Mr. Lipkis said. This is exactly our
4 role and this is exactly our job to make that assurance
5 that water-quality standards can be met.

6 MS. MEHRANIAN: Thank you, Sam.

7 I would like to move a little bit -- we'll come
8 back. They're not going anywhere.

9 So Board member Munoz, if you want to ask a few
10 of your questions.

11 MS. MUNOZ: There it goes.

12 The nice thing about going last is everyone
13 seems to ask the questions you have, but I do have a
14 couple. I still want to have a better understanding
15 about the safe harbor provisions. And your comment
16 about -- your comment on Heal the Bay's recommendation to
17 eliminate the -- of both the water management plan and
18 with the TMDL.

19 MR. UNGER: First of all, I don't think they are safe
20 harbors. I believe as we described before, the watershed
21 management provides a compliance mechanism with the
22 receiving water limitations. At the very least, I think
23 Board member Yee got it correctly. It is impossible as a
24 transitional safe harbor. But really, a safe harbor --
25 at best, it's a conditional safe harbor. They have to

1 comply with a number of conditions to develop and --
2 develop watershed management plans and build these
3 projects in order to be incentivized from -- I guess from
4 the receiving water limitation provisions.

5 So I -- the question -- I think it's been -- it
6 hasn't been properly stated as it really is. As Renee
7 said earlier, it's exactly the issue where language is
8 exactly the same, equivalent to the language that is in
9 the 2001 permit. And what has happened is we just
10 provided a different mechanism to comply with those
11 provisions in the permit.

12 So Renee or Deb, either one of you want to --

13 MS. PURDY: I would like to say just a few other
14 things. Specifically with regard to the TMDLs, I do want
15 to say that -- and I'm not sure if your question is
16 regarding once the plans are being implemented, the
17 watershed management programs are being implemented or
18 prior or both.

19 But I would say for the watershed management
20 programs, once they're being implemented, with regard to
21 TMDLs, the expectation and the requirement of those
22 watershed management programs -- as I pointed out -- I
23 can't remember what page it was now, 5- -- 47, actually,
24 in paragraph D, it specifically requires that a watershed
25 management program ensure that the TMDL numeric

1 water-quality based effluent limitations are met. It
2 provides several mechanisms for demonstrating compliance
3 with those numerics.

4 But to the extent that a permittee wants to
5 demonstrate compliance through a set of actions that are
6 implemented in its watershed management program, it has
7 to first demonstrate upfront that those actions have a
8 reasonable assurance of achieving the numeric
9 water-quality based effluent limitations.

10 So in that sense, this really -- there's no
11 compliance mechanism for TMDLs other than what's already
12 adopted by this Board in each of those 33 TMDLs. And the
13 schedules and the requirements for implementing those
14 TMDLs reflect exactly what was adopted by the Board when
15 those TMDLs came before you as Basin Plan Amendments.

16 And with regard to the other receiving water
17 limitation, what we've done as Sam described and I
18 described earlier is provide a mechanism for coming into
19 compliance with the receiving water limitations. The
20 receiving water limitations which are water-quality
21 standards still exist. The watershed management program
22 provides a way to comply with those receiving water
23 limitations.

24 And so I would say there again -- and there are
25 very specific requirements within the watershed

1 management program section related to -- for those
2 receiving water limitations where there's not a TMDL;
3 therefore, there aren't numeric water-quality based
4 effluent limitations. Permittees need to propose
5 enforceable milestones and deadlines for their
6 achievement that will be happening throughout the course
7 of the permit term. And those deadlines will have to be
8 complied with.

9 And so there is no opportunity for a permittee
10 to not take any action. They will have to be taking
11 action to ensure progress towards achieving both the
12 receiving water limitations not addressed by TMDLs as
13 well as those that are addressed by TMDLs.

14 MS. MUNOZ: Okay. Thank you.

15 My other question is they also mentioned in
16 their proposal that for purposes of public participation,
17 they wanted to make sure that all future actions in the
18 permit must include public participation board oversight.

19 Isn't that what we do? I'm just wondering why
20 they would include that in there because I thought that
21 we did have an open, transparent process with public
22 participation.

23 MS. GLICKFELD: It's not for us though.

24 MS. MUNOZ: What do you mean?

25 MS. PURDY: Right. I mean, I would say it was

1 present in the permit, even the tentative that -- that
2 went out in June. There was a process for public review
3 of documents that the permittees would be developing
4 prior to any approval of those documents.

5 However, I would say in response to comments
6 that we heard and, you know, we really took to heart, we
7 do feel like -- at least I would say speaking for myself
8 personally -- I feel that's a very important part of our
9 process is having that public involvement, both the
10 involvement of permittees as well as the environmental
11 community and other partners. And so we have added more
12 robust requirements in the form of the technical advisory
13 committee specifically related to the watershed
14 management programs which are a new construct in this
15 permit and everybody is very interested in.

16 And we want to make sure that we have input not
17 just when these draft plans come to us at the end of the
18 day, but starting at six months throughout the
19 development of these plans that there is that public
20 involvement and that opportunity for input in the
21 watershed management plans, and also as Deb mentioned I
22 think earlier, in the development of the monitoring
23 programs.

24 So we've added more robust provisions to those
25 that already existed in the -- actually exist in the 2001

1 permit and also existed in the initial tentative that we
2 put out.

3 MS. MUNOZ: I think that there's an observation that
4 I would make is that we have to go beyond the traditional
5 environmental groups and that we have to go into the EGA
6 groups because there are many of those -- to bring them
7 in and get their input and their feedback and possibly
8 create relationships with the traditional environmental
9 groups.

10 And my last comment is -- has to do with the
11 watershed management plans, both the standard and
12 enhanced -- which I am a big supporter of. I think it's
13 a great option, especially for those smaller cities who
14 are concerned about whether they will have the financial
15 means. But there's still a city -- and I don't remember
16 which city mentioned -- but they -- that they were having
17 challenges and they didn't know what to do and they
18 wanted our guidance.

19 And I guess my question is I want to make
20 sure -- I want to know what the role is going to be of
21 the staff to guide those cities, to encourage them to
22 either connect with the county or connect with other
23 cities near them so they fully understand that they're
24 not there by themselves dangling with a -- with the
25 option -- with possibly failing.

1 Because I think that the management plans were
2 really created -- both options, especially -- let's say
3 they decide they want to do a standard, they want to go
4 it alone. Will you provide them with strong guidances,
5 that's probably not what you want to do or -- that's the
6 concern that I have.

7 MS. PURDY: Right. I mean, I think -- I do think
8 that -- excuse me -- think that's a very important point.
9 And I actually -- I'm not sure, but you might have been
10 talking about I think the gentleman from Glendora, I
11 believe it was. I took note of somebody who I thought
12 that would be a good person to call and talk to a little
13 bit more about this process to make sure that they
14 understand it.

15 But I think that's something that would be a
16 good idea with some of the smaller cities, to really
17 reach out to them and help -- help them understand what
18 their options are within this permit and the benefits of
19 getting involved in a larger collaborative watershed
20 management program, given the benefits that they can get
21 and the efficiencies they can achieve by working with
22 other permittees during this process.

23 So I think that that's something that's
24 certainly at your direction. And also just based on what
25 we heard from permittees, we could follow-up and reach

1 out to some of those smaller permittees.

2 MS. MUNOZ: Thank you.

3 MR. UNGER: And may I add one other thing to that? I
4 would just -- in the recent weeks of developing this
5 permit, we've had good success in reaching out to one of
6 the state senators. And it seems as if that may be a
7 very viable means for us to try to get to some of the
8 cities and work with the senator staff, the legislative
9 staff that is in this area. They seem to be very eager
10 to be participating and opining on many of the aspects
11 of -- of this permit.

12 So that could also be a good avenue for us to
13 explore to and we would be pleased to take that direction
14 as well.

15 MS. MUNOZ: Thank you.

16 MS. MEHRANIAN: Is that it? I just have like one or
17 two that I would like to ask (inaudible) -- I know that,
18 you know, this -- the process of this work, this is not
19 probably the first time that the staff, at least, through
20 the workshops is hearing these issues and also the Board
21 members brought them up a number of times.

22 So throughout the development of the permit, I
23 had a feeling that this is a permit that for the first
24 time is approaching issues that are no precedent of it
25 and therefore, it's a very well-coordinated,

1 orchestrated, intertwined permit that I always thought if
2 I pull -- if any of us pull one section of it, it can
3 totally like throw it off from what it can do.

4 So I'm very careful of proposing any change
5 or -- therefore, my question is because we heard, again,
6 about -- and the terms was removing the off-ramp that
7 Heal the Bay mentioned or eliminating the safe harbor was
8 mentioned by another group. And overall, you know, I'm
9 trying to understand that this whole issue of the minimum
10 measures -- monitoring measures.

11 And you in your discussions said that -- a
12 number of times that if we take out some of the -- if we
13 make them continue with the minimum measures, then we're
14 taking from concentration and focus of what they need to
15 really do to meet the new plan and to meet the watershed
16 plan and all that. And I understand. That's the new
17 part of everything that is this unknown.

18 But my question to you is that no matter what
19 they do and how they tailor-make the need and the
20 measures and the BMPs of the new plans, first, are we
21 really taking out or allowing -- is it more permissive at
22 any point, at the beginning?

23 And second, no matter what they do, the minimum
24 measures, they have -- aren't they the same? So why are
25 we taking them out? It's a two-part question.

1 First, are we really making more relaxed
2 regulations at the beginning of the 20 months or
3 30 months, yes or no?

4 And then the second part is if it is yes, my
5 question to you then, why would we take anything out
6 knowing that no matter what they're going to be doing,
7 there's a minimum that is pretty much going to be
8 standard and the same?

9 MS. PURDY: So in answer to the first question,
10 definitely the answer is no, that we're not in any way
11 making this less stringent than what it's been before.

12 And with regard to the second part of your
13 question, we're -- I mean, I would say that we're not
14 taking any of the minimum control measures out. And
15 sometimes I -- I question whether minimum control
16 measures is the best way to refer to them, but that's how
17 they've been referred to for such a long time, that we
18 continue to do that.

19 But it's the -- it's really the baseline
20 standardized program. But within that there's -- there's
21 flexibility to target actions within each of those areas.
22 Like we touched on briefly a little bit before with, for
23 example, the commercial industrial pollutant control
24 program. There might be a desire for a permittee to
25 focus on restaurants or to focus on the plastic

1 industries or something like that or with public
2 education. It may be that a permittee or a group of
3 permittees want to focus on a certain type of public
4 education to address discharges of oil or something like
5 that.

6 So it gives them the opportunity. There are
7 certain parameters meaning in certain categories of storm
8 water management measures that they need to do. Six
9 general categories and then certain things within those.
10 But there are opportunities for them to customize. And
11 it's just -- we're not taking anything away. It's just
12 really a matter of how they target their efforts in each
13 of those six areas.

14 So I think that's -- I don't know if that
15 answers your question.

16 MS. MEHRANIAN: Yeah. So just the last piece of this
17 question, in a way that we're not saying okay, now, that
18 you're putting this sophisticated mechanism to control
19 the oil, then it's okay to not sweep your streets. I
20 mean, we're not saying that. I'm simplifying it. But
21 it's -- because somehow when you hear some of the
22 testimonies, it sound like oh, we're going take this back
23 and we're going to make it worse.

24 And I'm trying to -- okay. So then you said
25 that no, you're not thinking that or you believe that

1 we're not making this less stringent and more relaxed.
2 If we ask you to say four things, five things of why you
3 don't think that we are, what would be the most important
4 things you would say? Why is this equally good or
5 better? I want to believe it's got to be better than
6 what we adopted in 2001. So what would that be?

7 MS. PURDY: Well, I think -- I mean, with regard to
8 the minimum control measures, as a starting point, I
9 think the reason it's going to be better is first of all,
10 it's going to be focused on the water-quality outcomes
11 that we're looking for. And so rather than just
12 implementing a set of programs that perhaps aren't --
13 aren't really focused on the actual water quality issues
14 in the region, it's going to be targeted at that so we're
15 going to do a better job of actually getting
16 water-quality outcomes by targeting resources to those
17 areas that need to be addressed.

18 I think the other thing I wanted to touch on --
19 and maybe this is a reason or it might just be a little
20 bit of a tangent, but regard to your question of could
21 they just stop doing a certain element of a minimum
22 control measure, one of the things that we're very clear
23 about is that there's -- if for any reason there would be
24 a, you know, a proposal to eliminate some aspect of one
25 of those categories of minimum control measures, there

1 needs to be a justification for that. And it can't be
2 eliminated if that would be inconsistent with the federal
3 requirements for what needs to be included in the storm
4 water management program.

5 So if that customization is proposed and an
6 element is proposed for elimination, there needs to be a
7 very strong justification for that and there needs -- it
8 needs to be clear and a clear demonstration that there
9 will still be an equivalent level of water quality
10 protection based on the customized program.

11 MR. UNGER: Just to add one thing to that, I think
12 the tool that's going to allow customization without
13 diminution of effectiveness is the outfall monitoring.
14 We're going to actually see in different areas what the
15 outfalls are showing us. We're going to have that
16 monitoring data. That's going to provide the permittees
17 quite a bit of important data so that they can actually
18 target their programs to address the pollutants that they
19 may or may not be discharging into the receiving waters.
20 So -- and that's part of this program. So it's quite an
21 important tool for the customization of the minimum
22 control measures.

23 MS. MEHRANIAN: Sure. The reason I wanted to get to
24 the outfall monitoring is -- and the specificity of some
25 of this plan is because I do believe that if we impose

1 certain things to make it -- that is not in tune with the
2 rest of the permit, we can debilitate the permit itself
3 from doing what it needs to do because it is such a
4 unique way that it's been put together and there's no
5 precedent of being done before. But thank you. I'll let
6 others ask questions again.

7 Anything for the staff? Any --

8 MS. CAMACHO: No, I don't have any.

9 MR. YEE: Break for happy hour.

10 MR. UNGER: You're going to miss it very shortly.

11 MS. CAMACHO: Overall comments at all?

12 MS. MEHRANIAN: I believe it's just to ask questions,
13 yes, and clarification from the staff and any other group
14 by that matter, you know, the county, the cities, whoever
15 you have questions for. I think we should next round --
16 after we're done with the staff, we should give you time
17 again to ask other questions and then --

18 MR. STRINGER: I just have a -- just one thing I want
19 to focus on. But before I do, I just want to say I
20 fundamentally disagree with the notion or the
21 characterization of the permit including any safe harbor
22 thing. I just think that's fundamentally an incorrect
23 characterization of what the permit does. And I think
24 Renee and Sam have really pointed that out. So I just
25 wanted to be really clear about that.

1 The 85th percentile standard, if you can explain
2 a little bit kind of where that came from, I think it
3 would be helpful for us. And then I would like to talk a
4 little bit about EPA's concern that we heard it seems
5 like a week ago -- I guess it was this morning. And I
6 would just like to talk a little bit about that.

7 MR. UNGER: I -- possibly the county might be able to
8 provide you -- County Flood Control staff who are here
9 might be able to provide you a -- a better explanation
10 about how that standard has come into play.

11 But what we do know about it, there's been a lot
12 of discussion about what it would take to retain
13 precipitation vents in various watersheds across the
14 county. And it appears that when you look at that curve,
15 sort of a dollars versus precipitation event occurred,
16 right about that 85th percentile -- right at the 85th
17 percentile, the curve trends up very markedly. And what
18 that means, basically, is that it costs you a lot more
19 money to, essentially, contain the 86th percentile than
20 it would going from the 20th percentile to the 21st
21 percentile.

22 MR. STRINGER: Right. I understand sort of
23 technically, but I remember that chart and that was very
24 helpful. From a process perspective, I think we heard
25 about it in one of the earlier workshops. And I had

1 thought that the environmental community was on board
2 with that particular standard and today we heard
3 something that I thought was very different from that.

4 And in particular, you know, as a former EPA
5 person myself, I'm very concerned about their comment
6 that -- that it's not clear it will result in compliance
7 with the NELA's -- and so why don't you address that.

8 MR. UNGER: Again, I really think it comes down to
9 staff's most professional judgment. And in this case, we
10 have an incredibly robust tool that the county has been
11 working on developing. And as you heard them say, that
12 they will make it available to cities and to other
13 stakeholders to use as they see fit or they can use it
14 themselves.

15 That -- I don't exactly remember how long that's
16 been under development, but it's been under development
17 for at least three years. Our staff has been involved in
18 the development of that. They've been going to all the
19 stakeholder meetings, they've been going to all the
20 technical advisory committees.

21 And what happens is they have a map,
22 essentially, and they show the standards of various
23 places and they look at compliance with a number of the
24 TMDLs. And my -- at this point I would have to talk with
25 them if they've just singled out TMDLs or if they've

1 aggregated them all to be sure that in various locations
2 where they do obtain the 85th percentile 24-hour storm,
3 they show that they can obtain TMDL compliance in the
4 general sense.

5 I would have to ask them -- they're available if
6 you want to ask them essentially whether that's in the
7 general sense, whether it's for each and every TMDL, but
8 I know that they've looked at the compliance of how that
9 event would happen in Los Angeles County. And there's a
10 very good record now on some of the work that they've
11 done and they've shared with us and that our staff has
12 evaluated that the 85th percentile 24-hour storm is a
13 very robust measurement to obtain the surface water
14 quality parameters that we need.

15 MR. STRINGER: So you would disagree that EPA
16 characterized that as not being grounded in science?

17 MR. UNGER: Yes. I would definitely characterize it
18 as -- I think it's grounded in some of the best science
19 and the best science available at this point in some of
20 the most robust modeling. And I would invite the county
21 to bring one of their staff here.

22 MR. STRINGER: Right. I guess you had said that
23 earlier. I have a note here that there was some
24 potential language that was going to emerge from that
25 particular comment? Did I get that wrong or -- was that

1 the language that couldn't be agreed on?

2 MR. UNGER: Yes.

3 MR. STRINGER: Okay.

4 MR. UNGER: Well, maybe we should take another gander
5 at -- yeah. I'm going to let them explain.

6 MR. STRINGER: I take EPA's comments very -- you
7 know, very seriously.

8 MR. UNGER: So do we. We do as well.

9 MR. STRINGER: And is EPA still here?

10 MS. MEHRANIAN: Yeah, John.

11 Did you want to make comments?

12 MR. KEMMERER: -- referred to as language that
13 couldn't be agreed to because we weren't involved in any
14 discussions of that language.

15 MS. GLICKFELD: Please get him to come up and speak.

16 MS. MEHRANIAN: Come and answer questions. Thank
17 you.

18 MR. KEMMERER: Yeah. I was just saying I'm not sure
19 what's being referred to as language that couldn't be
20 agreed to because there was no discussion with us
21 about -- today about alternative language.

22 MR. UNGER: Well, go ahead, Deb.

23 MS. SMITH: I can give a little background to this.
24 I -- you know, I talked to John about this issue
25 yesterday and of course --

1 MR. KEMMERER: That's not the language you offered
2 yesterday.

3 MS. SMITH: No. So in talking with John yesterday
4 and hearing him today, my understanding --

5 You can correct me if I'm wrong.

6 -- is in large part about having the
7 equivalency, you know, without a robust -- some other
8 information backing up. And what we've been talking
9 about is how -- what Sam has been talking about is this
10 size storm in a number form from trash TMDL with what
11 county is doing is the size of the storm and working with
12 SQWRP that you see of the ability to build facilities in
13 our dams. We saw the relationship with the cost this
14 morning.

15 We also see relationships with pollutants coming
16 off in the early part of the storm and how it's
17 diminishing as the storms get bigger and bigger. You
18 don't see the same exceedance.

19 So there's plenty of evidence out there in the
20 scientific community about this size of storm being
21 something to aim for in terms of pollutant reduction, in
22 terms of facilities that you can build without building a
23 Hoover Dam in terms of cost -- the costs that are
24 prohibitive in trying to deal with this.

25 But in trying to answer more robustly John's

1 concern, what we were thinking about was we have a
2 provision that talks about this in the plan --

3 Perhaps you can find the page for me.

4 But we were talking about when the watershed
5 management plans are submitted to us, having evidence in
6 those plans presented to us for that particular approach
7 and that plan, bringing in more site-specific information
8 linking to 85th percentile to the pollutant reductions
9 expected with that plan.

10 MR. STRINGER: Right. So it would -- specifically
11 incorporate something to address the concern that it may
12 not be grounded by science even though you think it is?

13 MS. SMITH: Yes. But we did talk to a few of those
14 permittees and didn't get too far with that discussion.
15 But you can hear more from John now, we can hear from
16 some of the permittees and explore that further, but
17 that's -- that's what we were trying to do today.

18 MR. STRINGER: It seems like a reasonable approach to
19 me. I mean, I --

20 MR. KEMMERER: Can I just make a point? I mean, I
21 really --

22 MS. MEHRANIAN: Can you say your name for the record?

23 MR. KEMMERER: Sure. John Kemmerer for the EPA.

24 Yeah. I mean, the point -- the EPA guidance on
25 incorporating TMDLs into -- or into MS4 permits that has

1 been around since 2002 talks about when you come up with
2 a BMP-based approach for incorporating a TMDL into a
3 permit -- so basically this is a BMP-based approach. You
4 would be retaining the 85th percentile storm -- you have
5 to have in the record for the permit the justification
6 for how that gets to those specific wasteload
7 allocations.

8 And I agree with Sam and Deb and others that the
9 85th percentile storm is the metric that's been used a
10 lot as it will be. And I -- we've been very involved
11 with the county's modeling and it does show that there is
12 that pinch point on the curve and it's cost effective to
13 retain the 85th percentile storm.

14 Our point is we don't have that rigorous
15 analysis that's been -- that's required by the EPA
16 guidance for saying and showing that that specific
17 retention is going to achieve the numeric wasteload
18 allocation. And there's been a lot of discussion about
19 how we still have this backstop of you're going to have a
20 final wasteload allocation that needs to be achieved and
21 I think we're losing that with this addition to the
22 permit.

23 MR. STRINGER: So just to be clear --

24 Hang on Sam.

25 So is your issue with -- like an administrative

1 procedure one, that the record just isn't complete on
2 this particular issue?

3 MR. KEMMERER: It's that on Monday night we saw this
4 language that this was the new approach for -- this was
5 one of the options for achieving the final wasteload
6 allocations. And yes, it's not -- I haven't seen the
7 support in the administrative record, the fact sheet or
8 otherwise. Maybe I've missed it if it's there, if you
9 can tell me where it is -- to show that retention of the
10 85th percentile storm is going to result in achievement
11 of those specific numeric wasteload allocations that
12 have been established in these 33 TMDLs.

13 MR. STRINGER: So you're not quibbling with the
14 science that exists, you're just saying it's not --

15 MR. KEMMERER: I haven't seen the science --

16 MR. STRINGER: Is that --

17 THE REPORTER: One at a time.

18 MS. DIAMOND: The reporter --

19 MR. KEMMERER: I think that's a legal question.

20 MS. MEHRANIAN: Hold on.

21 THE REPORTER: Thank you.

22 MS. MEHRANIAN: Go ahead.

23 MR. STRINGER: I actually think that's an EPA
24 question. You know --

25 MR. UNGER: Certainly I --

1 MR. STRINGER: Do we need that for the record?

2 MR. UNGER: At the last -- when we opened this
3 hearing, the county presented that model. They discussed
4 it at the meeting. So when they first brought forth the
5 enhanced approach --

6 MR. STRINGER: Okay.

7 MS. GLICKFELD: I would rather have him
8 (inaudible) --

9 MR. STRINGER: He's talking about the county's
10 presentation this morning.

11 MS. DIAMOND: So that means it's in the record? So
12 it's in the record.

13 MS. MEHRANIAN: So -- I'm sorry. That it is in the
14 record?

15 MR. UNGER: Yes. Yes. It was discussed when the
16 county first presented at the last hearing, the enhanced
17 management approach, they discussed their -- the
18 watershed modeling system that they would be using to
19 demonstrate a reasonable assurance.

20 MR. STRINGER: Okay. I remember that now.

21 MS. MEHRANIAN: Okay. Okay. I think if there's no
22 more questions for staff --

23 MS. GLICKFELD: I have --

24 MS. MEHRANIAN: You do?

25 MS. GLICKFELD: Oh, yeah.

1 MS. MEHRANIAN: Go ahead.

2 MS. GLICKFELD: Okay.

3 So for staff, I'm looking at page 4- -- I was
4 pursuing the questions about the -- the incentives and
5 flexibility that we're giving the permittees to implement
6 these watershed -- to develop and implement these
7 watershed plans.

8 Is the item on page 3- -- 43, item 9 which is
9 some kind of an -- authorizes a reopener to revise WQBELS
10 and turn them into BMP. Why are we suggesting that
11 WQBELS shouldn't be in the numeric and is that one of
12 these incentives?

13 MS. PURDY: Well, this -- so the reopening provisions
14 here we already allow and allowed in the tentative that
15 went out in June. The option for permittees to implement
16 BMPs to demonstrate compliance with interim water-quality
17 based effluent limitations -- that was already provided
18 in the June tentative.

19 And what we're saying with this reopener, we
20 said at this point we felt like in the case of these
21 potential BMP actions that would be implemented, it was
22 premature at this point because we don't know what the
23 sweet (phonetic) of BMPs is -- that is going to be
24 implemented will be in each of these plans. So it was
25 premature to say that those BMP actions could be used to

1 constitute compliance with the final water-quality based
2 effluent limitations.

3 So the reason this reopener is here is we
4 described in the fact sheet that once we have more
5 experience and permittees have more experience with
6 implementing these watershed management programs, we can
7 evaluate how effective they are at achieving the interim
8 water-quality based effluent limitations based on the
9 monitoring data that's gathered and so forth. Then we
10 can evaluate whether a similar approach could be applied
11 in the case of the final water-quality based effluent
12 limitations.

13 MS. GLICKFELD: And what would be the benefit of that
14 to water quality and the benefit of that to the
15 discharges?

16 MS. PURDY: Well, the benefit to water quality -- it
17 would -- I mean, it would be the same. Because at that
18 point, we would have had a demonstration to show that
19 those BMPs are effective in ultimately achieving the
20 numeric water-quality based effluent limitations. We
21 wouldn't remove the water-quality based effluent
22 limitations because to the extent a permittee falls out
23 of the watershed management program process, then they're
24 subject to the numeric water-quality based effluent
25 limitations.

1 So the result for water quality would be the
2 same because they'll be implementing actions that will
3 achieve those final interim water-quality based effluent
4 limitations. For permittees, it gives them the certainty
5 that they can implement these BMPs and then they know if
6 they've implemented them and they've implemented them
7 properly, then that will constitute their compliance.

8 MS. GLICKFELD: So the only reason we would make
9 those changes is if we were completely assured that the
10 BMPs were, in fact, equal to the numerics that we were
11 trying to achieve in the water-quality standards; is that
12 correct?

13 MS. PURDY: That -- right. That is the intention of
14 that provision, Roman IX on page 43.

15 MS. GLICKFELD: And so we think that that's a
16 probable outcome that we want to call it in as a possible
17 reopener; is that the right reason?

18 MS. PURDY: Yes.

19 MS. GLICKFELD: We think that that's likely to
20 happen?

21 MS. PURDY: Yes.

22 MS. GLICKFELD: Okay. I want to go back. When we
23 started out I think last May, you showed us -- we went
24 through a bunch of workshops starting I think last May,
25 public workshops where we started looking at the

1 difference between a watershed approach and an individual
2 discharger city-by-city approach.

3 And we are now to the point where -- I think
4 what happened at our last meeting, the county came in and
5 asked us to offer an alternative, what I call über or
6 enhanced watershed approach. I'm very concerned that by
7 having all of these alternative ways of complying as
8 being complying and getting all of these incentives as a
9 watershed, in fact, what we're going to end up having is
10 fragmented watersheds because we're going to have a city
11 or two here, a city or two there, and it would be very
12 hard for the benefits that the county has described in
13 their models to come through.

14 I'm also very concerned that -- and this is
15 something I'm going to be recommending. I actually would
16 like there to only be two categories, the enhanced
17 watershed and the individual permittee. And I would like
18 to have your explanation for why that would be a bad
19 decision.

20 And then I would like to invite the county, the
21 City of Los Angeles -- if they're still here -- and any
22 other city that wanted to talk to me about why that would
23 be a big mistake. Why couldn't we just have -- what
24 eventually will happen anyway with the water quality fee
25 is if it's approved, everybody will have to be in the

1 same watershed planning group. Whether we can make them
2 happen or not, they will all be in the same watershed
3 planning group.

4 Why would we want to have to monitor and
5 participate in more than nine plans? Why would we want
6 to help fragment up these watersheds by having all of
7 these other options? And if there's a good reason for
8 it, I need to know why.

9 MR. UNGER: Let me try if I can, Board member
10 Glickfeld. You're well familiar with the -- the short
11 answer is this: The short answer is that we think the
12 problem -- as the City of L.A. told you, some of the
13 other cities may have told you -- that infiltration is
14 not available in all areas of the county. And they need
15 to use other types of BMPs such as diversions, smaller
16 catch basins, Sisters (phonetic) of Parks, Greenstreak,
17 LID and things like that.

18 And I would just bring -- and so basically by
19 looking at the enhanced management program, you're
20 limiting the types of BMPs, the categories of BMPs that
21 can be used to -- or to infiltration. And I would just
22 bring to your recollection that at the Santa Susana Field
23 Lab, we had their -- an expert panel with a number of
24 experts, not just one expert -- but just an absolute
25 number of experts and they started off with a retention

1 scenario and they've now moved to a distributed BMP
2 treatment, some collection and treatment of various
3 improvements to the contaminated soils and things like
4 that that have allowed them to get away from retention.

5 And why did they do that? They did it because
6 the environmental impacts of retaining in that, what some
7 day will be a pristine area, through a retention was much
8 greater than having smaller BMPs that could achieve the
9 same water quality. And there's been quite a bit of
10 success at the Santa Susana Field Lab using these types
11 of BMPs. And I think basically there's just going to be
12 a lot of areas where you need a wider toolbox, a bigger
13 toolbox to address water-quality issues than retention.

14 MS. GLICKFELD: Are you saying then that what I
15 call -- the enhanced watershed areas, in fact, are -- are
16 totally limited to being --

17 MR. UNGER: Yes.

18 MS. GLICKFELD: -- the facilities? And so they're
19 defined as that. So that basically we're creating --
20 we're creating a very complex system. I don't see any
21 reason why these things have to be separate.

22 And I would like to have the City of Los Angeles
23 and somebody from the County Flood Control District
24 explain to me why you can't have a proposal that includes
25 both the -- both the distributed and the regional.

1 MS. MEHRANIAN: Is this the last question that you
2 have for them? Can we hold, ask --

3 MS. GLICKFELD: It's really -- you know, this is a
4 line of questioning. I would like to just finish this
5 line of questioning and then we can go back.

6 MS. MEHRANIAN: You want them to go back and forth?

7 MS. GLICKFELD: Yes, I do.

8 MS. MEHRANIAN: Okay.

9 MS. GLICKFELD: It would really help me. I would
10 appreciate that.

11 MS. MEHRANIAN: Okay. Sure.

12 MS. GLICKFELD: So if the city -- if the county --
13 and I would like to know whether I'm talking to somebody
14 from the County Flood Control District or the County of
15 Los Angeles.

16 THE REPORTER: And please state your name.

17 MR. KHARAGHANI: Yes. Again, Good evening. I'm
18 Shahram Kharaghani, City of Los Angeles.

19 What you're going to -- for City of Los Angeles,
20 we are always going to start our planning with the
21 enhanced watershed management plan. And we have every
22 intention, you know, based on testimony to have those
23 projects first. The watershed that I'll (inaudible) use,
24 even for Sun Valley that you heard, there are multiple
25 projects. Some of them are what we call enhanced, some

1 of them are not enhanced.

2 Is the collection of (inaudible) the distributed
3 projects and the regional projects that I would call, I
4 call it integrated plan. Now, some of those projects can
5 capture 85 percent because the Sun Valley Park that we
6 have and we infiltrate. But we have within Sun Valley
7 "Talks For Green" (phonetic) which is a green small
8 project at the intersection. So I have other projects.
9 Those other projects, my understanding from permit,
10 they're called watershed management plan. So it is the
11 collection of those together that we call integrated
12 plan.

13 MS. GLICKFELD: So basically he's going to do the big
14 scale retention plan, you're going to do the small scale
15 distribution plan and they're going to be separate plans?

16 MR. KHARAGHANI: No, no, no. I am going to do the
17 big plan within the given watershed. It's first
18 priority. But there may not be enough opportunity to do
19 the base. So I have to have small and medium and other
20 things. That's --

21 MS. GLICKFELD: Is there any case where you can see
22 that there's a reason for us to incentivize watershed
23 plans for lids that don't cover the entire watershed?

24 MR. KHARAGHANI: I believe so because the watershed
25 that I'm participating in Los Angeles, (inaudible), Santa

1 Monica and Dominguez Channels, I don't believe I will
2 have enough regional projects for me to meet the
3 water-quality standards and wasteload allocations. I
4 have to have big projects when we can. I have to have
5 other medium sites. And also -- medium sites, those are
6 the ones that I'm saying that they cannot take
7 infiltration. That's what I'm using that terminology.

8 MS. GLICKFELD: You're not answering -- I don't think
9 you're understanding me. I'm asking whether or not you
10 can see any reason why this Board would want to have
11 watershed plans done either of a distributed type or of
12 the enhanced regional type that have less than a full
13 compliment of the cities and the watershed involvement.
14 Why would we want to incentivize multiple plans within a
15 watershed?

16 MR. KHARAGHANI: I don't look at them as multiple
17 plans. I look at them as one plan that has many
18 different parts to it. And what -- adopting that big
19 watershed management plan, you are providing incentives
20 for everyone to work together. I call them that big plan
21 that have every type of projects in it. That would be my
22 response if I understand you correctly.

23 MS. GLICKFELD: So you would not object if we
24 specified that it was not possible for two cities that
25 were less than 10 percent of a watershed to get together

1 and do a single watershed plan by themselves?

2 MR. KHARAGHANI: If that's what they choose to. But
3 based on the cost (inaudible) scale, I would say it
4 behooves them and also based on the funding that we have,
5 it behooves everyone to work together.

6 MS. GLICKFELD: Okay.

7 MS. MEHRANIAN: After Gary's comments, we need a
8 break because the court reporter needs a break.

9 So go ahead.

10 MR. HILDEBRAND: Again, I'm Gary Hildebrand with the
11 L.A. County Department of Public Works.

12 I think on the issue of the enhanced watershed
13 plan and the watershed plan, I think the reason we need
14 that flexibility is you're dealing with cities of various
15 sizes and various locations of the watershed. Like
16 Shahram, for example, he's very large. And -- the City
17 of L.A. It's getting late.

18 In any case, the city is very large. And in the
19 city of L.A., you can have a sub-watershed in the L.A.
20 River that is entirely comprised of the city of L.A. So
21 in that particular circumstance, they would be developing
22 and planning projects individually and on their own.

23 You move to, say, the San Gabriel River
24 watershed where you have several dozen cities. And in
25 the same size sub-watershed, you can have six cities. So

1 in that case there, they would want to have the
2 opportunity to work together and collaborate. So you
3 need the incentives to allow that type of situation to
4 occur.

5 There's also poor areas of the county where, for
6 example, some of the coastal cities on Santa Monica Bay,
7 some of those cities sit directly on the coast. There's
8 very little outside watersheds that drain through those
9 cities to the bay. They may end up wanting to develop
10 something individually or with just one or two cities
11 adjacent to them. They wouldn't be looking at larger
12 regional projects.

13 So I think the hydrologic circumstances, the
14 city size circumstances, they need to have that
15 flexibility to allow the permittees to pick what's the
16 most appropriate approach for them.

17 MS. MEHRANIAN: Can we take a break?

18 (Recess)

19 MS. MEHRANIAN: There were two more cities that
20 wanted to respond. One was Signal Hill and one was the
21 L.A. Permit Group. So Signal Hill, please.

22 MR. WATSON: Yes. I just wanted to say that --

23 THE REPORTER: I'm sorry, your name? Your name?

24 MR. WATSON: Richard Watson --

25 THE REPORTER: Thank you.

1 MR. WATSON: -- City of Signal Hill.

2 And you've had some presentation about Signal
3 Hill. Obviously, it can't really do much infiltration
4 with a city on a hill. And one of the things we're
5 looking at is the key place where you start is the
6 watershed management program. And in the case of Signal
7 Hill, it discharges into two watersheds, part of it into
8 the L.A. River and part of it into the Los Cerritos
9 Channel.

10 In the Los Cerritos channel portion, we already
11 got a group of seven cities organized with a ten-year
12 agreement and trying to work together. So that part of
13 the city -- I think we'll pretty definitely want to
14 take -- start with that. On the other side, it's a
15 question of do you do something by yourself or try to
16 work with Long Beach? But that's a matter of discussion.

17 But I think what most places are probably going
18 to do is start with the watershed management program, see
19 what they can work out in the sub-watershed area. And
20 then if you can work something out where you're connected
21 and somebody else has got the right soils and you can
22 infiltrate, then you might be able to go for an enhanced.
23 That's that reason I suggested earlier. I need to learn
24 more about the enhanced.

25 So I think the core of this whole thing is

1 probably the watershed management program and then you
2 need to back down from that or go ahead. But I think
3 that's where we need to start. And we've actually got a
4 group in the Coyote Creek of the San Gabriel River that's
5 12 cities. And what's pulling these groups together
6 initially is TMDLs because that's the way the TMDLs were
7 written. So I think you're going to find a lot of folks
8 start with the watershed management program and then
9 either go down or go up. So I think the flexibility is
10 important.

11 And I think the City of Downey -- I think John
12 Hunter had something he wanted to say too.

13 MS. MEHRANIAN: Thank you.

14 MR. HUNTER: If I may --

15 MS. MEHRANIAN: L.A. Permit Group.

16 MR. HUNTER: I would like to just talk for one minute
17 on the City of Downey if --

18 MS. MEHRANIAN: Sure. Would you allow the Permit
19 Group to go first?

20 MR. HUNTER: Absolutely.

21 MS. MALONEY: Thank you. I really appreciate the
22 opportunity to respond to your question.

23 We understand that there's some concerns over --
24 that you may get too many plans or whether there's some
25 cohesiveness within the watersheds. And I think that's a

1 valid concern. In response to that question, I think the
2 first thing is that we're -- we -- we have -- we've heard
3 from, you know, the City of Signal Hill and there's a few
4 potential outliers, you know, within -- that have unique
5 situations within their jurisdictions. So they may just
6 want to work together or with or one or two other cities.
7 And I think there's very few unique cases like that.

8 But to make kind of a black-and-white decision
9 to say you're either all in or you're all out, you know,
10 I think -- I think we would -- to not allow that
11 flexibility for those few agencies that may have those
12 very unique situations would kind of go to the detriment
13 to the program as a whole. So we want to make sure that
14 that opportunity is there, but also there's definitely an
15 understanding, you know, that the resource needs to
16 review these plans.

17 The -- and I think I talked earlier about the
18 technical advisory committee. And I think there's --
19 they have a really significant role in making sure in
20 reducing the amount of work that's really going to be on
21 your staff's shoulders in reviewing these plans to make
22 sure that they're ready to go before they're even
23 submitted.

24 And then furthermore, you know, we've heard a
25 lot of concerns from cities about the economics and some

1 testimony to say that, you know, we may be able to find
2 some more economically feasible or -- measures to
3 implement through these plans. So I think that's going
4 to drive cities to these plans through that economy
5 scale. So I don't think you're going to see very many
6 outliers, but for those few unique situations, I think we
7 do need to allow that exemption there. Thank you.

8 MS. MEHRANIAN: Thank you. Downey.

9 MR. HUNTER: I guess I should --

10 Oh, my name is John Hunter.

11 THE REPORTER: Thank you.

12 MR. HUNTER: And I guess I should be thankful that
13 this topic came up because I now get to show one of the
14 slides that I wasn't able to because I ran out of time
15 earlier.

16 This is a map of the city of Downey. Each one
17 of those green dots represents an existing LID system --
18 infiltration, biofiltration, something like that.
19 There's over 1,000 there.

20 We're moving forward with our watershed
21 management plan. As you know, Downey was one of the
22 cities that originally requested for an individual
23 permit, a separate permit. The preliminary direction
24 we've been given right now is to work towards this
25 watershed permit. If we have to go to an enhanced

1 watershed where we have to have a regional infiltration
2 system, all this work is for not. It was pointless.
3 Forget it.

4 The way we're preliminarily looking towards this
5 is we will have our watershed management plan and we will
6 take the component. We'll work with the L.A. River TMDL
7 groups and have added that as a component of our plan,
8 the Los Cerritos Channel, the L.A. -- or the San Gabriel
9 River Channel -- those will all be components of our
10 plan.

11 But if we have to go to enhanced, we don't have
12 a place to infiltrate regional water so what do we do?
13 So that's why we have to have a separate watershed
14 management program. We just -- the enhanced will more
15 than likely not work for us. Thank you.

16 MS. MEHRANIAN: Thank you.

17 MS. GLICKFELD: Madam Chair, if I could, I just
18 wanted to thank everyone that just responded. It helped
19 me a lot to understand more why this flexibility is
20 needed now.

21 MS. MEHRANIAN: Of course. Thank you.

22 Any other questions, any other parties that
23 you -- any of the Board members want to question?

24 MS. DIAMOND: I did want to ask something of EPA, but
25 I believe --

1 MS. MEHRANIAN: No, he's here.

2 MS. DIAMOND: Oh, good. John, can I ask you a
3 question, please?

4 MR. KEMMERER: John Kemmerer, EPA.

5 MS. DIAMOND: Thank you.

6 MS. MEHRANIAN: Mic is not on.

7 MS. DIAMOND: It's always on when it's not supposed
8 to be.

9 But anyway, you -- you had a couple of comments
10 that I take very serious. I think you know that we all
11 take what the EPA says very seriously. And you said at
12 the very beginning of the day that you wanted to make
13 sure that we didn't compromise protectiveness. Those
14 were your words.

15 And one of the issues that you raised -- and I
16 want to be sure I understand this -- is that the -- the
17 receiving water limits should remain in effect until the
18 plans are approved. And I thought I understood the staff
19 then to say that the receiving water limits remain in
20 effect. So I want to make sure I understand. Do the --
21 so I just -- I wanted to ask you, is that how you still
22 feel, that that's still an issue for EPA?

23 MR. KEMMERER: Yeah. And the -- the idea is is there
24 is a period starting -- the way the first permit lays it
25 out is starting with the submittal of, you know, the

1 intent to prepare the watershed management plan. And
2 there's a few other milestones that need to be met and
3 there's that interim period before the watershed
4 management plan is approved under which the permittees
5 are basically deemed to be in compliance. And as long as
6 they're working through that process, they're deemed to
7 be in compliance with the receiving water limits by a
8 percentage.

9 It would be our recommendation that the -- that
10 the permit be more protective if that did not occur. And
11 we -- I made some suggestions of pretty minor language
12 just to Renee that I think would get at this, but the
13 idea would be, you know, once the -- once those plans are
14 approved, then they would be -- then that alternative
15 compliance mechanism would be in place for meeting and
16 receiving water limitations.

17 MS. DIAMOND: I mean, I would like to explore that
18 with staff, whether it's legal or whoever. Why shouldn't
19 we have those receiving water limits in place until the
20 plans are approved? Because some of the plans won't be
21 approved until -- is it 18 months?

22 MS. SMITH: If you look at the -- I just put a
23 graphic up on the screen. And -- to try to walk you guys
24 through it. You see the effective date of the permit on
25 the left and then you see the hash line which means

1 there's no coverage and then there's six months' notice
2 to participate and then there's the plan at 18 or 30,
3 depending on the plan.

4 So I know we originally had then -- when the
5 plan was approved and we heard from the permittees that
6 it's going to be really hard to go to city councils to
7 get money when there's all this exposure to -- to take
8 the time -- you know, get the money, A, from councils or
9 other places, to have that protection to do the plan and
10 focus on the plan and not focus on being out of
11 compliance for the occasional exceedance or receiving
12 water limits.

13 So what we did was they -- they get the coverage
14 at six months, but if they don't get the plan in in 18
15 months, interim approved plan, do stuff subsequent to
16 that -- retroactively we take it away. So basically if
17 they don't do the plan at 18 months, from six to 18
18 months they've lost the coverage. And we can go back and
19 assess a couple lines of enforcement between six months
20 and 18 months.

21 So basically, you know, in a way we still are
22 doing what John wants. I know we're giving that early
23 protection, but we can just as easily take it away if
24 they don't get their plan in. If they get their plan in,
25 then they've had it from month six. If they don't do the

1 plan or don't do something else, it all goes away back to
2 month six.

3 So it's a major incentivization to both have a
4 little bit of protection while they're trying to get the
5 money -- getting together, developing the plans and
6 meeting all the deadlines. Not like the old days where
7 deadlines might not have been met, there wasn't a
8 consequence. There's a real consequence to not meeting
9 that planned deadline. And you can't game the system and
10 go --

11 Somebody asked earlier -- I think it was you,
12 Maria -- about someone going to month 29 and saying "Oh,
13 I changed my mind." If that happens, you know, all that
14 goes away. You know, game over, back to six months. And
15 that's -- that exposure is reinstated. So I think
16 there's still -- so there's two incentives there.
17 There's incentives to meet all the deadlines, do the
18 plans, get on the path, meet the enforceable milestones
19 in the future. There's also an incentive to focus people
20 early on to getting together and get the plans out so
21 that they can have success. We feel like there's a dual
22 line of incentive there.

23 MS. DIAMOND: So you're saying that, in essence, the
24 receiving water limits are there if they don't come up
25 with a plan, you can go back --

1 MS. SMITH: Yes.

2 MS. DIAMOND: -- and you can look at the monitoring
3 so in a sense it's still there?

4 MS. SMITH: Yes. Absolutely.

5 MR. UNGER: Yes. It is still there.

6 MS. SMITH: It is still there until they get -- until
7 they, you know, don't submit something on time, don't,
8 you know, get a plan in, whatever.

9 MS. DIAMOND: So you're saying the receiving water --
10 that's why you said earlier the receiving water limits
11 are still there, it's just that you're not -- while they
12 get this period of time that they're -- they've indicated
13 they're going to do a plan, that they're going to come up
14 to you in six months and say "Yes, we've entered into a
15 watershed management plan" -- so nothing has happened.

16 But if they don't at the end of six months, if
17 you find out they're not participating or is it the end
18 of 18 months or 30 months? That's --

19 MS. SMITH: Well, I imagine most people at six months
20 will say hey, we want to do one of these plans. There
21 might be a few people that don't. But then between zero
22 and six months, it's just like it is now, the permit.
23 And there's -- receiving waters are out there.

24 And then once they say that, we say okay. You
25 know, we're going to give you this temporary protection

1 here -- or this protection here until you march down the
2 road, you give us your plan, you revise it, you implement
3 early actions, you do whatever requirements are in the
4 permit. But if you don't, it goes away back to the six
5 months.

6 So what John was proposing was, you know, get it
7 to them in 18 months. But then they're worried between
8 six and 18 months about that exposure while they're
9 trying to get together to meet the stuff in 18 months.
10 So it's sort of -- it's a disincentive to do it that way.
11 This way both -- both ideas are incentivized at the
12 18 months, but this provides an additional set of focus
13 to get the plans done.

14 We want to see success. You know, we take this
15 very seriously. And I think you guys know that and we
16 want to see success, we want to provide this path to
17 success. And we think this is one ingredient that we
18 need to do it.

19 MS. MEHRANIAN: If my fellow Board members are not
20 opposed and there are no more questions, I would like to
21 make a motion to adopt the second revised tentative order
22 as opposed with the changed --

23 MR. STRINGER: You're making a motion? Okay.

24 MR. YEE: I'll second.

25 MS. MEHRANIAN: If you're not opposed.

1 Second? Motion made in second.

2 MS. GLICKFELD: Can I make --

3 MR. YEE: Do you want to make comments?

4 MS. GLICKFELD: Yeah.

5 MS. MEHRANIAN: Sure.

6 MS. GLICKFELD: That was fast.

7 MS. MEHRANIAN: I thought that we were at a

8 standstill.

9 MS. GLICKFELD: So in the motion before us, I would
10 like to add -- I would like to add -- I would like to
11 suggest some changes in addition to the finding fact
12 sheet, if that's possible.

13 I want to make sure that while we have a long
14 session that says the L.A. County Flood Control District
15 gets its own minimum control plan and we recognize that
16 it doesn't have land use authority and it doesn't have
17 highways, it doesn't have sewer plants, county -- the
18 county has highways that are both in unincorporated areas
19 and in cities, the county has special districts that own
20 treatment plants and the county definitely does have land
21 use authority. So I want it to be very clear, either at
22 page 6 or at page 17, specifying that the L.A. County
23 does have these authorities and is a separate permittee
24 under the MS4. Is that something that you can add?

25 MR. UNGER: Yeah. Maybe --

1 MS. SMITH: Yes.

2 MS. GLICKFELD: And --

3 MR. UNGER: Maybe we should get all the suggestions
4 and give us a few minutes?

5 MS. GLICKFELD: Yes. And my second one -- and this
6 is only if my board colleagues concur -- is that we
7 should actually add into the permit findings under the
8 economic considerations that the regional boards will
9 work with permittees to developing uniform financial data
10 collection and prove consistency in the reporting data so
11 that the wide differences that have been reported to the
12 board are rectified.

13 MS. MEHRANIAN: I agree with that if it works -- I
14 mean, in terms of like resources they have or how much
15 time that --

16 MS. GLICKFELD: Well, that's the whole -- that's part
17 of it.

18 MS. MEHRANIAN: I don't want to promise something
19 that the Board --

20 MS. SMITH: No. We definitely want to do that.

21 MS. McCHESNEY: I have a recommendation of that, that
22 suggestion which is that because you're directing your
23 staff to do something, it's maybe more appropriate to be
24 in the motion -- in your motion that you direct staff to
25 work with the permittees.

1 MS. GLICKFELD: So rather than amending the findings,
2 I would do what? It's her motion.

3 MS. McCHESNEY: If she agrees to amend the motion to
4 say that direct staff to -- or direct executive officer
5 and staff to work with the permittees to develop --
6 whatever you said. But I would say --

7 MS. MEHRANIAN: Uniform costs.

8 MS. McCHESNEY: Standardized costs reporting
9 information.

10 MS. MEHRANIAN: Your staff doesn't have objection to
11 this?

12 MR. UNGER: We do not have an objection to this.

13 MS. MEHRANIAN: Then it's fine.

14 MS. SMITH: No, and I may have --

15 MS. MEHRANIAN: Yes.

16 THE REPORTER: One at a time.

17 MS. GLICKFELD: Sorry.

18 THE REPORTER: One at a time, please. Go ahead.

19 MS. GLICKFELD: My last one is to also direct
20 staff -- if they're amenable to -- to start to develop a
21 strategic plan for what they are going to do to -- their
22 role in making sure that this permit is implemented, that
23 you're going -- you're going to have --

24 Sam, you're going to have to change the
25 organization of -- of the staff and what their staff

1 responsibilities are to shift from permit writing into a
2 permit consistency. Because I don't want to come -- I
3 don't want to hear in a year or two from now that we
4 didn't -- that there was plans due and nobody called them
5 on it. And I know that that's what you guys want too.

6 But I really want it to be very clear that the
7 board knows that this can't work unless we change what
8 we're doing as well to be really engaged in this.

9 MR. UNGER: I'm trying to think if the others have --
10 I'm assuming that would be in the adopting motion or in
11 the motion as well.

12 MS. GLICKFELD: I would like to direct the staff to
13 do a strategic plan and bring it back to the Board at a
14 later date.

15 MS. DIAMOND: What does that mean, a strategic plan?

16 MS. McCHESNEY: A strategic plan to ensure
17 implementation of the permit?

18 MR. YEE: That's a separate motion after the
19 approved -- if we approve.

20 MS. MEHRANIAN: Yeah. Let's first approve the
21 motion. So first and there's a second.

22 All in favor?

23 MS. GLICKFELD: Wait --

24 MS. McCHESNEY: Actually --

25 MS. FORDYCE: Yeah --

1 MS. MEHRANIAN: We decide the motions --

2 MS. FORDYCE: I would also like to suggest that -- I
3 drafted up some language that maybe can be put in the
4 fact sheet for detailed anti-backsliding that I would
5 like to propose to the Board.

6 MS. MEHRANIAN: I'll pull my motion. Because now
7 it's getting --

8 MR. STRINGER: Can I just say that we need to be
9 really clear about this motion and what's in it?

10 MS. MEHRANIAN: Yes. We have to move --

11 MS. GLICKFELD: So if you have a staff -- a revised
12 staff recommendation to us, we should get that.

13 MS. MEHRANIAN: I just don't think --

14 MR. STRINGER: The motion has been withdrawn so
15 let's --

16 MS. MEHRANIAN: Jennifer, at this point, I'm not
17 suggesting to develop another tentative motion because I
18 think it's -- especially with issues that have already
19 been resolved, I don't want to go back again. So --

20 MS. McCHESNEY: I don't think your motion is on the
21 table.

22 MS. FORDYCE: Yeah. I don't think the finding is --
23 I don't think the additional language is necessary as
24 explained in the response to comments, but it was just
25 further -- more information.

1 MS. MEHRANIAN: I think we're good without. I mean,
2 that's what my motion would be.

3 MS. FORDYCE: Then do you guys need some time to
4 craft some language?

5 MR. UNGER: We do. Yeah. We need a few minutes.

6 MS. SMITH: Yeah.

7 MS. FORDYCE: Can we request like 15 minutes?

8 MS. MEHRANIAN: What are we trying do? I'm not --

9 MS. McCHESNEY: Okay. You had -- you had asked --
10 Ms. Glickfeld had asked a question about some language
11 and they are --

12 MR. UNGER: The language that distinguishes -- as I
13 understand it, you're looking for language that
14 distinguishes the county from the County Flood Control
15 District in the findings section of the permit.

16 MS. GLICKFELD: Right. On page 17.

17 MR. UNGER: Yes. And what I would like to do is take
18 a brief respite, ask the county what -- you know, what
19 they think and come back to you with the proposal
20 about -- so the language is legally proper in terms of
21 how the county is addressed, unless our attorneys --

22 MS. SMITH: And if the attorney thinks it's prudent
23 to have a finding for --

24 MS. FORDYCE: They said no.

25 MS. SMITH: Oh, okay.

1 MS. MEHRANIAN: She has two things. She has the
2 cost. So the cost has to be incorporated in what you
3 have.

4 MR. UNGER: No, no, no. The cost -- my understanding
5 is the cost is going to be a directive.

6 MS. MEHRANIAN: A directive, okay. And then this --
7 but this first one that you just talked about should be
8 incorporated in the permit?

9 MR. UNGER: Yes. If you want to incorporate it in
10 the finding, we need five minutes.

11 MS. MUNOZ: I just had a point of order. Roberts
12 Rules of Order, which I remember from way back when,
13 don't we have to -- don't you have to agree to the
14 amendment that she's offering; and if that's done, don't
15 we have to agree on the amendment before as included as
16 part of the motion?

17 MS. MEHRANIAN: It is or I withdraw. And I agree
18 with the cost one and I'm willing to amend the cost. I'm
19 not willing to amend the new language on backsliding.
20 And I'm not understanding what are we talking about with
21 the county, if somebody can clarify for me.

22 MR. UNGER: Yeah. If you go to, I think it's page
23 F17 -- excuse me. The L.A. County, yes, the county.
24 It's -- yes. Excuse me. It's 15 or 17 of the order.
25 There are several paragraphs there that describe the Los

1 Angeles County Flood Control District as a different or a
2 separate permittee from the municipal permittees.

3 As I understand, what Board member Glickfeld
4 asked for was some language clarifying that the county
5 itself has the same obligations in the unincorporated
6 area as the other permittees. And what I'm asking for is
7 I need about five or ten minutes and I'm going to suggest
8 that we vet that language. We will compose that language
9 and we vet it with the county to be sure that we have
10 everything accurately stated when we craft that language.

11 So that's -- that's how -- that's what I'm
12 asking for. I'm asking for a brief respite so we can
13 craft the language, be sure that it is accurate and
14 correct and then come back to you with that language.
15 Yes.

16 MR. YEE: Well, then I would suggest, Madam Chair,
17 that you withdraw your motion, I will withdraw my second.
18 And when we come back, that we have a very carefully
19 worded motion.

20 MS. MEHRANIAN: No. I disagree. I don't want to
21 withdraw my motion because I think we're far enough and
22 we just add these two amendments -- that's my
23 suggestion -- and vote again.

24 If you want to make another motion -- I'm not
25 withdrawing my motion.

1 MR. UNGER: May I -- Renee has come up with a
2 brilliant idea that she will share with you.

3 MS. PURDY: I'm not sure if it's brilliant, but I --
4 I have a potentially simple solution perhaps to address
5 your comment, Board member Glickfeld, which is on page 17
6 of the order, would it be possible just so there's no
7 confusion -- because I believe that's your concern.

8 MS. GLICKFELD: 17 of the order --

9 MS. PURDY: 17 of the order.

10 MS. GLICKFELD: -- or 17 of the findings?

11 MS. PURDY: Of the order. So it's in the finding of
12 the order on page 17.

13 Would it be possible to make a simple addition
14 in the last paragraph of the findings under E related to
15 the Los Angeles County Flood Control District where that
16 paragraph begins "The L.A. County Flood Control District
17 has no planning, zoning," et cetera -- could we just make
18 the clarification there to read that "L.A. County Flood
19 Control District," comma, "in contrast to the County of
20 Los Angeles," comma, "has no planning, zoning,
21 development-permitting or other land use authority"?

22 MS. GLICKFELD: That would be fine. And if in the
23 paragraph above that, do the same thing in terms of the
24 municipal sewer systems, public streets, roads or
25 highways, the same thing as exactly.

1 MS. PURDY: Okay. The same -- exactly the same.

2 MS. McCHESNEY: Well, it already says "Unlike other
3 permittees."

4 MS. GLICKFELD: Yeah.

5 MS. McCHESNEY: Okay. I get it.

6 MR. UNGER: Maybe -- maybe we could say something
7 like "Unlike other permittees and Los Angeles County."

8 MS. McCHESNEY: Including the county of --

9 MS. GLICKFELD: Including Los Angeles County. Thank
10 you.

11 MS. MEHRANIAN: So that will work.

12 MS. PURDY: So "Unlike other permittees, including
13 the County of Los Angeles" -- and then continues on,
14 "L.A. County Flood Control District does not own or
15 operate."

16 MS. GLICKFELD: And the next paragraph would be --
17 just remind me again.

18 MS. PURDY: Okay. One moment please.

19 So in the -- in the other paragraph, the last
20 paragraph of the findings under E, it would read "The
21 L.A. County Flood Control District," comma, "in contrast
22 to the County of Los Angeles," comma, "has no planning,
23 zoning, development-permitting or other land use
24 authority."

25 MS. GLICKFELD: Perfect.

1 MS. PURDY: And continuing on.

2 MS. GLICKFELD: Thank you.

3 MS. DIAMOND: She is brilliant.

4 MS. PURDY: Not really, but thank you.

5 MS. FORDYCE: So -- okay.

6 MS. McCHESNEY: I wrote it down.

7 MS. FORDYCE: Oh, good. Go for it.

8 MS. McCHESNEY: Okay. So just if Chair Mehranian is
9 willing -- you're making -- you're requesting an
10 amendment to the motion, right? And to say that --

11 MS. MEHRANIAN: Yes. I accept.

12 MS. McCHESNEY: Okay. So what I have as the motion
13 is the motion to adopt, to revise the second revised
14 tentative permit with the change sheet and direct the
15 executive officer to work with permittees to develop
16 standardized cost information to direct the executive
17 officer to develop a strategic plan to ensure staff
18 ability to oversee the implementation of the permit; and
19 three, revise the last two paragraphs -- paragraphs of
20 section F on page 17.

21 MS. FORDYCE: Of section E.

22 MS. McCHESNEY: I mean the last two paragraphs of
23 section E to state -- the first one -- "Unlike other
24 permittees, including the County of Los Angeles that Los
25 Angeles" -- "the LACFCD does not own or operate any

1 municipal sanitary sewers, public roads or highways. And
2 the second paragraph, the last paragraph of part E, "The
3 LACFCD," comma, "in contrast to the County of Los
4 Angeles," comma, "has no planning, zoning," et cetera.

5 MS. DIAMOND: Can I offer one thought?

6 MS. MEHRANIAN: That's my motion.

7 MS. DIAMOND: Can I offer one thought that we not
8 have the word "strategic plan" because strategic
9 planning is a very specific --

10 MS. MEHRANIAN: So just say plan.

11 MS. DIAMOND: A plan. And that's all I need. I
12 would like to hear that plan at a retreat in January.
13 But that doesn't have to be part of the motion.

14 MS. MEHRANIAN: Okay. Great. That's my motion.

15 MS. GLICKFELD: Madam Chair, you know, I think it's
16 time that -- we've been in the week of -- as some of my
17 colleagues -- a lot on this and I think this is a really
18 important action we're about to take and I would like a
19 moment to just explain why I'm supporting this motion.

20 MS. MEHRANIAN: Sure.

21 MR. YEE: This is the time for discussion.

22 MS. MEHRANIAN: Yeah.

23 MS. GLICKFELD: If I could -- if you want to start at
24 one end or another?

25 MS. MEHRANIAN: Yeah. Let's start at that end.

1 MS. MUNOZ: This has been an incredible process for a
2 new Board member like me because I was told that this is
3 what was going to happen, but every explanation surely
4 did not reflect what actually did happen.

5 I think this is a very historic permit and I'm
6 very proud of our staff for their hard work, for the many
7 meetings that they held, for really trying to reassure
8 inclusion of the environmental organizations, the
9 permittees and all the other stakeholders. I think it's
10 very critical that as the regional water board, we --
11 that the cultures start changing and I think that it's
12 starting here. The people feel that they have a place at
13 the table, that they feel that what they say is heard and
14 is acted upon.

15 And based on all of the comments that I read in
16 responses to your comments, I think that that truly
17 does -- has happened. So I'm very proud of the work that
18 the staff has done with its leadership and I'm very proud
19 of the permittees, the county, the environmental
20 organization and other stakeholders.

21 Because this is really a -- when I think of this
22 last week of what we've gone through politically in the
23 country and how we're so divided as to what we want, I
24 think everybody in this room knows clearly what we want
25 is that common goal of water quality. I don't think

1 anybody here would argue that point. The point that
2 would be argued is how do we get there.

3 And I think that what we're going to find out is
4 that we need all of the players that we've had at the
5 table the last couple of years to be a part of that.
6 Because that's what it's going to take, everybody's
7 effort, energy, focus and dedication for that to take
8 place.

9 So I'm hoping that as we move forward that we
10 do -- that the cities that have been concerned about
11 their budgets and whether they can do this really take --
12 get the courage to ask for help. And -- and when I say
13 courage -- because sometimes if you're a small city, you
14 may be reluctant to do that. But I think the county and
15 others here were very clear that they have done this,
16 they have the experience, they know what works, what
17 hasn't worked, and that you talk to them. Not
18 necessarily that you have to take all of their advice.
19 But I think it's getting to be very critical that we
20 start moving forward in the same direction.

21 And once again, I'm very proud of my
22 colleagues. I will tell you this has been more difficult
23 than going to law school. With all the new language that
24 one had to learn, all the readings that we had to do --
25 and it's been a very difficult process for me because I

1 wanted to talk to everybody, but more important, I wanted
2 to listen to everybody, what they had to say and it was
3 very tempting to try to have those conversations. But as
4 you know, ex parte prevented us from doing that.

5 So I'm really looking forward to -- because I do
6 believe that the State of California is going to be very
7 proud of the work that the Los Angeles Regional Water
8 Board has done including the staff. It's very clear at
9 the meetings that we had in Sacramento last week that
10 we're seen as the pioneer leaders of the policy to have
11 water quality standards at its highest. So I want to
12 thank my colleagues for all the opportunities that they
13 have.

14 I learned a lot from my colleagues' questions
15 and I have a better understanding of what takes place by
16 the comments that you all made, including our staff. So
17 thank you so much and I'm very proud of all the folks
18 who -- almost 7:00, we're still here and we're still
19 invested in what we've done the last couple of years.

20 MS. MEHRANIAN: Thank you.

21 MS. McCHESNEY: Can I interrupt one second before --
22 was there a second to your revised amended motion? So
23 Larry, do you want to --

24 MR. YEE: My second still stands.

25 MS. McCHESNEY: Great. Thank you.

1 MS. DIAMOND: I'm not going to speak too long because
2 I know it's late and we all want to go.

3 You know, I was -- as you know, I was here for
4 the last permit and I -- in 2001. And I thought that was
5 a very good permit. It was a permit that we were proud
6 of. Again, we were looked at throughout the state as
7 very ground breaking, very -- basically doing things
8 before other people did it. And that -- and then we went
9 on and we did our trash TMDL, we had our SUSMP before
10 that. We've always been in the forefront of water
11 quality protection.

12 There was a lot of disappointment for me after
13 we had our 2001 permit because it didn't really work out
14 the way, you know, we had hoped it would. There was a
15 hope that there would be a kind of a looking at the BMPs
16 and the cities coming forward and saying, you know, we
17 didn't really get to the place we hoped to get to so
18 we're going to try the next step. I think the iterative
19 process by and large was not successful.

20 So I, for one, don't want to stay with that
21 permit and I think that we're moving to the next step.
22 And I appreciate the collaboration that went on. I think
23 the number one goal for all of us and certainly for us up
24 here and for our staff is to restore water quality. And
25 so for me, there is a little bit of a leap of faith doing

1 it in this way even though I don't want to go back to the
2 way that we were doing it because it really for many
3 reasons didn't go as far as we would have liked to have
4 seen it go.

5 So now we have 33 TMDLs which are incorporated
6 and we have LID and we have multiple benefits. And we
7 hope that these are going to be cost effective and we
8 hope, at least, most of all that we get to the place
9 where we do have -- as Shahram was saying -- one water
10 where there is no separation between waste water and
11 stormwater and supply. This is an opportunity for us to
12 increase the water that we have in Southern California
13 knowing that we cannot depend on water from other places
14 because of climate change, population growth and
15 everything that we know.

16 So I'm taking this leap of faith because I know
17 we have a great staff. And when they say to us we are
18 going to be able to pivot from TMDLs to implementation, I
19 know that I can trust Deb and Sam and Renee and Ivar and
20 all of the people that work for them. So based on sound
21 science and increased water quality and supply, I am
22 happy to support this and hope that at the end of the day
23 we're going to see what we all want and that working
24 together, we'll get there.

25 But we're going to be looking very carefully.

1 One of the things that's most very important to me is
2 this whole idea of public participation and board
3 participation. We need to see what's going on. We need
4 to be able to approve these plans and we need to be able
5 to see that the plans are doing what they're supposed to
6 do. And if they're not, we need to be able to call that
7 out and do something about it.

8 So I'm hoping that we're all going to work
9 together and that this will be a way for us to go forward
10 and get to the goal that we want of water quality
11 standards being met and designing for those standards,
12 increasing our water supply and making sure that future
13 generations in our region can look back to us and say you
14 did the right thing.

15 So thank you all. Thank you, most of all, to
16 the staff and to my colleagues because I think we're
17 embarking on a journey that we all are hoping that we
18 will end up being pleased and not have to wait ten more
19 years to move to the next step.

20 MS. MEHRANIAN: Thank you.

21 Board member Glickfeld.

22 MS. GLICKFELD: I think that my colleague is right in
23 saying this is a leap of faith, but this at this point in
24 the history of this Board and the Clean Water Act and our
25 MS4 permits, we needed to either move forward or stand

1 still. And this is the only way to move forward.

2 And I can see -- last week when we were in
3 Sacramento, we we're all kind of -- many of us had a tour
4 of the delta. And strangely enough, that's very
5 connected to our situation in our decision today because
6 the delta is really broken. And we are depending on it
7 for our water supply. And we -- and those of us who
8 think we need more local water supply and that getting
9 more local water supply will be an economic way of
10 getting better, clean stormwater -- really, we came back
11 even more convinced that this is the way to go.

12 At the same time when I asked all the questions
13 about the number of ways in which we're going to be
14 flexible, those -- I don't take those lightly. I don't
15 think any of the Board members take that lightly.

16 We have -- we're reaching out to the permittees
17 to ask you and we're trusting that you're going to
18 respond in a way that this permit is designed for you to
19 respond. I feel like it's a new chance for us to restart
20 a very productive relationship. And I've already heard
21 today in the last couple of hearings sort of a level of
22 excitement in the voices of some of the permittees about
23 what they can do if we help them.

24 And I think we -- if we vote on this tonight, we
25 will help you to do what we need you to do and you will

1 do it in a way that helps the whole county. So I urge
2 that everybody support it.

3 MS. MEHRANIAN: Thank you.

4 Vice Chair.

5 MR. STRINGER: Thanks.

6 I -- I just first want to say thank you to the
7 staff and to the fellow Board members. This has been an
8 incredibly enlightening experience for me and everyone
9 who is involved. This is a monumental moment, I think,
10 as we all know.

11 I view stormwater as a significant and critical
12 resource to independence or increased independence from
13 the delta, from other imported supplies of water and I
14 view this permit as a really significant step in that
15 direction. It's not perfect and it's not -- certainly
16 not the final step. But it is a -- a very, very
17 significant step.

18 I'm sorry that our friends in the environmental
19 community aren't completely with us today. And my hope
20 is that through the implementation of the permit and all
21 of the good work that's going to come forward that --
22 that the concerns that they have will be increasingly
23 viewed as -- as things that perhaps they didn't need to
24 be as concerned about as they are today.

25 I -- I just most significantly want to thank

1 everybody and express my support for this permit and I
2 think it's a giant leap forward and I'm very proud to be
3 supporting it.

4 MS. MEHRANIAN: Thank you.

5 Board member Yee.

6 MR. YEE: Well, every time I come down to one of
7 these water board meetings, I'm just really happy to be
8 able to return to my simple life in Ojai.

9 I too want to acknowledge the enormous and
10 extraordinary efforts to bring this new MS4 permit into
11 reality. So kudos to staff and the permittees and all
12 the other stakeholder groups.

13 I want to paraphrase a quote from Buckminster
14 Fuller. He said something like the best way to change
15 existing reality is to create a new model that makes the
16 old one obsolete. And I think that's -- that's really
17 what we've been attempting to do.

18 And is this new model perfect? Well, we know
19 the answer to that. But I think it's -- it's good
20 enough. In fact, it's more than good enough. It has --
21 to me, it's comprehensive. It has a very special
22 integrity to it. It's coherent and, you know, it has
23 this -- this watershed approach which I think is very
24 ecological and cooperative. It's not going to be easy,
25 but I think it's the way to go. Does it move the ball

1 down the field? Absolutely.

2 And we obviously have learned a lot since --
3 since the -- since the 2001 permit. I mean, my God, we
4 have 33 TMDLs and we're incorporating into this now.
5 It's quite an achievement. And, in fact, as we've
6 already heard today, there's probably nothing else like
7 it in the country.

8 Is it fair, reasonable and practical? I believe
9 it's fair. It seems reasonable. But we got to find out
10 a lot more about how reasonable it is and how practical
11 it is as we move into it and begin implementing. So now
12 I think it's time to go forth and show the way and I just
13 want to thank all of you for your efforts and your
14 leadership and I think it's time to pass this permit.

15 MS. MEHRANIAN: Thank you.

16 Board member Camacho.

17 MS. CAMACHO: Yes. So first, obviously, I want to
18 thank staff, not only for your efforts for thinking
19 outside the box -- which I am a big believer in thinking
20 outside the box -- but allowing me to bother you all the
21 time with questions and e-mails and comments and calls.

22 But in all honesty, thank you for your guidance,
23 but also just for that willingness to think about things
24 in a way that we could get -- is going to allow people,
25 the permittees to meet water-quality standards in a

1 flexible and customized way so that no one is setting up
2 to fail. And I think that's really, really important.

3 I also want to thank the permittees and all of
4 the interested stakeholders for your time and commitment.
5 I'm sure this wasn't a fun process by any stretch. But
6 in all honesty, it couldn't have been done without you.
7 So I want to absolutely thank everyone for continuing to
8 be at the table at all times of the morning, afternoon,
9 night, midnight, whatever it was.

10 I do, obviously, appreciate all of the comments
11 and thoughts that were brought forward by my colleagues.
12 I agree with them 100 percent. I completely think that
13 this permit is the way to go. I think it's something
14 that will allow us to show to the rest of the Board -- of
15 the regional boards that we're smart, that we're
16 innovative and that we're, again, thinking outside the
17 box in a collaborative way with our stakeholders and I
18 really appreciate that. So thank you very much. I'm all
19 for this revised permit.

20 MS. MEHRANIAN: Thank you. I have like two thoughts.

21 When most of us are interviewed for being on the
22 board, they ask you what do you think you can do? And we
23 all say we can build consensus. And I think this is one
24 of the times that I can say that we're proud of feeling
25 and doing what we said we will. The whole cooperation

1 between the county and city of Los Angeles and other
2 cities -- really, I think what the county did I think is
3 very, very creative with the thoughts that they brought
4 to the equation.

5 And then I think I'm very proud of the staff,
6 again, because of the process. I think the process has
7 been something that was -- there was no precedent of
8 having like 90 days of meetings and trying to bring
9 everybody to the table. I want to thank the
10 environmental community for being a part of this process.

11 And again, the transparency of the process, the
12 flexibility -- those are all concepts that I would think
13 that each one of the Board members would say in an
14 interview with the governor's office that -- about we are
15 about transparency and flexibility and inclusion and
16 using all this attributes to protect water and water
17 quality.

18 And with that, you know, I thank the staff and
19 thank everybody here for staying so late.

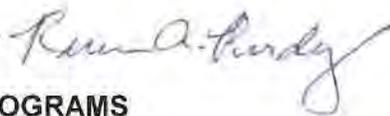
20 And my motion is on the table and seconded.

21 So all in favor, say aye.

22 THE BOARD: Aye.

23 MS. MEHRANIAN: Aye.

24 (Hearing adjourned at 6:57 p.m.)
25

EDMUND G. BROWN JR.
GOVERNORMATTHEW RODRIGUES
SECRETARY FOR
ENVIRONMENTAL PROTECTION**Los Angeles Regional Water Quality Control Board****TO:** MS4 Permittees covered by NPDES Permit No. CAS004001**FROM:** Renee A. Purdy 
Section Chief
REGIONAL PROGRAMS**DATE:** December 5, 2012**SUBJECT:** TRANSMITTAL OF FINAL ORDER NO. R4-2012-0175 -- WASTE DISCHARGE REQUIREMENTS FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES WITHIN THE COASTAL WATERSHEDS OF LOS ANGELES COUNTY, EXCEPT THOSE DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH MS4 (NPDES PERMIT NO. CAS004001)

We are pleased to transmit to you the final National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and waste discharge requirements for storm water and non-storm water discharges from the MS4 within the coastal watersheds of Los Angeles County, which was adopted by the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) at its meeting on November 8, 2012.

The final Order and all attachments are posted on the Regional Board's website at the following address:

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

Order No. R4-2012-0175 shall be effective as of December 28, 2012, 50 days from the date of Board adoption, as stated in the Order.

We look forward to working together with all Permittees to implement the permit. Should you have any questions, please do not hesitate to call me at (213) 576-6622 or Ivar Ridgeway at (213) 620-2150.

cc: John Kemmerer, Acting Director, Water Division, USEPA Region IX
David Smith, NPDES Program Manager, USEPA Region IX
Vicky Whitney, Deputy Director, DWQ, State Water Board
Bruce Fujimoto, Manager, Surface Water/Permitting, State Water Board

LYRIS MAILING

LIST NAME:

MS4 LA County

DATE MAILED:

12/5/2012

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3/7/2012 16:27	Jim@CuratingLA.com		Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org		John Beshay
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8/29/2011 14:09	Julie_Carver@ci.pomona.ca.us		Julie Carver
7/6/2009 13:53	Kaden.Young@culvercity.org		Kaden Young
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4/5/2011 9:34	Leroy.Richards@msh.dmh.ca.gov		LeRoy Richards
8/25/2010 13:32	Lynn@MLMENG.com		Lynn Kubasek
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6/8/2010 15:11	Nels@stemmdevelopment.com		Nels Stemm
12/29/2011 11:05	Ppeuron@forestlawn.com		Peter Peuron
11/16/2011 8:43	RYee@DiamondBarCA.Gov		Rick Yee
10/22/2010 15:23	Ramon@calfran.net		Ramon Wagner
7/6/2009 13:51	Rhughes@WILLDAN.com		Roxanne Hughes
4/25/2011 15:19	Robert.Vega@lacity.org		Robert Vega
7/6/2009 11:32	Sandra.Kelley@waterboards.ca.gov		Sandra Kelley
7/6/2009 13:23	Shannon.Yauchzee@westcovina.org		Shannon Yauchzee
7/6/2009 13:49	Skennedy@enfact.net		Sheila Kennedy
7/6/2009 13:55	TLANGE@santa-clarita.com		Travis Lange
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7/6/2009 13:20	lleblanc@cityofrosemead.org	Lou LeBlanc
4/19/2010 9:55	llough@bbinfrastructureinc.com	Lynn Lough
11/28/2010 20:36	lmckenney@sawpa.org	Larry McKenney
8/14/2012 11:35	lnaslund@dpw.lacounty.gov	Lisa Naslund
11/22/2010 12:05	lopezj@chevron.com	Joseph E. Lopez
4/21/2011 12:47	loriwolfe@wolfe-engineering.com	Lori Wolfe
7/6/2009 13:36	lpyeatt@comptoncity.org	Leslie Alan Pyeatt
8/15/2011 13:11	lreyes@lakewoodcity.org	Leon de los Reyes
8/22/2011 10:40	lskutecki@brwnald.com	Lisa Skutecki
4/5/2010 13:00	ltsoi@lacs.org	Linda Tsoi
3/5/2012 14:15	luke.milick@lacity.org	Luke Milick
9/16/2009 9:53	mackw@lwa.com	Malcolm Walker
7/6/2009 13:39	malexander@lcf.ca.gov	Mark R. Alexander
11/1/2011 15:24	mali@waterboards.ca.gov	Mazhar Ali

2/14/2012 16:27	marcbeyeler@mac.com	marc Beyeler
8/25/2011 13:44	marisayrodriguez@gmail.com	Marisa Rodriguez
7/6/2009 13:11	mark-christoffels@longbeach.gov	Mark Christoffels
9/14/2010 10:01	markbaker@physislabs.com	Mark D. Baker
2/15/2011 13:45	martin.pastucha@smgov.net	Martin Pastucha
11/9/2010 15:47	martinagarnier@gmail.com	Martin Garnier
5/23/2012 7:38	matt.helon@sierrachemsales.com	Matt Helon
2/8/2011 14:00	matzrubber@sbcglobal.net	Phillip Jensen
8/7/2010 22:02	maya@cbecal.org	Maya Golden-Krasner
12/27/2011 16:30	mayorlutz@gmail.com	Mary Ann Lutz
12/11/2009 11:51	mbiedebach@sespeconsulting.com	mike biedebach
11/2/2011 10:36	mcarpenter@newhall.com	Matt Carpenter
7/6/2009 13:00	mdadian@cityofartesia.us	Maria Dadian
7/6/2009 13:45	mduran@ci.gardena.ca.us	Mike Duran
1/4/2011 13:31	meecker.lara@gmail.com	Lara Meeker
11/16/2011 7:52	meg_mcwade@ci.pomona.ca.us	Meg McWade
2/21/2012 11:12	melissa.pamer@dailynews.com	Melissa Pamer
9/20/2011 11:34	melissa.pena@ralphs.com	Melissa Pena
11/2/2010 19:35	memo1ah@gmail.com	
11/5/2009 6:46	metalkittiekat@aol.com	Nicole Bullum
11/7/2011 14:56	mfrancis@ddsffirm.com	Michael A. Francis
11/23/2011 11:41	mgarcia@tvmwd.com	Mario Garcia
2/16/2012 14:41	mgrey@biasc.org	Mark Grey
7/1/2010 14:57	michael.blum@gmail.com	Michael Blum
6/27/2012 9:47	michele_turton@baxter.com	
3/16/2012 0:41	miguel@urbansemillas.com	Miguel Luna
7/6/2009 13:36	mike.shay@redondo.org	Mike Shay
7/3/2012 21:39	mike@watershedhealth.org	Mike Antos
7/6/2009 13:05	mike_ogrady@ci.cerritos.ca.us	Mike O'Grady
6/2/2011 17:09	mitch@whitsoncm.com	Mitch Whitson
5/25/2012 21:27	mitchm@lwa.com	Mitch Mysliwicz
4/12/2011 13:43	mkadah@edmsvc.com	Michel Kadah
4/28/2011 10:03	mkearney@waterboards.ca.gov	Michelle Kearney
7/6/2009 13:04	mkeith@cityofbradbury.org	Michelle Keith
3/9/2010 9:38	mkinsler@wheelerandgray.com	Mary Kinsler
11/10/2011 10:26	mkirrene@verizon.net	Michael Kirrene
11/16/2011 8:44	mkolbensschlag@aei-casc.com	Michael Kolbensschlag
7/6/2009 13:08	mlansdell@ci.gardena.ca.us	Mitchell G. Lansdell
4/13/2012 15:01	mlcoffee@nossaman.com	Mary Lynn K. Coffee
9/26/2012 11:15	mmcmeechan@environcorp.com	Melissa McMeechan
7/6/2009 13:47	mmilhiser@cityoflamirada.org	Mike Milhiser
11/16/2011 8:00	mmostahkami@sogate.org	Mohammad Mostahkami
9/11/2012 15:52	mmotto@geosyntec.com	Megan Otto
7/6/2009 13:58	mmunoz@cityoflamirada.org	Marlin Munoz
11/16/2011 7:57	mogrady@cerritos.us	Mike OGrady
7/6/2009 13:47	moillataguerre@ci.glendale.ca.us	Maurice Oillataguerre
5/26/2010 8:55	morton.price@lacity.org	Morton Price

3/6/2012 11:30	mpassanisi@breeneng.com	Mercedes Passanisi
7/6/2009 13:11	mpestrel@dpw.lacounty.gov	Mark Pestrella
3/22/2012 14:29	msgrajeda@picowaterdistrict.net	Mark Grajeda
9/3/2009 14:01	msolorzano@mclam.com	Marcela Solorzano
7/31/2012 10:31	mthorme@downeybrand.com	Melissa Thorme
3/15/2011 9:30	mvazquez@golder.com	Misty Vazquez
9/14/2012 12:16	myanai@counsel.lacounty.gov	Mark Yanai
7/13/2012 11:30	myoung@awattorneys.com	Marie W. Young
11/8/2011 14:01	myriam.cardenas@smgov.net	Myriam Cardenas
7/24/2012 19:24	naomistone@mugenkioku.com	Naomi Stone
3/9/2010 9:28	nascarjws@yahoo.com	John Schwartz
7/6/2009 13:52	nasser.sh@lcf.ca.gov	Nasser Shoushtarian
5/20/2010 7:53	navedissian@quakercityplating.com	NICK AVEDISSIAN
7/29/2009 13:55	ndupont@rwglaw.com	Norman Dupont
7/6/2009 13:43	neal.shapiro@smgov.net	Neal Shapiro
11/5/2011 20:04	neilandeb@aol.com	Neil Dipprey
8/6/2009 11:06	ngarrison@nrdc.org	Noah Garrison
11/30/2009 11:21	nisheeth.kakarala@lacity.org	Nisheeth Kakarala
8/13/2012 19:24	njohnson@waterboards.ca.gov	Nicole Johnson
8/7/2012 15:02	nmartorano@waterboards.ca.gov	Nicholas Martorano
7/6/2009 13:43	ocramer@santa-clarita.com	Oliver Cramer
10/28/2011 14:52	ogalang@brwnclald.com	Oliver D. Galang PE
11/9/2010 15:30	ogalang@dpw.lacounty.gov	Oliver Galang
8/3/2009 12:35	olivia@malibutimes.com	Olivia Damavandi
8/9/2010 10:52	paul.ahn@sce.com	Paul ahn
7/17/2009 15:05	paul.singarella@lw.com	Paul Singarella
5/4/2012 15:16	pauling.sun@tetrattech.com	Pauling Sun
1/12/2010 8:06	pcmsusa@hotmail.com	Raymond Wells PhD
7/6/2009 13:41	pelkins@carson.ca.us	Patricia Elkins
5/17/2012 15:48	pete_halpin@caltestlabs.com	Peter Halpin
9/16/2011 9:48	ply@wrd.org	Phuong Ly
2/27/2010 15:59	pmglick@gmail.com	Peter Glick
10/12/2010 14:27	quangtran59@gmail.com	Quang Tran
4/1/2011 14:18	r.appy@cox.net	Ralph Appy
9/23/2010 7:17	rabbott5@toromail.csudh.edu	Rodney Abbott
2/1/2011 11:42	rasancho@dpw.lacounty.gov	Randall Sancho
7/4/2012 11:03	razzip1@aol.com	Paul V. Ferrazzi
11/16/2011 9:01	rbeste@torranceca.gov	Rob Beste
7/6/2009 13:17	rbow@ci.monrovia.ca.us	Ron Bow
2/17/2012 9:50	rchristmann@waterboards.ca.gov	Rebecca Christmann
7/6/2009 13:22	rdickey@sogate.org	Robert T. Dickey
12/28/2011 16:43	rdrayse@treepeople.org	Rebecca Drayse
8/15/2011 13:46	reddy.pakala@ventura.org	Reddy Pakala
9/16/2009 14:00	rehsiteworks@aol.com	Ray E. Hensley
7/6/2009 13:42	rfajardo@elsegundo.org	Ron Fajardo
8/24/2009 9:40	rfreeman@lawa.org	Robert Freeman
7/2/2010 12:04	rfgwpetro@verizon.net	Darry White

7/6/2009 13:17 rhaley@lynwood.ca.us	Roger Haley
3/10/2011 9:37 rhs@malibufamilywines.com	Ronald H. Semler
2/16/2011 11:54 ricardo.moreno@sce.com	Ricardo E. Moreno
2/12/2010 15:00 ricardo.moreno@ventura.org	Ricardo Moreno
11/25/2011 12:08 richard@coloramanursery.com	Richard Wilson
11/16/2011 8:54 rick.valte@smgov.net	Rick Valte
7/6/2009 13:48 rkenny@soelmonte.org	Ron Kenny
10/3/2012 15:30 rmcpherson@portla.org	Rachel McPherson
11/9/2011 16:38 rmontevideo@rutan.com	Richard Montevideo
10/27/2011 12:53 rnewman@santa-clarita.com	Robert Newman
5/10/2010 17:08 robert.ruscitto@arcadis-us.com	Robert Ruscitto
8/2/2010 9:32 robert.skands@pardeehomes.com	Robert Skands
11/28/2011 15:36 robert@ssseeds.com	Robert Sjoquist
7/6/2009 13:41 robertz@ci.commerce.ca.us	Robert Zarrilli
2/10/2011 16:44 roly@kal-plastics.com	Rolly A. Panganiban
11/16/2011 7:16 rond@rpv.com	Ron Dragoo, P.E.
11/9/2010 15:42 rorton@lvmwd.com	Randal D. Orton Ph.D. D.Env.
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2/1/2011 8:56 rpurdy@waterboards.ca.gov	Renee Purdy
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10/28/2009 14:20 rsoto@ci.vernon.ca.us	Rafael Soto
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3/4/2011 13:50 rtremblay@lacsds.org	Raymond L Tremblay
7/6/2009 13:53 rvasquez@scsengineers.com	Ralph Vasquez
4/14/2010 11:46 rveiga@waterboards.ca.gov	Rebecca Veiga Nascimento
3/23/2011 11:22 rwang@dpw.lacounty.gov	Ruby Wang
4/8/2011 13:18 rwatson@rwaplanning.com	Richard A. Watson
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7/6/2009 13:23 rwishner@ci.walnut.ca.us	Rob Wishner
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7/6/2009 13:20 samw@ci.rolling-hills-estates.ca.us	Samuel R. Wise
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2/21/2012 8:50 shawn.hagerty@bbklaw.com	Shawn Hagerty
11/16/2011 8:40 shenley@covinaca.gov	Steve Henley
8/16/2012 16:37 simran@northeasttrees.org	Simran Sikand

7/6/2009 11:32 skelley@waterboards.ca.gov	Sandra Kelley
9/14/2012 14:28 smandegari@greenesol.com	shirin mandegari
2/23/2011 10:55 smartin@remet.com	Scott Martin
11/30/2009 14:50 smurow@moote.com	Steven Murow
11/16/2011 8:01 smyrter@cityofsignalhill.org	Steve Myrter
2/2/2011 14:43 snania@forester.net	
9/10/2009 15:31 snissman@bos.lacounty.gov	Susan Nissman
7/6/2009 13:46 sochoa@ci.monrovia.ca.us	Scott Ochoa
5/11/2012 14:33 soligeorge@chevron.com	Soli George
6/6/2012 16:51 sperlstein@weho.org	Sharon Perlstein
11/15/2011 15:20 srigg@ci.vernon.ca.us	Scott Rigg
5/31/2011 16:28 ssanchez@bialav.org	Sandy Sanchez
1/30/2012 13:55 ssantilena@healthebay.org	Susie Santilena
2/9/2012 12:40 sschuyler@biasc.org	steven schuyler
12/20/2011 12:32 stanleys@uppercrustent.com	Stanley Shimabuku
11/16/2011 8:59 steve.huang@redondo.org	Steve Huang
1/14/2010 14:32 stormwatercentral@gmail.com	Anna Hensley
6/19/2012 17:02 sturney@weho.org	Susannah Turney
5/31/2011 16:33 suhles@delanegroup.com	Scott Uhles
5/27/2012 12:38 suzi_youssef@ymail.com	Suzi Youssef
11/16/2011 8:46 swalker@cityofpasadena.net	Stephen Walker
5/27/2010 11:33 symeon.finch@orco.com	Symeon Finch
7/6/2009 13:08 szurn@ci.glendale.ca.us	Stephen M. Zurn
11/10/2011 9:40 tajenkins@sgvwater.com	Thomas A. Jenkins
6/8/2012 15:29 tattnlaw@gmail.com	JOHNTOMMY ROSAS
7/6/2009 13:04 tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57 tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33 tiffanypedrick@santafesprings.org	Tiffany Shedrick
5/31/2011 16:30 tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51 tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19 tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20 tony@csstudios.com	Tony Ignacio
2/20/2012 13:01 tracy@egoscuelaw.com	Tracy Egoscue
7/6/2009 13:10 trobinson@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29 trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33 tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59 ttait@ci.arcadia.ca.us	Tom Tait
7/6/2009 13:22 tybarra@soelmonte.org	Tony Ybarra
4/3/2011 19:01 uhdenr@metro.net	Roger Uhden
6/17/2011 20:16 uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42 vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02 vcastro@covinaca.gov	Vivian Castro
1/24/2011 11:30 vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/7/2011 11:10 victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39 vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03 vsinghal@baldwinpark.com	Vijay Singhal

2/18/2011 11:31 wade@grahamstudio.net
2/21/2012 4:06 wbotha@brownandwinters.com
6/29/2011 9:59 wcaffrey@vandermostconsulting.com
12/29/2011 11:17 welchrc@pbworld.com
11/14/2011 16:14 wgross@lacsds.org
8/6/2012 10:00 wjohnson@dpw.lacounty.gov
7/6/2009 13:52 wrlindinc@aol.com
8/17/2011 11:33 wynesta@earthlink.net
11/16/2011 8:58 ykwan@lcf.ca.gov
7/6/2009 13:35 ys@cityofrh.net
12/6/2010 17:34 ysim@dpw.lacounty.gov
9/17/2010 8:45 zora.baharians@lacity.org

Wade Graham
Wentzelee Botha
wade caffrey
Robert Welch
bill gross
William Johnson
Wes Lind
Wynesta Dale
Ying Kwan
Yolanta Schwartz
Youn Sim
Zora

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

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**ORDER NO. R4-2012-0175
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS
FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES WITHIN THE
COASTAL WATERSHEDS OF LOS ANGELES COUNTY, EXCEPT THOSE DISCHARGES
ORIGINATING FROM THE CITY OF LONG BEACH MS4**

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

I. FACILITY INFORMATION

Table 1. Discharger Information

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

Table 2. Facility Information

Permittee (WDID)	Contact Information	
Agoura Hills (4B190147001)	Mailing Address	30001 Ladyface Court Agoura Hills, CA 91301
	Facility Contact, Title, and E-mail	Ken Berkman, City Engineer kberkman@agoura-hills.ca.us

Permittee (WDID)	Contact Information	
Alhambra (4B190148001)	Mailing Address	111 South First Street Alhambra, CA 91801-3796
	Facility Contact and E-mail	David Dolphin ddolphin@cityofalhambra.org
Arcadia (4B190149001)	Mailing Address	11800 Goldring Road Arcadia, CA 91006-5879
	Facility Contact, Title, Phone, and E-mail	Vanessa Hevener, Environmental Services Officer (626) 305-5327 vhevener@ci.arcadia.ca.us
Artesia (4B190150001)	Mailing Address	18747 Clarkdale Avenue Artesia, CA 90701-5899
	Facility Contact, Title, and E-mail	Maria Dadian, Director of Public Works mdadian@cityofartesia.ci.us
Azusa (4B190151001)	Mailing Address	213 East Foothill Boulevard Azusa, CA 91702
	Facility Contact, Title, and E-mail	Carl Hassel, City Engineer chassel@ci.azusa.ca.us
Baldwin Park (4B190152001)	Mailing Address	14403 East Pacific Avenue Baldwin Park, CA 91706-4297
	Facility Contact, Title, and E-mail	David Lopez, Associate Engineer dlopez@baldwinpark.com
Bell (4B190153001)	Mailing Address	6330 Pine Avenue Bell, CA 90201-1291
	Facility Contact, Title, and E-mail	Terri Rodrigue, City Engineer trodrigue@cityofbell.org
Bell Gardens (4B190139002)	Mailing Address	7100 South Garfield Avenue Bell Gardens, CA 90201-3293
	Facility Contact, Title, and Phone	John Oropeza, Director of Public Works (562) 806-7700
Bellflower (4B190154001)	Mailing Address	16600 Civic Center Drive Bellflower, CA 90706-5494
	Facility Contact, Title, and E-mail	Bernie Iniguez, Environmental Services Manager biniguez@bellflower.org
Beverly Hills (4B190132002)	Mailing Address	455 North Rexford Drive Beverly Hills, CA 90210
	Facility Contact, Title, and E-mail	Vincent Chee, Project Civil Engineer kgettler@beverlyhills.org
Bradbury (4B190155001)	Mailing Address	600 Winston Avenue Bradbury, CA 91010-1199
	Facility Contact, Title, and E-mail	Elroy Kiepke, City Engineer mkeith@cityofbradbury.org
Burbank (4B190101002)	Mailing Address	P.O. Box 6459 Burbank, CA 91510
	Facility Contact, Title, and E-mail	Bonnie Teaford, Public Works Director bteaford@ci.burbank.ca.us
Calabasas (4B190157001)	Mailing Address	100 Civic Center Way Calabasas, CA 91302-3172
	Facility Contact, Title, and E-mail	Alex Farassati, ESM afarassati@cityofcalabasas.com
Carson (4B190158001)	Mailing Address	P.O. Box 6234 Carson, CA 90745
	Facility Contact, Title,	Patricia Elkins, Building Construction Manager

Permittee (WDID)	Contact Information	
	and E-mail	pelkins@carson.ca.us
Cerritos (4B190159001)	Mailing Address	P.O. Box 3130 Cerritos, CA 90703-3130
	Facility Contact, Title, and E-mail	Mike O'Grady, Environmental Services mo'grady@cerritos.us
Claremont (4B190160001)	Mailing Address	207 Harvard Avenue Claremont, CA 91711-4719
	Facility Contact, Title, and E-mail	Craig Bradshaw, City Engineer cbradshaw@ci.claremont.ca.us
Commerce (4B190161001)	Mailing Address	2535 Commerce Way Commerce, CA 90040-1487
	Facility Contact and E-mail	Gina Nila gnila@ci.commerce.ca.us
Compton (4B190162001)	Mailing Address	205 South Willowbrook Avenue Compton, CA 90220-3190
	Facility Contact, Title, and Phone	Hien Nguyen, Assistant City Engineer (310) 761-1476
Covina (4B190163001)	Mailing Address	125 East College Street Covina, CA 91723-2199
	Facility Contact, Title, and E-mail	Vivian Castro, Environmental Services Manager vcastro@covinaca.gov
Cudahy (4B190164001)	Mailing Address	P.O. Box 1007 Cudahy, CA 90201-6097
	Facility Contact, Title, and E-mail	Hector Rodriguez, City Manager hrodriguez@cityofcudahy.ca.us
Culver City (4B190165001)	Mailing Address	9770 Culver Boulevard Culver City, CA 90232-0507
	Facility Contact, Title, and Phone	Damian Skinner, Manager (310) 253-6421
Diamond Bar (4B190166001)	Mailing Address	21825 East Copley Drive Diamond Bar, CA 91765-4177
	Facility Contact, Title, and E-mail	David Liu, Director of Public Works dliu@diamondbarca.gov
Downey (4B190167001)	Mailing Address	P.O. Box 7016 Downey, CA 90241-7016
	Facility Contact , Title, and E-mail	Yvonne Blumberg yblumberg@downeyca.org
Duarte (4B190168001)	Mailing Address	1600 Huntington Drive Duarte, CA 91010-2592
	Facility Contact, Title, and Phone	Steve Esbenshades, Engineering Division Manager (626) 357-7931 ext. 233
El Monte (4B190169001)	Mailing Address	P.O. Box 6008 El Monte, CA 91731
	Facility Contact, Title, and Phone	James A Enriquez, Director of Public Works (626) 580-2058
El Segundo (4B190170001)	Mailing Address	350 Main Street El Segundo, CA 90245-3895
	Facility Contact, Title, Phone, and E-mail	Stephanie Katsouleas, Public Works Director (310) 524-2356 skatsouleas@elsegundo.org
Gardena (4B190118002)	Mailing Address	P.O. Box 47003 Gardena, CA 90247-3778

Permittee (WDID)	Contact Information	
	Facility Contact, Title, and E-mail	Ron Jackson, Building Maintenance Supervisor jfelix@ci.gardena.ci.us
Glendale (4B190171001)	Mailing Address	Engineering Section, 633 East Broadway, Room 209 Glendale, CA 91206-4308
	Facility Contact, Title, and E-mail	Maurice Oillataguerre, Senior Environmental Program Scientist moillataguerre@ci.glendale.ca.us
Glendora (4B190172001)	Mailing Address	116 East Foothill Boulevard Glendora, CA 91741
	Facility Contact, Title, and E-mail	Dave Davies, Deputy Director of Public Works ddavies@ci.glendora.ca.us
Hawaiian Gardens (4B190173001)	Mailing Address	21815 Pioneer Boulevard Hawaiian Gardens, CA 90716
	Facility Contact, Title, and E-mail	Joseph Colombo, Director of Community Development jcolombo@ghcity.org
Hawthorne (4B190174001)	Mailing Address	4455 West 126 th Street Hawthorne, CA 90250-4482
	Facility Contact, Title, and E-mail	Arnold Shadbeh, Chief General Service and Public Works ashadbeh@cityofhawthorne.org
Hermosa Beach (4B190175001)	Mailing Address	1315 Valley Drive Hermosa Beach, CA 90254-3884
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San Gabriel (4B190207001)	Mailing Address	425 South Mission Drive San Gabriel, CA 91775
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	Facility Contact, Title, and Phone	James Carlson, Management Analyst (626) 355-7135 ext. 803
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	Facility Contact, Phone, and E-mail	John Hunter (562) 802-7880 jhunter@jlha.net
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Permittee (WDID)	Contact Information	
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	Mailing Address	P.O. Box 682 Walnut, CA 91788
Walnut (4B190217001)	Facility Contact and Title	Jack Yoshino, Senior Management Assistant
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West Covina (4B190218001)	Facility Contact, Title, and E-mail	Samuel Gutierrez, Engineering Technician sam.gutierrez@westcovina.org
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West Hollywood (4B190219001)	Facility Contact, Title, and E-mail	Sharon Perlstein, City Engineer sperlstein@weho.org
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Westlake Village (4B190220001)	Facility Contact, Title, Phone, and E-mail	Joe Bellomo, Stormwater Program Manager (805) 279-6856 jbellomo@willdan.com
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	Mailing Address	900 South Fremont Avenue Alhambra, CA 91803

Table 3. Discharge Location

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

Table 4. Administrative Information

This Order was adopted by the California Regional Water Quality Control Board, Los Angeles Region on:	November 8, 2012
This Order becomes effective on:	December 28, 2012
This Order expires on:	December 28, 2017
In accordance with Title 23, Division 3, Chapter 9 of the California Code of Regulations and Title 40, Part 122 of the Code of Federal Regulations, each Discharger shall file a Report of Waste Discharge as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date above

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

MS4 Discharges within the
Coastal Watersheds of Los Angeles County

ORDER NO. R4-2012-0175
NPDES NO. CAS004001

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

I, Samuel Unger, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 8, 2012.



Samuel Unger, Executive Officer

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Attachment R – TMDL Provisions for Middle Santa Ana River Watershed Management
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II. FINDINGS

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

A. Nature of Discharges and Sources of Pollutants

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

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

B. Permit History

Prior to the issuance of this Order, Regional Water Board Order No. 01-182 served as the NPDES Permit for MS4 storm water and non-storm water discharges within the Coastal Watersheds of the County of Los Angeles. The requirements of Order No. 01-182 applied to the Los Angeles County Flood Control District, the unincorporated areas of Los Angeles County under County jurisdiction, and 84 Cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach. The first county-wide MS4 permit for the County of Los Angeles and the incorporated areas therein was Order No. 90-079, adopted by the Regional Water Board on June 18, 1990.

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

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

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

C. Permit Application

On June 12, 2006, prior to the expiration date of Order No. 01-182, all of the Permittees filed Reports of Waste Discharge (ROWD) applying for renewal of their waste discharge requirements that serve as an NPDES permit to discharge storm water and authorized and conditionally exempt non-storm water through their MS4 to surface waters. Specifically, the Los Angeles County Flood Control District (LACFCD) submitted an ROWD application on behalf of itself, the County of Los Angeles, and 78 other Permittees. Several Permittees under Order No. 01-182 elected to not be included as part of the Los Angeles County Flood Control District's ROWD. On June 12, 2006, the Cities of Downey and Signal Hill each submitted an individual ROWD application requesting a separate MS4 Permit; and the Upper San Gabriel River Watershed Coalition, comprised of the cities of Azusa, Claremont, Glendora, Irwindale, and Whittier also submitted an individual ROWD application requesting a separate MS4 Permit for these cities. In 2010, the LACFCD withdrew from its participation in the 2006 ROWD submitted in conjunction with the County and 78 other co-permittees, and submitted a new ROWD also requesting an individual MS4 permit. The LACFCD also requested that, if an individual MS4 permit was not issued to it, it no longer be designated as the

Principal Permittee and it be relieved of Principal Permittee responsibilities. The Regional Water Board evaluated each of the 2006 ROWDs and notified all of the Permittees that their ROWDs did not satisfy federal storm water regulations contained in the USEPA Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems; Final Rule, August 9, 1996 (61 *Fed Reg.* 41697). Because each ROWD did not satisfy federal requirements, the Regional Water Board deemed all four 2006 ROWDs incomplete. The Regional Water Board also evaluated the LACFCD's 2010 ROWD and found that it too did not satisfy federal requirements for MS4s.

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

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

D. Permit Coverage and Facility Description

The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach (see Table 5, List of Permittees), hereinafter referred to separately as Permittees and jointly as the Dischargers, discharge storm water and non-storm water from municipal separate storm sewer systems (MS4s), also called storm drain systems. For the purposes of this Order, references to the "Discharger" or "Permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger, or Permittees herein.

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

depicting the major drainage infrastructure within the area covered under this Order are included in Attachment C of this Order.

Table 5. List of Permittees

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

E. Los Angeles County Flood Control District

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

The LACFCD's system includes the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including approximately 500 miles of open channel, 3,500 miles of underground drains, and an estimated 88,000 catch basins, and several dams. Portions of the LACFCD's current system were originally unmodified natural rivers and water courses.

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

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

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

The LACFCD in contrast to the County of Los Angeles has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. The Permittees that have such land use authority are responsible for implementing a storm water management program to inspect and control pollutants from industrial and commercial facilities, new development and re-development projects, and development construction sites within their jurisdictional boundaries. Nonetheless, as an owner and operator of MS4s, the LACFCD is required by federal regulations to control pollutant discharges into and from its MS4, including the ability to control through interagency agreements among co-Permittees and other owners of a MS4 the contribution of pollutants from one portion of the MS4 to another portion of the MS4.

F. Permit Scope

This Order regulates municipal discharges of storm water and non-storm water from the Permittees' MS4s. Section 122.26(b)(8) of title 40 of the Code of Federal Regulations (CFR) defines an MS4 as "a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) [o]wned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian

tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) [d]esignated or used for collecting or conveying storm water; (iii) [w]hich is not a combined sewer; and (iv) [w]hich is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

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

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

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

G. Geographic Coverage and Watershed Management Areas

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

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

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

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

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

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

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

The OCFCD pumps the water within the Los Alamitos Retarding Basin to the San Gabriel River Estuary through four discharge pipes, which are covered by tide gates. The discharge point is located approximately 700 feet downstream from the 2nd Street Bridge in Long Beach. The total pumping capacity of the four pumps is 800 cubic feet per second (cfs). There is also a 5 cfs sump pump that discharges nuisance flow continuously to the Estuary through a smaller diameter uncovered pipe.

The discharge from the Los Alamitos Retarding Basin is covered under the Orange County Municipal NPDES Storm Water Permit (NPDES Permit No. CAS618030, Santa Ana Regional Water Quality Control Board Order No. R8-2010-0062), which was issued to the County of Orange, Orange County Flood Control District and Incorporated Cities on May 22, 2009. The Orange County MS4 Permit references the San Gabriel River Metals and Selenium TMDL (Metals TMDL). The waste load allocations listed in the

Metals TMDL for Coyote Creek are included in the Orange County MS4 Permit. However, the Orange County MS4 Permit does not contain the dry weather copper waste load allocations assigned to the Estuary.

H. Legal Authorities

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

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

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

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

- J. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the Permittees' applications, through monitoring and reporting programs, and other available

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

information. In accordance with federal regulations at 40 CFR section 124.8, a Fact Sheet (Attachment F) has been prepared to explain the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing this Order. The Fact Sheet is hereby incorporated into this Order and also constitutes part of the Findings of the Regional Water Board for this Order. Attachments A through E and G through R are also incorporated into this Order.

K. Water Quality Control Plans. The Clean Water Act requires the Regional Water Board to establish water quality standards for each water body in its region. Water quality standards include beneficial uses, water quality objectives and criteria that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. The Regional Water Board adopted a *Water Quality Control Plan - Los Angeles Region* (hereinafter Basin Plan) on June 13, 1994 and has amended it on multiple occasions since 1994. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Los Angeles Region. Pursuant to California Water Code section 13263(a), the requirements of this Order implement the Basin Plan. Beneficial uses applicable to the surface water bodies that receive discharges from the Los Angeles County MS4 generally include those listed below.

Table 6. Basin Plan Beneficial Uses

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

1. Total Maximum Daily Loads (TMDLs)

Clean Water Act section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. Water bodies that do not meet water quality standards are considered impaired and are placed on the state’s “CWA Section 303(d) List”. For each listed water body, the state is required to establish a TMDL of each pollutant impairing the water quality standards in that water body. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The

TMDL establishes the allowable pollutant loadings for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. A TMDL is the sum of the allowable pollutant loads of a single pollutant from all contributing point sources (the waste load allocations or WLAs) and non-point sources (load allocations or LAs), plus the contribution from background sources and a margin of safety. (40 CFR section 130.2(i).) MS4 discharges are considered point source discharges.

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

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

WLAs for trash are expressed as progressively decreasing allowable amounts of trash discharges from a Permittee's jurisdictional area within the drainage area to the impaired water body. The Trash TMDLs require each Permittee to make annual reductions of its discharges of trash over a set period, until the numeric target of zero trash discharged from the MS4 is achieved. The Trash TMDLs specify a specific formula for calculating and allocating annual reductions in trash discharges from each jurisdictional area within a watershed. The formula results in specified annual amounts of trash that may be discharged from each jurisdiction into the receiving waters. Translation of the WLAs or compliance points described in the TMDLs into jurisdiction-specific load reductions from the baseline levels, as specified

in the TMDL, logically results in the articulation of an annual limitation on the amount of a pollutant that may be discharged. The specification of allowable annual trash discharge amounts meets the definition of an “effluent limitation”, as that term is defined in subdivision (c) of section 13385.1 of the California Water Code. Specifically, the trash discharge limitations constitute a “numeric restriction ... on the quantity [or] discharge rate ... of a pollutant or pollutants that may be discharged from an authorized location.”

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

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

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

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

Additionally, this Order allows a Permittee to clarify and distinguish their individual contributions and demonstrate that its MS4 discharge did not cause or contribute to exceedances of applicable water quality-based effluent limitations and/or receiving

water limitations. If such a demonstration is made, though the Permittee’s discharge may commingle with that of other Permittees, the Permittee would not be held jointly responsible for the exceedance of the water quality-based effluent limitation or receiving water limitation. Individual co-permittees who demonstrate compliance with the water quality-based effluent limitations will not be held responsible for violations by non-compliant co-permittees.

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

L. Ocean Plan. In 1972, the State Water Resources Control Board (State Water Board) adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (hereinafter Ocean Plan). The State Water Board adopted the most recent amended Ocean Plan on September 15, 2009. The Office of Administration Law approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to the ocean waters of the State. In order to protect beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Pursuant to California Water Code section 13263(a), the requirements of this Order implement the Ocean Plan. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized in the table below.

Table 7. Ocean Plan Beneficial Uses

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

M. Antidegradation Policy

40 CFR section 131.12 requires that state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16 (“Statement of Policy with Respect to Maintaining the Quality of the Waters of the State”). Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is

justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

- N. Anti-Backsliding Requirements.** Section 402(o)(2) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous permit.
- O. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2115.5) or the Federal Endangered Species Act (16 U.S.C.A., §§ 1531 to 1544). This Order requires compliance with requirements to protect the beneficial uses of waters of the United States. Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.
- P. Monitoring and Reporting.** Section 308(a) of the federal Clean Water Act, and 40 CFR sections 122.41(h), (j)-(l), 122.41(i), and 122.48, require that all NPDES permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code section 13383 authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program establishes monitoring, reporting, and recordkeeping requirements that implement the federal and State laws and/or regulations. This Monitoring and Reporting Program is provided in Attachment E.
- Q. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42 provided in Attachment D. The Regional Water Board has also included in Part VI of this Order various special provisions applicable to the Dischargers. A rationale for the various special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- R. State Mandates**
Article XIII B, Section 6(a) of the California Constitution provides that whenever "any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service." The requirements of this Order do not constitute state mandates that are subject to a

subvention of funds for several reasons as described in detail in the attached Fact Sheet (Attachment F).

- S. California Water Code Section 13241.** The California Supreme Court has ruled that although California Water Code section 13263 requires the State and Regional Water Boards (collectively, Water Boards) to consider the factors set forth in California Water Code section 13241 when issuing an NPDES permit, the Water Boards may not consider the factors to justify imposing pollutant restriction that are less stringent than the applicable federal regulations require. (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 618, 626-627). However, when the pollutant restrictions in an NPDES permit are more stringent than federal law requires, California Water Code section 13263 requires that the Water Boards consider the factors described in section 13241 as they apply to those specific restrictions. As noted in the preceding finding, the Regional Water Board finds that the requirements in this permit are not more stringent than the minimum federal requirements. Therefore, a 13241 analysis is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water discharges into the MS4, or for controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, or other provisions that the Regional Water Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law. Notwithstanding the above, the Regional Water Board has developed an economic analysis of the permit's requirements, consistent with California Water Code section 13241. That analysis is provided in the Fact Sheet (Attachment F of this Order).
- T. California Environmental Quality Act (CEQA).** This action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, § 21100, et seq.) pursuant to California Water Code section 13389. (*County of Los Angeles v. Cal. Water Boards* (2006) 143 Cal.App.4th 985.)
- U. Notification of Interested Parties.** In accordance with State and federal laws and regulations, the Regional Water Board has notified the Permittees and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharges authorized by this Order and has provided them with an opportunity to provide written and oral comments. Details of notification, as well as the meetings and workshops held on drafts of the permit, are provided in the Fact Sheet of this Order.
- V. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all oral and written comments pertaining to the discharges authorized by this Order and the requirements contained herein. The Regional Water Board has prepared written responses to all timely comments, which are incorporated by reference as part of this Order.
- W.** This Order serves as an NPDES permit pursuant to CWA section 402 or amendments thereto, and becomes effective fifty (50) days after the date of its adoption, provided that the Regional Administrator, USEPA, Region IX, expresses no objections.
- X.** This Order supersedes Order No. 01-182 as amended, except for enforcement purposes.

Y. Review by the State Water Board. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the Regional Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

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

III. DISCHARGE PROHIBITIONS

A. Prohibitions – Non-Storm Water Discharges

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

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

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

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

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

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

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

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

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

- b.** Those discharges that fall within one of the categories below, provided that the discharge itself is not a source of pollutants and meets all required conditions specified in Table 8 or as otherwise specified or approved by the Regional Water Board Executive Officer:
- i.** Dewatering of lakes¹⁰;
 - ii.** Landscape irrigation;
 - iii.** Dechlorinated/debrominated swimming pool/spa discharges¹¹, where not otherwise regulated by a separate NPDES permit;
 - iv.** Dewatering of decorative fountains¹²;
 - v.** Non-commercial car washing by residents or by non-profit organizations;

⁹ Pollutants of concern from drinking water supplier distribution system releases may include trash and debris, including organic matter, total suspended solids (TSS), residual chlorine, pH, and any pollutant for which there is a water quality-based effluent limitation (WQBEL) in Part VI.E applicable to discharges from the MS4 to the receiving water. Determination of the pollutants of concern for a particular discharge shall be based on an evaluation of the potential for the constituent(s) to be present in the discharge at levels that may cause or contribute to exceedances of applicable WQBELs or receiving water limitations.

¹⁰ Dewatering of lakes does not include dewatering of drinking water reservoirs. Dewatering of drinking water reservoirs is addressed in Part III.A.2.a.ii.

¹¹ Conditionally exempt dechlorinated/debrominated swimming pool/spa discharges do not include swimming pool/spa filter backwash or swimming pool/spa water containing bacteria, detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.

¹² Conditionally exempt discharges from dewatering of decorative fountains do not include fountain water containing bacteria, detergents, wastes, or algaecides, or any other chemicals in excess of applicable water quality objectives.

vi. Street/sidewalk wash water¹³.

3. Conditional Exemptions from Non-Storm Water Discharge Prohibition within an ASBS. The following non-storm water discharges from the MS4 directly to an ASBS are conditionally exempt pursuant to the California Ocean Plan as specified below, provided that:

- a. The discharges are essential for emergency response purposes, structural stability, slope stability or occur naturally, including the following discharges:
 - i. Discharges associated with emergency fire fighting activities (i.e., flows necessary for the protection of life or property)¹⁴;
 - ii. Foundation and footing drains;
 - iii. Water from crawl space or basement pumps;
 - iv. Hillside dewatering;
 - v. Naturally occurring ground water seepage via a MS4; and
 - vi. Non-anthropogenic flows from a naturally occurring stream via a culvert or MS4, as long as there are no contributions of anthropogenic runoff.
- b. The discharges fall within one of the conditionally exempt essential non-storm water discharge categories in Part III.A.2.a. above.
- c. Conditionally exempt non-storm water discharges shall not cause or contribute¹⁵ to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations in this Order or the water quality objectives in Chapter II of the Ocean Plan, or alter natural ocean water quality in an ASBS.

4. Permittee Requirements. Each Permittee shall:

- a. Develop and implement procedures to ensure that a discharger, if not a named Permittee in this Order, fulfills the following for non-storm water discharges to the Permittee's MS4:
 - i. Notifies the Permittee of the planned discharge in advance, consistent with requirements in Table 8 or recommendations pursuant to the applicable BMP manual;
 - ii. Obtains any local permits required by the MS4 owner(s) and/or operator(s);

¹³ Conditionally exempt non-storm water discharges of street/sidewalk wash water only include those discharges resulting from use of high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area in accordance with Regional Water Board Resolution No. 98-08. Conditionally exempt non-storm water discharges of street/sidewalk wash water do not include hosing of any sidewalk or street with a garden hose with a pressure nozzle.

¹⁴ See note 4.

¹⁵ Based on the water quality characteristics of the conditionally exempt non-storm water discharge itself.

- iii. Provides documentation that it has obtained any other necessary permits or water quality certifications¹⁶ for the discharge;
 - iv. Conducts monitoring of the discharge, if required by the Permittee;
 - v. Implements BMPs and/or control measures as specified in Table 8 or in the applicable BMP manual(s) as a condition of the approval to discharge into the Permittee's MS4; and
 - vi. Maintains records of its discharge to the MS4, consistent with requirements in Table 8 or recommendations pursuant to the applicable BMP manual. For lake dewatering, Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date and time of notification, method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, total number of gallons discharged, type(s) of sediment controls used, pH of discharge, type(s) of volumetric and velocity controls used, and field and laboratory monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.
- b.** Develop and implement procedures that minimize the discharge of landscape irrigation water into the MS4 by promoting conservation programs.
- i. Permittees shall coordinate with the local water purveyor(s), where applicable, to promote landscape water use efficiency requirements for existing landscaping, use of drought tolerant, native vegetation, and the use of less toxic options for pest control and landscape management.
 - ii. Permittees shall develop and implement a coordinated outreach and education program to minimize the discharge of irrigation water and pollutants associated with irrigation water consistent with Part VI.D.4.c of this Order (Public Information and Participation Program).
- c.** Evaluate monitoring data collected pursuant to the Monitoring and Reporting Program (MRP) of this Order (Attachment E), and any other associated data or information, and determine whether any of the authorized or conditionally exempt non-storm water discharges identified in Parts III.A.1, III.A.2, and III.A.3 above are a source of pollutants that may be causing or contributing to an exceedance of applicable receiving water limitations in Part V and/or water quality-based effluent limitations in Part VI.E. To evaluate monitoring data, the Permittee shall either use applicable interim or final water quality-based effluent limitations for the pollutant or, if there are no applicable interim or final water quality-based effluent limitations for the pollutant, use applicable action levels provided in Attachment G. Based on non-storm water outfall-based monitoring as implemented through the MRP, if monitoring data show

¹⁶ Pursuant to the Federal Clean Water Act § 401.

demonstration must be based on source specific water quality monitoring data from the authorized or conditionally exempt essential non-storm water discharge or other relevant information documenting the characteristics of the specific non-storm water discharge as identified in Table 8.

6. Notwithstanding the above, the Regional Water Board Executive Officer, based on an evaluation of monitoring data and other relevant information for specific categories of non-storm water discharges, may modify a category or remove categories of conditionally exempt non-storm water discharges from Parts III.A.2 and III.A.3 above if the Executive Officer determines that a discharge category is a source of pollutants that causes or contributes to an exceedance of applicable receiving water limitations and/or water quality-based effluent limitations, or may require that a discharger obtain coverage under a separate individual or general State or Regional Water Board permit for a non-storm water discharge.

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

Discharge Category	General Conditions Under Which Discharge Through the MS4 is Allowed	Conditions/BMPs that are Required to be Implemented Prior to Discharge Through the MS4
All Discharge Categories	See discharge specific conditions below.	<p>Ensure conditionally exempt non-storm water discharges avoid potential sources of pollutants in the flow path to prevent introduction of pollutants to the MS4 and receiving water.</p> <p>Whenever there is a discharge of 100,000 gallons or more into the MS4, Permittees shall require advance notification by the discharger to the potentially affected MS4 Permittees, including at a minimum the LACFCD, if applicable, and the Permittee with jurisdiction over the land area from which the discharge originates.</p>
Dewatering of lakes	Discharge allowed only if all necessary permits/water quality certifications for dredge and fill activities, including water diversions, are obtained prior to discharge.	<p>Ensure procedures for advanced notification by the lake owner / operator to the Permittee(s) no less than 72 hours prior to the planned discharge.</p> <p>Immediately prior to discharge, visible trash on the shoreline or on the surface of the lake shall be removed and disposed of in a legal manner.</p> <p>Immediately prior to discharge, the discharge pathway and the MS4 inlet to which the discharge is directed, shall be inspected and cleaned out.</p> <p>Discharges shall be volumetrically and velocity controlled to minimize resuspension of sediments.</p> <p>Measures shall be taken to stabilize lake bottom sediments.</p> <p>Ensure procedures for water quality monitoring for pollutants of concern¹⁸ in the lake.</p> <p>Ensure record-keeping of lake dewatering by the lake owner / operator.</p>

¹⁸ Pollutants of concern include, at a minimum, trash and debris, including organic matter, TSS, and any pollutant for which there is a water quality-based effluent limitation in Part VI.E for the lake and/or receiving water.

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

<p>Dechlorinated/ debrominated swimming pool/spa discharges</p>	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Pool or spa water containing copper-based algaecides is not allowed to be discharged to the MS4.</p> <p>Discharges of cleaning waste water and filter backwash allowed only if authorized by a separate NPDES permit.</p>	<p>Implement BMPs and ensure discharge avoids potential sources of pollutants in the flow path to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Swimming pool water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Swimming pool water shall not contain any detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as “salt water pools” in excess of applicable water quality objectives.¹⁹</p> <p>Swimming pool discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Swimming pool discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration.</p> <p>Ensure procedures for advanced notification by the pool owner to the Permittee(s) at least 72 hours prior to planned discharge for discharges of 100,000 gallons or more.</p> <p>For discharges of 100,000 gallons or more, immediately prior to discharge, the discharge pathway and the MS4 inlet to which the discharge is directed, shall be inspected and cleaned out.</p>
<p>Dewatering of decorative fountains</p>	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Fountain water containing copper-based algaecides may not be discharged to the MS4.</p> <p>Fountain water containing dyes may not be discharged to the MS4.</p>	<p>Implement BMPs and ensure discharge avoids potential sources of pollutants in the flow path to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Fountain water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Fountain discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Fountain discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration.</p> <p>Ensure procedures for advanced notification by the fountain owner to the Permittee(s) at least 72 hours prior to planned discharge for discharges of 100,000 gallons or more.</p> <p>For discharges of 100,000 gallons or more, immediately prior to discharge, the discharge pathway and the MS4 inlet to which the discharge is directed, shall be inspected and cleaned out.</p>
<p>Non-commercial car washing by residents or by non-</p>	<p>Discharges allowed after implementation of specified BMPs.</p>	<p>Implement BMPs and ensure discharge avoids potential sources of pollutants in the flow path to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Minimize the amount of water used by employing water conservation practices such as turning off</p>

¹⁹ Applicable mineral water quality objectives for surface waters are contained in Chapter 3 of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.

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

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

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

B. Land Discharge Specifications – Not Applicable

C. Reclamation Specifications – Not Applicable

V. RECEIVING WATER LIMITATIONS

A. Receiving Water Limitations

1. Discharges from the MS4 that cause or contribute to the violation of receiving water limitations are prohibited.
2. Discharges from the MS4 of storm water, or non-storm water, for which a Permittee is responsible²⁰, shall not cause or contribute to a condition of nuisance.
3. The Permittees shall comply with Parts V.A.1 and V.A.2 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the storm water management program and its components and other requirements of this Order including any modifications. The storm water management program and its components shall be designed to achieve compliance with receiving water limitations. If exceedances of receiving water limitations persist, notwithstanding implementation of the storm water management program and its components and other requirements of this Order, the Permittee shall assure compliance with discharge prohibitions and receiving water limitations by complying with the following procedure:
 - a. Upon a determination by either the Permittee or the Regional Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable Receiving Water Limitation, the Permittee shall promptly notify and thereafter submit an Integrated Monitoring Compliance Report (as described in the Program Reporting Requirements, Part XVIII.A.5 of the Monitoring and Reporting Program) to the Regional Water Board for approval. The Integrated Monitoring Compliance shall describe the BMPs that are currently being

²⁰ Pursuant to 40 CFR § 122.26(a)(3)(vi), a Permittee is only responsible for discharges of storm water and non-storm water from the MS4 for which it is an owner or operator.

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

B. Ground Water Limitations – Not Applicable

VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** Each Permittee shall comply with all Standard Provisions included in Attachment D of this Order, in accordance with 40 CFR sections 122.41 and 122.42.
2. **Legal Authority**
 - a. Each Permittee must establish and maintain adequate legal authority, within its respective jurisdiction, to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize or enable the Permittee to:

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

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

3. Fiscal Resources

- a.** Each Permittee shall conduct a fiscal analysis of the annual capital and operation and maintenance expenditures necessary to implement the requirements of this Order.
- b.** Each Permittee shall also enumerate and describe in its Annual Report the source(s) of funds used in the past year, and proposed for the coming year, to meet necessary expenditures on the Permittee's storm water management program.

4. Responsibilities of the Permittees

- a.** Each Permittee is required to comply with the requirements of this Order applicable to discharges within its boundaries. Permittees are not responsible for the implementation of the provisions applicable to other Permittees. Each Permittee shall:
 - i.** Comply with the requirements of this Order and any modifications thereto.
 - ii.** Coordinate among its internal departments and agencies, as necessary, to facilitate the implementation of the requirements of this Order applicable to such Permittees in an efficient and cost-effective manner.
 - iii.** Participate in intra-agency coordination (e.g. Planning Department, Fire Department, Building and Safety, Code Enforcement, Public Health, Parks and Recreation, and others) and inter-agency coordination (e.g. co-Permittees, other NPDES permittees) necessary to successfully implement the provisions of this Order.

5. Public Review

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

6. Regional Water Board Review

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

7. Reopener and Modification

- a. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 124.5, 125.62, and 125.64. Causes for taking such actions include, but are not limited to:
 - i. Endangerment to human health or the environment resulting from the permitted activity, including information that the discharge(s) regulated by this Order may have the potential to cause or contribute to adverse impacts on water quality and/or beneficial uses;
 - ii. Acquisition of newly-obtained information that would have justified the application of different conditions if known at the time of Order adoption;
 - iii. To address changed conditions identified in required reports or other sources deemed significant by the Regional Water Board;
 - iv. To incorporate provisions as a result of future amendments to the Basin Plan, such as a new or revised water quality objective or the adoption or reconsideration of a TMDL, including the program of implementation. Within 18 months of the effective date of a revised TMDL or as soon as practicable thereafter, where the revisions warrant a change to the provisions of this Order, the Regional Water Board may modify this Order consistent with the assumptions and requirements of the revised WLA(s), including the program of implementation;

- v. To incorporate provisions as a result of new or amended statewide water quality control plans or policies adopted by the State Water Board, or in consideration of any State Water Board action regarding the precedential language of State Water Board Order WQ 99-05;
 - vi. To incorporate provisions as a result of the promulgation of new or amended federal or state laws or regulations, USEPA guidance concerning regulated activities, or judicial decisions that becomes effective after adoption of this Order.
 - vii. To incorporate effluent limitations for toxic constituents determined to be present in significant amount in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the reasonable potential analysis;
 - viii. In accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach or to include new Minimum Levels (MLs); and/or
 - ix. To include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges. Such modifications shall be based on the Regional Water Board's evaluation of whether Watershed Management Programs in Part VI.C. have resulted in attainment of interim WQBELs for storm water and review of relevant research, including but not limited to data and information provided by Permittees and other stakeholders, on storm water quality and the efficacy and reliability of storm water control technologies. Provisions or modifications to WQBELs in Part VI.E. shall only be included in this Order where there is evidence that storm water control technologies can reliably achieve final WQBELs.
- b.** After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
- i. Violation of any term or condition contained in this Order;
 - ii. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c.** The filing of a request by a Permittee for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

- violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.
- d. California Water Code section 13385(h)(1) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each serious violation. Pursuant to California Water Code section 13385(h)(2), a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of 40 CFR section 123.45 specifies the Group I and II pollutants. Pursuant to California Water Code section 13385.1(a)(1), a “serious violation” is also defined as “a failure to file a discharge monitoring report required pursuant to Section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations.”
 - e. California Water Code section 13385(i) requires the Regional Water Board to assess a mandatory minimum penalty of three-thousand dollars (\$3,000) for each violation whenever a person violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.
 - f. Pursuant to California Water Code section 13385.1(d), for the purposes of section 13385.1 and subdivisions (h), (i), and (j) of section 13385, “effluent limitation” means a numeric restriction or a numerically expressed narrative restriction, on the quantity, discharge rate, concentration, or toxicity units of a pollutant or pollutants that may be discharged from an authorized location. An effluent limitation may be final or interim, and may be expressed as a prohibition. An effluent limitation, for these purposes, does not include a receiving water limitation, a compliance schedule, or a best management practice.
 - g. Unlike subdivision (c) of California Water Code section 13385, where violations of effluent limitations may be assessed administrative civil liability on a per day basis, the mandatory minimum penalties provisions identified above require the Regional Water Board to assess mandatory minimum penalties for “each violation” of an effluent limitation. Some water quality-based effluent limitations in Attachments L through R of this Order (e.g., trash, as described immediately below) are expressed as annual effluent limitations. Therefore, for such limitations, there can be no more than one violation of each interim or final effluent limitation per year.

h. Trash TMDLs.

- i. Consistent with the 2009 amendments to Order No. 01-182 to incorporate the Los Angeles River Trash TMDL, the water quality-based effluent limitations in Attachments L through R of this Order for trash are expressed as annual effluent limitations. Therefore, for such limitations, there can be no more than one violation of each interim or final effluent limitation per year. Trash is considered a Group I pollutant, as specified in Appendix A to 40 CFR section 123.45. Therefore, each annual violation of a trash effluent limitation in Attachments L through R of this Order by forty percent or more would be considered a “serious violation” under California Water Code section 13385(h). With respect to the final effluent limitation of zero trash, any detectable discharge of trash necessarily is a serious violation, in accordance with the State Water Board’s Enforcement Policy. Violations of the effluent limitations in Attachments L through R of this Order would not constitute “chronic” violations that would give rise to mandatory liability under California Water Code section 13385(i) because four or more violations of the effluent limitations subject to a mandatory penalty cannot occur in a period of six consecutive months.
 - ii. For the purposes of enforcement under California Water Code section 13385, subdivisions (a), (b), and (c), not every storm event may result in trash discharges. In trash TMDLs adopted by the Regional Water Board, the Regional Water Board states that improperly deposited trash is mobilized during storm events of greater than 0.25 inches of precipitation. Therefore, violations of the effluent limitations are limited to the days of a storm event of greater than 0.25 inches. Once a Permittee has violated the annual effluent limitation, any subsequent discharges of trash during any day of a storm event of greater than 0.25 inches during the same storm year constitutes an additional “day in which the violation [of the effluent limitation] occurs”.
- 14.** This Order does not exempt any Permittee from compliance with any other laws, regulations, or ordinances that may be applicable.

- 15.** The provisions of this Order are severable. If any provisions of this Order or the application of any provision of this Order to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Watershed Management Programs

1. General

- a. The purpose of this Part VI.C is to allow Permittees the flexibility to develop Watershed Management Programs to implement the requirements of this Order on a watershed scale through customized strategies, control measures, and BMPs.
- b. Participation in a Watershed Management Program is voluntary and allows a Permittee to address the highest watershed priorities, including complying with the requirements of Part V.A. (Receiving Water Limitations), Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R, by customizing the control measures in Parts III.A.4 (Prohibitions – Non-Storm Water Discharges) and VI.D (Minimum Control Measures).
- c. Customized strategies, control measures, and BMPs shall be implemented on a watershed basis, where applicable, through each Permittee's storm water management program and/or collectively by all participating Permittees through a Watershed Management Program.
- d. The Watershed Management Programs shall ensure that discharges from the Permittee's MS4: (i) achieve applicable water quality-based effluent limitations in Part VI.E and Attachments L through R pursuant to the corresponding compliance schedules, (ii) do not cause or contribute to exceedances of receiving water limitations in Parts V.A and VI.E and Attachments L through R, and (iii) do not include non-storm water discharges that are effectively prohibited pursuant to Part III.A. The programs shall also ensure that controls are implemented to reduce the discharge of pollutants to the maximum extent practicable (MEP) pursuant to Part IV.A.1.
- e. Watershed Management Programs shall be developed either collaboratively or individually using the Regional Water Board's Watershed Management Areas (WMAs). Where appropriate, WMAs may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water.
- f. Each Watershed Management Program shall be consistent with Part VI.C.5-C.8 and shall:
 - i. Prioritize water quality issues resulting from storm water and non-storm water discharges from the MS4 to receiving waters within each WMA,
 - ii. Identify and implement strategies, control measures, and BMPs to achieve the outcomes specified in Part VI.C.1.d,
 - iii. Execute an integrated monitoring program and assessment program pursuant to Attachment E – MRP, Part IV to determine progress towards achieving applicable limitations and/or action levels in Attachment G, and

- iv. Modify strategies, control measures, and BMPs as necessary based on analysis of monitoring data collected pursuant to the MRP to ensure that applicable water quality-based effluent limitations and receiving water limitations and other milestones set forth in the Watershed Management Program are achieved in the required timeframes.
- v. Provide appropriate opportunity for meaningful stakeholder input, including but not limited to, a permit-wide watershed management program technical advisory committee (TAC) that will advise and participate in the development of the Watershed Management Programs and enhanced Watershed Management Programs from month 6 through the date of program approval. The composition of the TAC may include at least one Permittee representative from each Watershed Management Area for which a Watershed Management Program will be developed, and must include a minimum of one public representative from a non-governmental organization with public membership, and staff from the Regional Water Board and USEPA Region IX.
- g. Permittees may elect to develop an enhanced Watershed Management Program (EWMP). An EWMP is one that comprehensively evaluates opportunities, within the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects that, wherever feasible, retain (i) all non-storm water runoff and (ii) all storm water runoff from the 85th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others. In drainage areas within the EWMP area where retention of the 85th percentile, 24-hour storm event is not feasible, the EWMP shall include a Reasonable Assurance Analysis to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved through implementation of other watershed control measures. An EWMP shall:
 - i. Be consistent with the provisions in Part VI.C.1.a-f and VI.C.5-C.8;
 - ii. Incorporate applicable State agency input on priority setting and other key implementation issues;
 - iii. Provide for meeting water quality standards and other CWA obligations by utilizing provisions in the CWA and its implementing regulations, policies and guidance;
 - iv. Include multi-benefit regional projects to ensure that MS4 discharges achieve compliance with all final WQBELs set forth in Part VI.E. and do not cause or contribute to exceedances of receiving water limitations in Part V.A. by retaining through infiltration or capture and reuse the storm water volume from the 85th percentile, 24-hour storm for the drainage areas tributary to the multi-benefit regional projects.;

- v. In drainage areas where retention of the storm water volume from the 85th percentile, 24-hour event is not technically feasible, include other watershed control measures to ensure that MS4 discharges achieve compliance with all interim and final WQBELs set forth in Part VI.E. with compliance deadlines occurring after approval of a EWMP and to ensure that MS4 discharges do not cause or contribute to exceedances of receiving water limitations in Part V.A.;
- vi. Maximize the effectiveness of funds through analysis of alternatives and the selection and sequencing of actions needed to address human health and water quality related challenges and non-compliance;
- vii. Incorporate effective innovative technologies, approaches and practices, including green infrastructure;
- viii. Ensure that existing requirements to comply with technology-based effluent limitations and core requirements (e.g., including elimination of non-storm water discharges of pollutants through the MS4, and controls to reduce the discharge of pollutants in storm water to the maximum extent practicable) are not delayed;
- ix. Ensure that a financial strategy is in place.

2. Compliance with Receiving Water Limitations Not Otherwise Addressed by a TMDL through a WMP or EWMP

- a. For receiving water limitations in Part V.A. associated with water body-pollutant combinations not addressed through a TMDL, but which a Permittee elects to address through a Watershed Management Program or EWMP as set forth in this Part VI.C., a Permittee shall comply as follows:
 - i. **For pollutants that are in the same class²¹ as those addressed in a TMDL for the watershed and for which the water body is identified as impaired on the State's Clean Water Act Section 303(d) List as of the effective date of this Order:**

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

²¹ Pollutants are considered in a similar class if they have similar fate and transport mechanisms, can be addressed via the same types of control measures, and within the same timeline already contemplated as part of the Watershed Management Program for the TMDL.

- (2) Permittees shall include the water body-pollutant combination(s) in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).
 - (3) Permittees shall identify milestones and dates for their achievement consistent with those in the corresponding TMDL.
- ii. For pollutants that are not in the same class as those addressed in a TMDL for the watershed, but for which the water body is identified as impaired on the State's Clean Water Act Section 303(d) List as of the effective date of this Order:**

- (1) Permittees shall assess contributions of the pollutant(s) from MS4 discharges to the receiving waters and sources of the pollutant(s) within the drainage area of the MS4 pursuant to Part VI.C.5.a.iii.
- (2) Permittees shall identify Watershed Control Measures pursuant to Part VI.C.5.b. that will adequately address contributions of the pollutant(s) from MS4 discharges to receiving waters such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
- (3) Permittees shall include the water body-pollutant in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).
- (4) Permittees shall identify enforceable requirements and milestones and dates for their achievement to control MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations within a timeframe(s) that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary. The time between dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint (e.g., x% of the MS4 drainage area is meeting the receiving water limitations) and dates shall relate either to taking a specific action or meeting a milestone.
- (5) Where the final date(s) in (4) is beyond the term of this Order, the following conditions shall apply:
 - (a) For an EWMP, in drainage areas where retention of (i) all non-storm water runoff and (ii) all storm water runoff from the 85th percentile, 24-hour storm event will be achieved, each participating Permittee shall continue to target implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges that are a source of pollutants to receiving waters.
 - (b) For a WMP and in areas of a EWMP where retention of the volume in (a) is technically infeasible and where the Regional Water Board determines that MS4 discharges cause or

contribute to the water quality impairment, participating Permittees may initiate development of a stakeholder-proposed TMDL upon approval of the Watershed Management Program or EWMP. For MS4 discharges from these drainage areas to the receiving waters, any extension of this compliance mechanism beyond the term of this Order shall be consistent with the implementation schedule in a TMDL for the waterbody pollutant combination(s) adopted by the Regional Water Board.

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

- (1) Upon an exceedance of a receiving water limitation, based on data collected pursuant to the MRP and approved IMPs and CIMPs, Permittees shall assess contributions of the pollutant(s) from MS4 discharges to the receiving waters and sources of the pollutant(s) within the drainage area of the MS4 pursuant to Part VI.C.5.a.iii.
- (2) If MS4 discharges are identified as a source of the pollutant(s) that has caused or contributed to, or has the potential to cause or contribute to, the exceedance(s) of receiving water limitations in Part V.A., Permittees shall address contributions of the pollutant(s) from MS4 discharges through modifications to the WMP or EWMP pursuant to Part VI.C.8.a.ii.
 - (a) In a modified WMP or EWMP, Permittees shall identify Watershed Control Measures pursuant to Part VI.C.5.b. that will adequately address contributions of the pollutant(s) from MS4 discharges to receiving waters such that the MS4 discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.
 - (b) Permittees shall modify the Reasonable Assurance Analysis pursuant to Part VI.C.5.b.iv.(5) to address the pollutant(s).
 - (c) Permittees shall identify enforceable requirements and milestones and dates for their achievement to control MS4 discharges such that they do not cause or contribute to exceedances of receiving water limitations within a timeframe(s) that is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary. The time between dates shall not exceed one year. Milestones shall relate to a specific water quality endpoint (e.g., x% of the MS4 drainage area is meeting the receiving water limitations) and dates shall relate either to taking a specific action or meeting a milestone.

- (d) Where the final date(s) in (4) is beyond the term of this Order, the following conditions shall apply:
- (i) For an EWMP, in drainage areas where retention of (i) all non-storm water runoff and (ii) all storm water runoff from the 85th percentile, 24-hour storm event will be achieved, each participating Permittee shall continue to target implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges that are a source of pollutants to receiving waters.
 - (ii) For a WMP and in areas of a EWMP where retention of the volume in (a) is technically infeasible, for newly identified exceedances of receiving water limitations, a Permittee may request that the Regional Water Board approve a modification to its WMP or EWMP to include these additional water body-pollutant combinations.
- b.** A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or EWMP shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A. of this Order for the specific water body-pollutant combinations addressed by an approved Watershed Management Program or EWMP.
- c.** If a Permittee fails to meet any requirement or date for its achievement in an approved Watershed Management Program or EWMP, the Permittee shall be subject to the provisions of Part V.A. for the waterbody-pollutant combination(s) that were to be addressed by the requirement.
- d.** Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with all of the following requirements shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A. not otherwise addressed by a TMDL, if all the following requirements are met:
- i.** Provides timely notice of its intent to develop a WMP or EWMP,
 - ii.** Meets all interim and final deadlines for development of a WMP or EWMP,
 - iii.** For the area to be covered by the WMP or EWMP, targets implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges of pollutants through the MS4 to receiving waters, to address known contributions of

pollutants from MS4 discharges that cause or contribute to exceedances of receiving water limitations, and

- iv. Receives final approval of its WMP or EWMP within 28 or 40 months, respectively.

3. Compliance with Receiving Water Limitations Addressed by a TMDL through a WMP or EWMP

- a. A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or EWMP shall constitute a Permittee's compliance with provisions pertaining to applicable interim water quality based effluent limitations and interim receiving water limitations in Part VI.E. and Attachments L-R for the pollutant(s) addressed by the approved Watershed Management Program or EWMP.
- b. Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with all of the following requirements shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A., if all the following requirements are met:
 - i. Provides timely notice of its intent to develop a WMP or EWMP,
 - ii. Meets all interim and final deadlines for development of a WMP or EWMP,
 - iii. For the area to be covered by the WMP or EWMP, targets implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges of pollutants through the MS4 to receiving waters, to address known contributions of pollutants from MS4 discharges that cause or contribute to exceedances of receiving water limitations, and
 - iv. Receives final approval of its WMP or EWMP within 28 or 40 months, respectively.
- c. Subdivision b. does not apply to receiving water limitations corresponding to final compliance deadlines pursuant to TMDL provisions in Part VI.E. that have passed or will occur prior to approval of a WMP or EWMP.

4. Process

- a. Timelines for Implementation
 - i. Implementation of the following requirements shall occur per the schedule specified in Table 9 below:

Table 9. Watershed Management Program Implementation Requirements

Part	Provision	Due Date
VI.C.4.b	Notify Regional Water Board of intent to develop Watershed Management Program or enhanced WMP and request submittal date for draft program plan	6 months after Order effective date
VI.C.4.c	For Permittee(s) that elect not to implement the conditions of Part VI.C.4.c.i or c.ii, submit draft plan to Regional Water Board	1 year after Order effective date
VI.C.4.c	For Permittee(s) that elect to implement the conditions of Part VI.C.4.c.i or c.ii, submit draft plan to Regional Water Board	18 months after Order effective date
VI.C.4.c.iv	For Permittees that elect to collaborate on an enhanced WMP that meets the requirements of Part VI.C.4.c.iv, submit draft plan to Regional Water Board	18 months after Order effective date, provide final work plan for development of enhanced WMP 30 months after Order effective date, submit draft plan
VI.C.4.c	Comments provided to Permittees by Regional Water Board	4 months after submittal of draft plan
VI.C.4.c	Submit final plan to Regional Water Board	3 months after receipt of Regional Water Board comments on draft plan
VI.C.4.c	Approval or denial of final plan by Regional Water Board or by the Executive Officer on behalf of the Regional Water Board	3 months after submittal of final plan
VI.C.6	Begin implementation of Watershed Management Program or EWMP	Upon approval of final plan
VI.C.8	Comprehensive evaluation of Watershed Management	Every two years from date of

Program or EWMP and submittal of modifications to plan	approval
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- b.** Permittees that elect to develop a Watershed Management Program or EWMP must notify the Regional Water Board no later than six months after the effective date of this Order.
- i.** Such notification shall specify if the Permittee(s) are requesting a 12-month or 18-month submittal date for the draft Watershed Management Program, per Part VI.C.4.c.i – ii, or if the Permittees are requesting a 18/30-month submittal date for the draft EWMP per Part VI.C.4.c.iv.
- ii.** As part of their notice of intent to develop a WMP or EWMP, Permittees shall identify all applicable interim and final trash WQBELs and all other final WQBELs and receiving water limitations pursuant to Part VI.E. and the applicable attachment(s) with compliance deadlines occurring prior to approval of a WMP or EWMP. Permittees shall identify watershed control measures, where possible from existing TMDL implementation plans, that will be implemented by participating Permittees concurrently with the development of a Watershed Management Program or EWMP to ensure that MS4 discharges achieve compliance with applicable interim and final trash WQBELs and all other final WQBELs and receiving water limitations set forth in Part VI.E. and the applicable attachment(s) by the applicable compliance deadlines occurring prior to approval of a WMP or EWMP.
- iii.** As part of their notification, Permittees electing to develop an EWMP shall submit all of the following in addition to the requirements of Part VI.C.4.b.i.-ii.:
- (1) Plan concept and geographical scope,
 - (2) Cost estimate for plan development,
 - (3) Executed MOU/agreement among participating Permittees to fund plan development, or final draft MOU among participating Permittees along with a signed letter of intent from each participating City Manager or head of agency. If a final draft MOU is submitted, the MOU shall be fully executed by all participating Permittees within 12 months of the effective date of this Order.
 - (4) Interim milestones for plan development and deadlines for their achievement,
 - (5) Identification of, and commitment to fully implement, one structural BMP or a suite of BMPs at a scale that provides meaningful water quality improvement within each watershed covered by the plan within 30 months of the effective date of this Order in addition to

watershed control measures to be implemented pursuant to b.ii. above. The structural BMP or suite of BMPs shall be subject to approval by the Regional Water Board Executive Officer, and

- (6) Demonstration that the requirements in Parts VI.C.4.c.iv.(1) and (2) have been met.
- c. Permittees that elect to develop a Watershed Management Program shall submit a draft plan to the Regional Water Board as follows:
- i. For Permittees that elect to collaborate on the development of a Watershed Management Program, Permittees shall submit the draft Watershed Management Program no later than 18 months after the effective date of this Order if the following conditions are met in greater than 50% of the land area covered by the WMP:
 - (1) Demonstrate that there are LID ordinances in place and/or commence development of a Low Impact Development (LID) ordinance(s) meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have a draft ordinance within 6 months of the effective date of the Order, and
 - (2) Demonstrate that there are green streets policies in place and/or commence development of a policy(ies) that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have a draft policy within 6 months of the effective date of the Order.
 - (3) Demonstrate in the notification of the intent to develop a Watershed Management Program that Parts VI.C.4.c.i(1) and (2) have been met in greater than 50% of the watershed area.
 - ii. For a Permittee that elects to develop an individual Watershed Management Program, the Permittee shall submit the draft Watershed Management Program no later than 18 months after the effective date of this Order if the following conditions are met:
 - (1) Demonstrate that there is a LID ordinance in place for the Permittee's jurisdiction and/or commence development of a Low Impact Development (LID) ordinance for the Permittee's jurisdiction meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have a draft ordinance within 6 months of the effective date of the Order, and
 - (2) Demonstrate that there is a green streets policy in place for the Permittee's jurisdiction and/or commence development of a policy

that specifies the use of green street strategies for transportation corridors within the Permittee's jurisdiction within 60 days of the effective date of the Order and have a draft policy within 6 months of the effective date of the Order.

- (3) Demonstrate in the notification of the intent to develop a Watershed Management Program that Parts VI.C.4.c.ii.(1) and (2) have been met.
- iii. For Permittees that elect not to implement the conditions under Part VI.C.4.c.i. or Part VI.C.4.c.ii., Permittees shall submit the draft Watershed Management Program no later than 12 months after the effective date of this Order.
 - iv. For Permittees that elect to collaborate on the development of an EWMP, Permittees shall submit the work plan for development of the EWMP no later than 18 months after the effective date of this Order, and shall submit the draft program no later than 30 months after the effective date of this Order if the following conditions are met in greater than 50% of the land area in the watershed:
 - (1) Demonstrate that there are LID ordinances in place and/or commence development of a Low Impact Development (LID) ordinance(s) meeting the requirements of this Order's Planning and Land Development Program within 60 days of the effective date of the Order and have a draft ordinance within 6 months of the effective date of the Order, and
 - (2) Demonstrate that there are green streets policies in place and/or commence development of a policy(ies) that specifies the use of green street strategies for transportation corridors within 60 days of the effective date of the Order and have a draft policy within 6 months of the effective date of the Order.
 - (3) Demonstrate in the notification of the intent to develop an EWMP that Parts VI.C.4.c.iv.(1) and (2) have been met in greater than 50% of the watershed area.
- d. Until the Watershed Management Program or EWMP is approved by the Regional Water Board or by the Executive Officer on behalf of the Regional Water Board, Permittees that elect to develop a Watershed Management Program or EWMP shall:
 - i. Continue to implement watershed control measures in their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv),

- ii. Continue to implement watershed control measures to eliminate non-storm water discharges through the MS4 that are a source of pollutants to receiving waters consistent with CWA section 402(p)(3)(B)(ii), and
 - iii. Implement watershed control measures, where possible from existing TMDL implementation plans, to ensure that MS4 discharges achieve compliance with interim and final trash WQBELs and all other final WQBELs and receiving water limitations pursuant to Part VI.E. and set forth in Attachments L through R by the applicable compliance deadlines occurring prior to approval of a WMP or EWMP.
- e. Permittees that do not elect to develop a Watershed Management Program or EWMP, or that do not have an approved WMP or EWMP within 28 or 40 months, respectively, of the effective date of this Order, shall be subject to the baseline requirements in Part VI.D and shall demonstrate compliance with receiving water limitations pursuant to Part V.A. and with applicable interim water quality-based effluent limitations in Part VI.E pursuant to subparts VI.E.2.d.i.(1)-(3).
- f. Permittees subject to the Middle Santa Ana River Watershed Bacteria Indicator TMDL shall submit a Comprehensive Bacteria Reduction Plan (CBRP) for dry weather to the Regional Water Board Executive Officer no later than nine months after the effective date of this Order. The CBRP shall describe, in detail, the specific actions that have been taken or will be taken to achieve compliance with the dry weather water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Watershed Bacteria Indicator TMDL by December 31, 2015. The CBRP shall also establish a schedule for developing a CBRP to comply with the water quality-based effluent limitations and the receiving water limitations for the Middle Santa Ana River Bacteria TMDL during wet weather by December 31, 2025. The CBRP may be developed in lieu of the Watershed Management Program for MS4 discharges of bacteria within the Middle Santa Ana River Watershed.

5. Program Development

a. Identification of Water Quality Priorities

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

- i. Water Quality Characterization. Each plan shall include an evaluation of existing water quality conditions, including characterization of storm water and non-storm water discharges from the MS4 and receiving water quality,

to support identification and prioritization/sequencing of management actions.

ii. **Water Body-Pollutant Classification.** On the basis of the evaluation of existing water quality conditions, water body-pollutant combinations shall be classified into one of the following three categories:

- (1) **Category 1 (Highest Priority):** Water body-pollutant combinations for which water quality-based effluent limitations and/or receiving water limitations are established in Part VI.E and Attachments L through R of this Order.
- (2) **Category 2 (High Priority):** Pollutants for which data indicate water quality impairment in the receiving water according to the State's Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (State Listing Policy) and for which MS4 discharges may be causing or contributing to the impairment.
- (3) **Category 3 (Medium Priority):** Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable receiving water limitations contained in this Order and for which MS4 discharges may be causing or contributing to the exceedance.

iii. **Source Assessment.** Utilizing existing information, potential sources within the watershed for the water body-pollutant combinations in Categories 1 - 3 shall be identified.

- (1) Permittees shall identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the water quality priorities. The identification of known and suspected sources of the highest water quality priorities shall consider the following:
 - (a) Review of available data, including but not limited to:
 - (i) Findings from the Permittees' Illicit Connections and Illicit Discharge Elimination Programs;
 - (ii) Findings from the Permittees' Industrial/Commercial Facilities Programs;
 - (iii) Findings from the Permittees' Development Construction Programs;

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

b. Selection of Watershed Control Measures

i. Permittees shall identify strategies, control measures, and BMPs to implement through their individual storm water management programs, and collectively on a watershed scale, with the goal of creating an efficient program to focus individual and collective resources on watershed priorities.

ii. The objectives of the Watershed Control Measures shall include:

- (1) Prevent or eliminate non-storm water discharges to the MS4 that are a source of pollutants from the MS4 to receiving waters.
- (2) Implement pollutant controls necessary to achieve all applicable interim and final water quality-based effluent limitations and/or receiving water limitations pursuant to corresponding compliance schedules.
- (3) Ensure that discharges from the MS4 do not cause or contribute to exceedances of receiving water limitations.

iii. Watershed Control Measures may include:

- (1) Structural and/or non-structural controls and operation and maintenance procedures that are designed to achieve applicable water quality-based effluent limitations, receiving water limitations in Part VI.E and/or Attachments L through R;
- (2) Retrofitting areas of existing development known or suspected to contribute to the highest water quality priorities with regional or sub-regional controls or management measures; and
- (3) Stream and/or habitat rehabilitation or restoration projects where stream and/or habitat rehabilitation or restoration are necessary for, or will contribute to demonstrable improvements in the physical, chemical, and biological receiving water conditions and restoration and/or protection of water quality standards in receiving waters.

iv. The following provisions of this Order shall be incorporated as part of the Watershed Management Program:

- (1) Minimum Control Measures.
 - (a) Permittees shall assess the minimum control measures (MCMs) as defined in Part VI.D.4 to Part VI.D.10 of this Order to identify opportunities for focusing resources on the high priority issues in each watershed. For each of the following minimum control measures, Permittees shall identify potential modifications that will address watershed priorities:

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

receiving water limitations established in this Order pursuant to these TMDLs.

- (a) TMDL control measures shall include where necessary control measures to address both storm water and non-storm water discharges from the MS4.
 - (b) TMDL control measures may include baseline or customized activities covered under the general MCM categories in Part VI.D as well as BMPs and other control measures covered under the non-storm water discharge provisions of Part III.A of this Order.
 - (c) The WMP shall include, at a minimum, those actions that will be implemented during the permit term to achieve interim and/or final water quality-based effluent limitations and/or receiving water limitations with compliance deadlines within the permit term.
- (4) Each plan shall include the following components:
- (a) Identification of specific structural controls and non-structural best management practices, including operational source control and pollution prevention, and any other actions or programs to achieve all water quality-based effluent limitations and receiving water limitations contained in this Part VI.E and Attachments L through R to which the Permittee(s) is subject;
 - (b) For each structural control and non-structural best management practice, the number, type, and location(s) and/or frequency of implementation;
 - (c) For any pollution prevention measures, the nature, scope, and timing of implementation;
 - (d) For each structural control and non-structural best management practice, interim milestones and dates for achievement to ensure that TMDL compliance deadlines will be met; and
 - (e) The plan shall clearly identify the responsibilities of each participating Permittee for implementation of watershed control measures.
- (5) Permittees shall conduct a Reasonable Assurance Analysis for each water body-pollutant combination addressed by the Watershed Management Program. A Reasonable Assurance Analysis (RAA) shall be quantitative and performed using a peer-reviewed model in the public domain. Models to be considered for the RAA, without exclusion, are the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). The RAA shall commence with assembly of all available, relevant subwatershed data collected within the last 10 years, including land use and pollutant

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

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

c. Compliance Schedules

Permittees shall incorporate compliance schedules in Attachments L through R into the plan and, where necessary develop interim milestones and dates for their achievement. Compliance schedules and interim milestones and dates for their achievement shall be used to measure progress towards addressing the highest water quality priorities and achieving applicable water quality-based effluent limitations and/or receiving water limitations.

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

6. Watershed Management Program Implementation

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

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

7. Integrated Watershed Monitoring and Assessment

Permittees in each WMA shall develop an integrated monitoring program as set forth in Part IV of the MRP (Attachment E) or implement a customized monitoring program with the primary objective of allowing for the customization of the outfall monitoring program (Parts VIII and IX) in conjunction with an approved Watershed Management Program or EWMP, as defined below. Each monitoring program shall assess progress toward achieving the water quality-based effluent limitations and/or receiving water limitations per the compliance schedules, and progress toward addressing the water quality priorities for each WMA. The customized monitoring program shall be submitted as part of the Watershed Management Program, or where Permittees elect to develop an EWMP, shall be submitted within 18 months of the effective date of this Order. If pursuing a customized monitoring program, the Permittee(s) shall provide sufficient justification for each element of the program that differs from the monitoring program requirements as set forth in Attachment E. Monitoring programs shall be subject to approval by the Executive Officer following a public comment period. The customized monitoring program shall be designed to address the Primary Objectives detailed in Attachment E, Part II.A and shall include the following program elements:

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

8. Adaptive Management Process

a. Watershed Management Program Adaptive Management Process

- i. Permittees in each WMA shall implement an adaptive management process, every two years from the date of program approval, adapting the Watershed Management Program or EWMP to become more effective, based on, but not limited to a consideration of the following:
 - (1) Progress toward achieving interim and/or final water quality-based effluent limitations and/or receiving water limitations in Part VI.E and Attachments L through R, according to established compliance schedules;
 - (2) Progress toward achieving improved water quality in MS4 discharges and achieving receiving water limitations through implementation of the watershed control measures based on an evaluation of outfall-based monitoring data and receiving water monitoring data;

- (3) Achievement of interim milestones;
 - (4) Re-evaluation of the water quality priorities identified for the WMA based on more recent water quality data for discharges from the MS4 and the receiving water(s) and a reassessment of sources of pollutants in MS4 discharges;
 - (5) Availability of new information and data from sources other than the Permittees' monitoring program(s) within the WMA that informs the effectiveness of the actions implemented by the Permittees;
 - (6) Regional Water Board recommendations; and
 - (7) Recommendations for modifications to the Watershed Management Program solicited through a public participation process.
- ii. Based on the results of the adaptive management process, Permittees shall report any modifications, including where appropriate new compliance deadlines and interim milestones, with the exception of those compliance deadlines established in a TMDL, necessary to improve the effectiveness of the Watershed Management Program or EWMP in the Annual Report, as required pursuant to Part XVIII.A.6 of the MRP (Attachment E), and as part of the Report of Waste Discharge (ROWD) required pursuant to Part II.B of Attachment D – Standard Provisions.
- (1) The adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.
- iii. Permittees shall implement any modifications to the Watershed Management Program or EWMP upon approval by the Regional Water Board Executive Officer or within 60 days of submittal if the Regional Water Board Executive Officer expresses no objections.

D. Storm Water Management Program Minimum Control Measures

1. General Requirements

- a. Each Permittee shall implement the requirements in Parts VI.D.4 through VI.D.10 below, or may in lieu of the requirements in Parts VI.D.4 through VI.D.10 implement customized actions within each of these general categories of control measures as set forth in an approved Watershed Management Program per Part VI.C. Implementation shall be consistent with the requirements of 40 CFR § 122.26(d)(2)(iv).
- b. Timelines for Implementation
 - i. Unless otherwise noted in Part VI.D, each Permittee that does not elect to develop a Watershed Management Program or EWMP per Part VI.C shall implement the requirements contained in Part VI.D within 6 months after the

effective date of this Order. In the interim, a Permittee shall continue to implement its existing storm water management program, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv).

- ii. Permittees that elect to develop a Watershed Management Program or EWMP shall continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv) until the Watershed Management Program or EWMP is approved by the Regional Water Board Executive Officer.

2. Progressive Enforcement and Interagency Coordination

- a. Each Permittee shall develop and implement a Progressive Enforcement Policy to ensure that (1) regulated Industrial/Commercial facilities, (2) construction sites, (3) development and redevelopment sites with post-construction controls, and (4) illicit discharges are each brought into compliance with all storm water and non-storm water requirements within a reasonable time period as specified below.

- i. Follow-up Inspections

In the event that a Permittee determines, based on an inspection or illicit discharge investigation conducted, that a facility or site operator has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement actions which, at a minimum, shall include a follow-up inspection within 4 weeks from the date of the initial inspection and/or investigation.

- ii. Enforcement Action

In the event that a Permittee determines that a facility or site operator has failed to adequately implement BMPs after a follow-up inspection, that Permittee shall take enforcement action as established through authority in its municipal code and ordinances, through the judicial system, or refer the case to the Regional Water Board, per the Interagency Coordination provisions below.

- iii. Records Retention

Each Permittee shall maintain records, per their existing record retention policies, and make them available on request to the Regional Water Board, including inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance.

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

A Permittee may refer a violation(s) of its municipal storm water ordinances and/or California Water Code section 13260 by Industrial and Commercial facilities and construction site operators to the Regional Water Board

provided that the Permittee has made a good faith effort of applying its Progressive Enforcement Policy to achieve compliance with its own ordinances. At a minimum, a Permittee's good faith effort must be documented with:

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

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

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

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

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

Each Permittee shall initiate, within one business day,²² investigation of complaints from facilities within its jurisdiction. The initial investigation shall include, at a minimum, a limited inspection of the facility to confirm validity of the complaint and to determine if the facility is in compliance with municipal storm water ordinances and, if necessary, to oversee corrective action.

c. Assistance with Regional Water Board Enforcement Actions

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

- i. Assisting in identification of current owners, operators, and lessees of properties and sites.**

²² Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to "initiate" the investigation within that one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, to occur within four business days.

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

3. Modifications/Revisions

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

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

a. Public Information and Participation Program (PIPP)

i. General

- (1) The LACFCD shall participate in a regional Public Information and Participation Program (PIPP) or alternatively, shall implement its own PIPP that includes the requirements listed in this part. The LACFCD shall collaborate, as necessary, with other Permittees to implement PIPP requirements. The objectives of the PIPP are as follows:
 - (a) To measurably increase the knowledge of the target audience about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts.
 - (b) To measurably change the waste disposal and storm water pollution generation behavior of target audiences by encouraging the implementation of appropriate alternatives by providing information to the public.
 - (c) To involve and engage a diversity of socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of stormwater pollution.

ii. PIPP Implementation

- (1) The LACFCD shall implement the PIPP requirements listed in this Part VI.D.5 using one or more of the following approaches:
 - (a) By participating in a collaborative PIPP covering the entire service area of the Los Angeles County Flood Control District,
 - (b) By participating in one or more Watershed Group sponsored PIPPs, and/or
 - (c) Individually within the service area of the Los Angeles County Flood Control District.

- (2) If the LACFCD participates in a collaborative District-wide or Watershed Group PIPP, the LACFCD shall provide the contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes no later than 30 days after a change occurs.

iii. Public Participation

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

iv. Residential Outreach Program

- (1) Working in conjunction with a District-wide or Watershed Group sponsored PIPP or individually, the LACFCD shall implement the following activities:
 - (a) Conduct storm water pollution prevention public service announcements and advertising campaigns
 - (b) Facilitate the dissemination of public education materials including, at a minimum, information on the proper handling (i.e., disposal, storage and/or use) of:
 - (i) Vehicle waste fluids
 - (ii) Household waste materials (i.e., trash and household hazardous waste)
 - (iii) Construction waste materials
 - (iv) Pesticides and fertilizers (including integrated pest management practices [IPM] to promote reduced use of pesticides),
 - (v) Green waste (including lawn clippings and leaves)
 - (vi) Animal wastes
 - (c) Facilitate the dissemination of activity-specific storm water pollution prevention public education materials, at a minimum, for the following points of purchase:
 - (i) Automotive parts stores

- (ii) Home improvement centers / lumber yards / hardware stores / paint stores
- (iii) Landscaping / gardening centers
- (iv) Pet shops / feed stores
- (d) Maintain a storm water website, which shall include educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities listed in Part VI.D.5.
- (e) When implementing activities in (a)-(d), the LACFCD shall use effective strategies to educate and involve ethnic communities in storm water pollution prevention through culturally effective methods.

b. Industrial/Commercial Facilities Program

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

c. Public Agency Activities Program

i. General

- (1) The LACFCD shall implement a Public Agency Activities Program to minimize storm water pollution impacts from LACFCD-owned or operated facilities and activities. Requirements for Public Agency Facilities and Activities consist of the following components:
 - (a) Public Construction Activities Management.
 - (b) Public Facility Inventory
 - (c) Public Facility and Activity Management
 - (d) Vehicle and Equipment Washing
 - (e) Landscape and Recreational Facilities Management
 - (f) Storm Drain Operation and Maintenance
 - (g) Parking Facilities Management
 - (h) Emergency Procedures
 - (i) Employee and Contractor Training

ii. Public Construction Activities Management

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

iii. Public Facility Inventory

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

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

iv. Public Agency Facility and Activity Management

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

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

v. Vehicle and Equipment Washing

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

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

vi. Landscape and Recreational Facilities Management

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

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

vii. Storm Drain Operation and Management

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

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

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

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

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

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

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

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

Priority C: A minimum of once per year.

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

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

(4) Catch Basin Labels and Open Channel Signage

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

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

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

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

(5) Open Channel Maintenance

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

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

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

viii. Parking Facilities Management

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

ix. Emergency Procedures

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

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

x. Employee and Contractor Training

- (1) The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors in targeted positions (whose interactions, jobs, and activities affect storm water quality) on the requirements of the overall storm water management program to:
 - (a) Promote a clear understanding of the potential for activities to pollute storm water.
 - (b) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.

- (2) The LACFCD shall, no later than one year after Order adoption and annually thereafter before June 30, train all of their employees and contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). Outside contractors can self-certify, providing they certify they have received all applicable training required in the Order and have documentation to that effect. Training programs shall address:
 - (a) The potential for pesticide-related surface water toxicity.
 - (b) Proper use, handling, and disposal of pesticides.
 - (c) Least toxic methods of pest prevention and control, including IPM.
 - (d) Reduction of pesticide use.
- (3) The LACFCD shall require appropriate training of contractor employees in targeted positions as described above.

d. Illicit Connections and Illicit Discharge Elimination Program

i. General

- (1) The LACFCD shall continue to implement an Illicit Connection and Illicit Discharge (IC/ID) Program to detect, investigate, and eliminate IC/IDs to its MS4. The IC/ID Program must be implemented in accordance with the requirements and performance measures specified in the following subsections.
- (2) As stated in Part VI.A.2 of this Order, each Permittee must have adequate legal authority to prohibit IC/IDs to the MS4 and enable enforcement capabilities to eliminate the source of IC/IDs.
- (3) The LACFCD's IC/ID Program shall consist of at least the following major program components:
 - (a) An up-to-date map of LACFCD's MS4
 - (b) Procedures for conducting source investigations for IC/IDs
 - (c) Procedures for eliminating the source of IC/IDs
 - (d) Procedures for public reporting of illicit discharges
 - (e) Spill response plan
 - (f) IC/IDs education and training for LACFCD staff

ii. MS4 Mapping

- (1) The LACFCD shall maintain an up-to-date and accurate electronic map of its MS4. If possible, the map should be maintained within a GIS. The map must show the following, at a minimum:
 - (a) Within one year of Permit adoption, the location of outfalls owned and maintained by the LACFCD. Each outfall shall be given an alphanumeric identifier, which must be noted on the map. Each mapped outfall shall be located using a geographic positioning system (GPS). Photographs of the major outfalls shall be taken to provide baseline information to track operation and maintenance needs over time.
 - (b) The location and length of open channels and underground storm drain pipes with a diameter of 36 inches or greater that are owned and operated by the LACFCD.
 - (c) The location and name of all waterbodies receiving discharges from those MS4 major outfalls identified in (a).
 - (d) All LACFCD's dry weather diversions installed within the MS4 to direct flows from the MS4 to the sanitary sewer system, including the owner and operator of each diversion.
 - (e) By the end of the Permit term, map all known permitted and documented connections to its MS4 system.
- (2) The MS4 map shall be updated as necessary.

iii. Illicit Discharge Source Investigation and Elimination

- (1) The LACFCD shall develop written procedures for conducting investigations to prioritize and identify the source of all illicit discharges to its MS4, including procedures to eliminate the discharge once the source is located.
- (2) At a minimum, the LACFCD shall initiate²³ an investigation(s) to identify and locate the source within one business day of becoming aware of the illicit discharge.
- (3) When conducting investigations, the LACFCD shall comply with the following:
 - (a) Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
 - (b) The LACFCD shall track all investigations to document, at a minimum, the date(s) the illicit discharge was observed; the results

²³ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to "initiate" the investigation within one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, occur within two business days of becoming aware of the illicit discharge.

- of the investigation; any follow-up of the investigation; and the date the investigation was closed.
- (c) The LACFCD shall prioritize and investigate the source of all observed illicit discharges to its MS4.
 - (d) If the source of the illicit discharge is found to be a discharge authorized under an NPDES permit, the LACFCD shall document the source and report to the Regional Water Board within 30 days of determination. No further action is required.
 - (e) If the source of the illicit discharge has been determined to originate from within the jurisdiction of other Permittee(s) with land use authority over the suspected responsible party/parties, the LACFCD shall immediately alert the appropriate Permittee(s) of the problem for further action by the Permittee(s).
- (4) When taking corrective action to eliminate illicit discharges, the LACFCD shall comply with the following:
- (a) If the source of the illicit discharge has been determined or suspected by the LACFCD to originate within an upstream jurisdiction(s), the LACFCD shall immediately notify the upstream jurisdiction(s), and notify the Regional Water Board within 30 days of such determination and provide all the information collected and efforts taken.
 - (b) Once the Permittee with land use authority over the suspected responsible party/parties has been alerted, the LACFCD may continue to work in cooperation with the Permittee(s) to notify the responsible party/parties of the problem, and require the responsible party/parties to immediately initiate necessary corrective actions to eliminate the illicit discharge. Upon being notified that the discharge has been eliminated, the LACFCD may, in conjunction with the Permittee(s) conduct a follow-up investigation to verify that the discharge has been eliminated and cleaned up to the satisfaction of the LACFCD. The LACFCD shall document its follow-up investigation. The LACFCD may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection and investigation activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy.
 - (c) If the source of the illicit discharge cannot be traced to a suspected responsible party, the LACFCD, in conjunction with other affected Permittees, shall continue implementing the illicit discharge/spill response plan.

- (5) In the event the LACFCD and/or other Permittees are unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, including the inability to find the responsible party/parties, or other circumstances prevent the full elimination of an ongoing illicit discharge, the LACFCD and/or other Permittees shall notify the Regional Water Board within 30 days of such determination and provide available information to the Regional Water Board.

iv. Identification and Response to Illicit Connections

- (1) Investigation

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

- (2) Elimination

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

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

- (3) Documentation

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

v. Public Reporting of Non-Stormwater Discharges and Spills

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

vi. Illicit Discharge and Spill Response Plan

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

vii. Illicit Connection and Illicit Discharge Education and Training

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

5. Public Information and Participation Program**a. General**

- i. Each Permittee shall implement a Public Information and Participation Program (PIPP) that includes the requirements listed in this Part VI.D.5. Each Permittee shall be responsible for developing and implementing the PIPP and implementing specific PIPP requirements. The objectives of the PIPP are as follows:
 - (1) To measurably increase the knowledge of the target audiences about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts.
 - (2) To measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging the implementation of appropriate alternatives.

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

b. PIPP Implementation

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

c. Public Participation

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

d. Residential Outreach Program

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

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

6. Industrial/Commercial Facilities Program

a. General

- i. Each Permittee shall implement an Industrial / Commercial Facilities Program that meets the requirements of this Part VI.D.6. The Industrial / Commercial

Facilities Program shall be designed to prevent illicit discharges into the MS4 and receiving waters, reduce industrial / commercial discharges of storm water to the maximum extent practicable, and prevent industrial / commercial discharges from the MS4 from causing or contributing to a violation of receiving water limitations. At a minimum, the Industrial / Commercial Facilities Program shall be implemented in accordance with the requirements listed in this Part VI.D.6, or as approved in a Watershed Management Program per Part VI.C. Minimum program components shall include the following components:

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

b. Track Critical Industrial / Commercial Sources

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

- (1) Commercial Facilities
 - (a) Restaurants
 - (b) Automotive service facilities (including those located at automotive dealerships)
 - (c) Retail Gasoline Outlets
 - (d) Nurseries and Nursery Centers (Merchant Wholesalers, Nondurable Goods, and Retail Trade)
- (2) USEPA "Phase I" Facilities [as specified in 40 CFR §122.26(b)(14)(i)-(xi)]
- (3) Other federally-mandated facilities [as specified in 40 CFR §122.26(d)(2)(iv)(C)]
 - (a) Municipal landfills
 - (b) Hazardous waste treatment, disposal, and recovery facilities
 - (c) Industrial facilities subject to section 313 "Toxic Release Inventory" reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) [42 U.S.C. § 11023]
- (4) All other commercial or industrial facilities that the Permittee determines may contribute a substantial pollutant load to the MS4.

- ii. Each Permittee shall include the following minimum fields of information for each critical source industrial and commercial facility identified in its watershed-based inventory or database:
 - (1) Name of facility
 - (2) Name of owner/ operator and contact information
 - (3) Address of facility (physical and mailing)
 - (4) North American Industry Classification System (NAICS) code
 - (5) Standard Industrial Classification (SIC) code
 - (6) A narrative description of the activities performed and/or principal products produced
 - (7) Status of exposure of materials to storm water
 - (8) Name of receiving water
 - (9) Identification of whether the facility is tributary to a CWA § 303(d) listed water body segment or water body segment subject to a TMDL, where the facility generates pollutants for which the water body segment is impaired.
 - (10) Ability to denote if the facility is known to maintain coverage under the State Water Board's General NPDES Permit for the Discharge of Stormwater Associated with Industrial Activities (Industrial General Permit) or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.
 - (11) Ability to denote if the facility has filed a No Exposure Certification with the State Water Board.
- iii. Each Permittee shall update its inventory of critical sources at least annually. The update shall be accomplished through collection of new information obtained through field activities or through other readily available inter- and intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer connection permits, and similar information).

c. Educate Industrial / Commercial Sources

- i. At least once during the five-year period of this Order, each Permittee shall notify the owner/operator of each of its inventoried commercial and industrial sites identified in Part VI.D.6.b of the BMP requirements applicable to the site/source.
- ii. Business Assistance Program
 - (1) Each Permittee shall implement a Business Assistance Program to provide technical information to businesses to facilitate their efforts to reduce the discharge of pollutants in storm water. Assistance shall be targeted to select business sectors or small businesses upon a determination that their activities may be contributing substantial pollutant

loads to the MS4 or receiving water. Assistance may include technical guidance and provision of educational materials. The Program may include:

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

d. Inspect Critical Commercial Sources

i. Frequency of Mandatory Commercial Facility Inspections

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

ii. Scope of Mandatory Commercial Facility Inspections

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

e. Inspect Critical Industrial Sources

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

i. Frequency of Mandatory Industrial Facility Compliance Inspections

(1) Minimum Inspection Frequency

Each Permittee shall perform an initial mandatory compliance inspection at all industrial facilities identified in Part VI.D.6.b no later than 2 years after the effective date of this Order. After the initial inspection, all

facilities that have not filed a No Exposure Certification with the State Water Board are subject to a second mandatory compliance inspection. A minimum interval of 6 months between the first and the second mandatory compliance inspection is required. A facility need not be inspected more than twice during the term of the Order unless subject to an enforcement action as specified in Part VI.D.6.h below.

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

Each Permittee shall review the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) database²⁴ at defined intervals to determine if an industrial facility has recently been inspected by the Regional Water Board. The first interval shall occur approximately 2 years after the effective date of the Order. The Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period. The second interval shall occur approximately 4 years after the effective date of the Order. Likewise, the Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period.

(3) No Exposure Verification

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

(4) Exclusion Based on Watershed Management Program

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

ii. Scope of Mandatory Industrial Facility Inspections

Each Permittee shall confirm that each industrial facility:

- (1) Has a current Waste Discharge Identification (WDID) number for coverage under the Industrial General Permit, and that a Storm Water Pollution Prevention Plan (SWPPP) is available on-site; *or*
- (2) Has applied for, and has received a current No Exposure Certification for facilities subject to this requirement;
- (3) Is effectively implementing BMPs in compliance with municipal ordinances. Facilities must implement the source control BMPs identified

²⁴ SMARTS is accessible at <https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>

in Table 10, unless the pollutant generating activity does not occur. The Permittees shall require implementation of additional BMPs where storm water from the MS4 discharges to a water body subject to TMDL Provisions in Part VI.E, or a CWA § 303(d) listed impaired water body. Likewise, if the specified BMPs are not adequately protective of water quality standards, a Permittee may require additional site-specific controls. For critical sources that discharge to MS4s that discharge to SEAs, each Permittee shall require operators to implement additional pollutant-specific controls to reduce pollutants in storm water runoff that are causing or contributing to exceedances of water quality standards.

- (4) Applicable industrial facilities identified as not having either a current WDID or No Exposure Certification shall be notified that they must obtain coverage under the Industrial General Permit and shall be referred to the Regional Water Board per the Progressive Enforcement Policy procedures identified in Part VI.D.2.

f. Source Control BMPs for Commercial and Industrial Facilities

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

Table 10. Source Control BMPs at Commercial and Industrial Facilities

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

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

g. Significant Ecological Areas (SEAs)

See VI.D.6.e.ii.3.

h. Progressive Enforcement

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

7. Planning and Land Development Program

a. Purpose

- i. Each Permittee shall implement a Planning and Land Development Program pursuant to Part VI.D.7.b for all New Development and Redevelopment projects subject to this Order to:
 - (1) Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas.
 - (2) Minimize the adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water

bodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21000 et seq.).

- (3) Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing Low Impact Development (LID) design principles to mimic predevelopment hydrology through infiltration, evapotranspiration and rainfall harvest and use.
- (4) Maintain existing riparian buffers and enhance riparian buffers when possible.
- (5) Minimize pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), LID Strategies, and Treatment Control BMPs.
- (6) Properly select, design and maintain LID and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce changes to pre-development hydrology, assure long-term function, and avoid the breeding of vectors²⁵.
- (7) Prioritize the selection of BMPs to remove storm water pollutants, reduce storm water runoff volume, and beneficially use storm water to support an integrated approach to protecting water quality and managing water resources in the following order of preference:
 - (a) On-site infiltration, bioretention and/or rainfall harvest and use.
 - (b) On-site biofiltration, off-site ground water replenishment, and/or off-site retrofit.

b. Applicability

i. New Development Projects

- (1) Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:
 - (a) All development projects equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area
 - (b) Industrial parks 10,000 square feet or more of surface area
 - (c) Commercial malls 10,000 square feet or more surface area
 - (d) Retail gasoline outlets 5,000 square feet or more of surface area
 - (e) Restaurants (SIC 5812) 5,000 square feet or more of surface area

²⁵ Treatment BMPs when designed to drain within 96 hours of the end of rainfall minimize the potential for the breeding of vectors. See California Department of Public Health *Best Management Practices for Mosquito Control in California* (2012) at <http://www.westnile.ca.gov/resources.php>

- (f) Parking lots 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces
- (g) Street and road construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets²⁶ (December 2008 EPA-833-F-08-009) to the maximum extent practicable. Street and road construction applies to standalone streets, roads, highways, and freeway projects, and also applies to streets within larger projects.
- (h) Automotive service facilities (SIC 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) 5,000 square feet or more of surface area
- (i) Redevelopment projects in subject categories that meet Redevelopment thresholds identified in Part VI.D.6.b.ii (Redevelopment Projects) below
- (j) Projects located in or directly adjacent to, or discharging directly to a Significant Ecological Area (SEA), where the development will:
 - (i) Discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and
 - (ii) Create 2,500 square feet or more of impervious surface area
- (k) Single-family hillside homes. To the extent that a Permittee may lawfully impose conditions, mitigation measures or other requirements on the development or construction of a single-family home in a hillside area as defined in the applicable Permittee's Code and Ordinances, each Permittee shall require that during the construction of a single-family hillside home, the following measures are implemented:
 - (i) Conserve natural areas
 - (ii) Protect slopes and channels
 - (iii) Provide storm drain system stenciling and signage
 - (iv) Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability
 - (v) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

ii. Redevelopment Projects

- (1) Redevelopment projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:
 - (a) Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area

²⁶ <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>

on an already developed site on development categories identified in Part VI.D.6.c. (New Development/Redevelopment Performance Criteria).

- (b) Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, the entire project must be mitigated.
- (c) Where Redevelopment results in an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, only the alteration must be mitigated, and not the entire development.
 - (i) Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.
 - (ii) Existing single-family dwelling and accessory structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.
- (d) In this section, Existing Development or Redevelopment projects shall mean all discretionary permit projects or project phases that have not been deemed complete for processing, or discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals within 90 days of adoption of the Order. Projects that have been deemed complete within 90 days of adoption of the Order are not subject to the requirements Section 7.c. For Permittee's projects the effective date shall be the date the governing body or their designee approves initiation of the project design.
- (e) Specifically, the Newhall Ranch Project Phases I and II (a.k.a. the Landmark and Mission Village projects) are deemed to be an existing development that will at a minimum, be designed to comply with the Specific LID Performance Standards attached to the Waste Discharge Requirements (Order No. R4-2012-0139). All subsequent phases of the Newhall Ranch Project constructed during the term of this Order shall be subject to the requirements of this Order.

c. New Development/ Redevelopment Project Performance Criteria

i. Integrated Water Quality/Flow Reduction/Resources Management Criteria

- (1) Each Permittee shall require all New Development and Redevelopment projects (referred to hereinafter as “new projects”) identified in Part VI.D.7.b to control pollutants, pollutant loads, and runoff volume emanating from the project site by: (1) minimizing the impervious surface area and (2) controlling runoff from impervious surfaces through infiltration, bioretention and/or rainfall harvest and use.
- (2) Except as provided in Part VI.D.7.c.ii. (Technical Infeasibility or Opportunity for Regional Ground Water Replenishment), Part VI.D.7.d.i (Local Ordinance Equivalence), or Part VI.D.7.c.v (Hydromodification), below, each Permittee shall require the project to retain on-site the Stormwater Quality Design Volume (SWQDv) defined as the runoff from:
 - (a) The 0.75-inch, 24-hour rain event or
 - (b) The 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, *whichever is greater*.
- (3) Bioretention and biofiltration systems shall meet the design specifications provided in Attachment H to this Order unless otherwise approved by the Regional Water Board Executive Officer.
- (4) When evaluating the potential for on-site retention, each Permittee shall consider the maximum potential for evapotranspiration from green roofs and rainfall harvest and use.

ii. Alternative Compliance for Technical Infeasibility or Opportunity for Regional Ground Water Replenishment

- (1) In instances of technical infeasibility or where a project has been determined to provide an opportunity to replenish regional ground water supplies at an offsite location, each Permittee may allow projects to comply with this Order through the alternative compliance measures as described in Part VI.D.7.c.iii.
- (2) To demonstrate technical infeasibility, the project applicant must demonstrate that the project cannot reliably retain 100 percent of the SWQDv on-site, even with the maximum application of green roofs and rainwater harvest and use, and that compliance with the applicable post-construction requirements would be technically infeasible by submitting a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect. Technical infeasibility may result from conditions including the following:
 - (a) The infiltration rate of saturated in-situ soils is less than 0.3 inch per hour and it is not technically feasible to amend the in-situ soils to attain an infiltration rate necessary to achieve reliable performance of infiltration or bioretention BMPs in retaining the SWQDv on-site.

- (b) Locations where seasonal high ground water is within 5 to 10 feet of the surface,
 - (c) Locations within 100 feet of a ground water well used for drinking water,
 - (d) Brownfield development sites where infiltration poses a risk of causing pollutant mobilization,
 - (e) Other locations where pollutant mobilization is a documented concern²⁷,
 - (f) Locations with potential geotechnical hazards, or
 - (g) Smart growth and infill or redevelopment locations where the density and/ or nature of the project would create significant difficulty for compliance with the on-site volume retention requirement.
- (3) To utilize alternative compliance measures to replenish ground water at an offsite location, the project applicant shall demonstrate (i) why it is not advantageous to replenish ground water at the project site, (ii) that ground water can be used for beneficial purposes at the offsite location, and (iii) that the alternative measures shall also provide equal or greater water quality benefits to the receiving surface water than the Water Quality/Flow Reduction/Resource Management Criteria in Part VI.7.D.c.i.

iii. Alternative Compliance Measures

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

(1) On-site Biofiltration

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

Equation 1:

$$Bv = 1.5 * [SWQDv - Rv]$$

Where:

Bv = biofiltration volume

²⁷ Pollutant mobilization is considered a documented concern at or near properties that are contaminated or store hazardous substances underground.

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

Rv = volume reliably retained on-site

(b) Conditions for On-site Biofiltration

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

(2) Offsite Infiltration

- (a) Use infiltration or bioretention BMPs to intercept a volume of storm water runoff equal to the SWQDv, less the volume of storm water runoff reliably retained on-site, at an approved offsite project, and
- (b) Provide pollutant reduction (treatment) of the storm water runoff discharged from the project site in accordance with the Water Quality Mitigation Criteria provided in Part VI.D.7.c.iv.
- (c) The required offsite mitigation volume shall be calculated by Equation 2 below and equal to:

Equation 2:

$$Mv = 1.0 * [SWQDv - Rv]$$

Where:

Mv = mitigation volume

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

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

(3) Ground Water Replenishment Projects

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

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

Equation 2:

$$Mv = 1.0 \cdot [SWQDv - Rv]$$

Where:

Mv = mitigation volume

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

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

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

(4) Offsite Project - Retrofit Existing Development

Use infiltration, bioretention, rainfall harvest and use and/or biofiltration BMPs to retrofit an existing development, with similar land uses as the new development or land uses associated with comparable or higher storm water runoff event mean concentrations (EMCs) than the new development.

Comparison of EMCs for different land uses shall be based on published data from studies performed in southern California. The retrofit plan shall be designed and constructed to:

- (a) Intercept a volume of storm water runoff equal to the mitigation volume (M_v) as described above in Equation 2, except biofiltration BMPs shall be designed to meet the biofiltration volume as described in Equation 1 and
- (b) Provide pollutant reduction (treatment) of the storm water runoff from the project site as described in the Water Quality Mitigation Criteria provided in Part VI.D.7.c.iv.

(5) Conditions for Offsite Projects

- (a) Project applicants seeking to utilize these alternative compliance provisions may propose other offsite projects, which the Permittees may approve if they meet the requirements of this subpart.
- (b) Location of offsite projects. Offsite projects shall be located in the same sub-watershed (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) as the new development or redevelopment project. Each Permittee may consider locations outside of the HUC-12 but within the HUC-10 subwatershed area if there are no opportunities within the HUC-12 subwatershed or if greater pollutant reductions and/or ground water replenishment can be achieved at a location within the expanded HUC-10 subwatershed. The use of a mitigation, ground water replenishment, or retrofit project outside of the HUC-12 subwatershed is subject to the approval of the Executive Officer of the Regional Water Board.
- (c) Project applicant must demonstrate that equal benefits to ground water recharge cannot be met on the project site.
- (d) Each Permittee shall develop a prioritized list of offsite mitigation, ground water replenishment and/or retrofit projects, and when feasible, the mitigation must be directed to the highest priority project within the same HUC-12 or if approved by the Regional Water Board Executive Officer, the HUC-10 drainage area, as the new development project.
- (e) Infiltration/bioretenion shall be the preferred LID BMP for offsite mitigation or ground water replenishment projects. Offsite retrofit projects may include green streets, parking lot retrofits, green roofs, and rainfall harvest and use. Biofiltration BMPs may be considered for retrofit projects when infiltration, bioretention or rainfall harvest and use is technically infeasible.
- (f) Each Permittee shall develop a schedule for the completion of offsite projects, including milestone dates to identify, fund, design, and construct the projects. Offsite projects shall be completed as soon as possible, and at the latest, within 4 years of the certificate of occupancy for the first project that contributed funds toward the

construction of the offsite project, unless a longer period is otherwise authorized by the Executive Officer of the Regional Water Board. For public offsite projects, each Permittee must provide in their annual reports a summary of total offsite project funds raised to date and a description (including location, general design concept, volume of water expected to be retained, and total estimated budget) of all pending public offsite projects. Funding sufficient to address the offsite volume must be transferred to the Permittee (for public offsite mitigation projects) or to an escrow account (for private offsite mitigation projects) within one year of the initiation of construction.

- (g) Offsite projects must be approved by the Permittee and may be subject to approval by the Regional Water Board Executive Officer, if a third-party petitions the Executive Officer to review the project. Offsite projects will be publicly noticed on the Regional Water Board's website for 30 days prior to approval.
- (h) The project applicant must perform the offsite projects as approved by either the Permittee or the Regional Water Board Executive Officer or provide sufficient funding for public or private offsite projects to achieve the equivalent mitigation storm water volume.

(6) Regional Storm Water Mitigation Program

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

- (a) Retains the runoff from the 85th percentile, 24-hour rain event or the 0.75 inch, 24-hour rain event, whichever is greater;
- (b) Results in improved storm water quality;
- (c) Protects stream habitat;
- (d) Promotes cooperative problem solving by diverse interests;
- (e) Is fiscally sustainable and has secure funding; and
- (f) Is completed in five years including the construction and start-up of treatment facilities.
- (g) Nothing in this provision shall be construed as to delay the implementation of requirements for new and redevelopment, as approved in this Order.

(7) Water Quality Mitigation Criteria

- (a) Each Permittee shall require all New Development and Redevelopment projects that have been approved for offsite mitigation or ground water replenishment projects as defined in Part VI.D.7.c.ii-iii to also provide treatment of storm water runoff from the project site. Each Permittee shall require these projects to design and implement post-construction storm water BMPs and control measures to reduce pollutant loading as necessary to:
 - (i) Meet the pollutant specific benchmarks listed in Table 11 at the treatment systems outlet or prior to the discharge to the MS4, and
 - (ii) Ensure that the discharge does not cause or contribute to an exceedance of water quality standards at the Permittee’s downstream MS4 outfall.
- (b) Each Permittee may allow the project proponent to install flow-through modular treatment systems including sand filters, or other proprietary BMP treatment systems with a demonstrated efficiency at least equivalent to a sand filter. The sizing of the flow through treatment device shall be based on a rainfall intensity of:
 - (i) 0.2 inches per hour, or
 - (ii) The one year, one-hour rainfall intensity as determined from the most recent Los Angeles County isohyetal map, *whichever is greater*.

Table 11. Benchmarks Applicable to New Development Treatment BMPs²⁸

Conventional Pollutants

Pollutant	Suspended Solids mg/L	Total P mg/L	Total N mg/L		TKN mg/L	
Effluent Concentration	14	0.13	1.28		1.09	

Metals

Pollutant	Total Cd µg/L	Total Cu µg/L	Total Cr µg/L	Total Pb µg/L	Total Zn µg/L
Effluent Concentration	0.3	6	2.8	2.5	23

²⁸ The treatment control BMP performance benchmarks were developed from the median effluent water quality values of the six highest performing BMPs, per pollutant, in the storm water BMP database (<http://www.bmpdatabase.org/>, last visited September 25, 2012).

- (c) In addition to the requirements for controlling pollutant discharges as described in Part VI.D.7.c.iii. and the treatment benchmarks described above, each Permittee shall ensure that the new development or redevelopment will not cause or contribute to an exceedance of applicable water quality-based effluent limitations established in Part VI.E pursuant to Total Maximum Daily Loads (TMDLs).

iv. Hydromodification (Flow/ Volume/ Duration) Control Criteria

Each Permittee shall require all New Development and Redevelopment projects located within natural drainage systems as described in Part VI.D.7.c.iv.(1)(a)(iii) to implement hydrologic control measures, to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems. The purpose of the hydrologic controls is to minimize changes in post-development hydrologic storm water runoff discharge rates, velocities, and duration. This shall be achieved by maintaining the project's pre-project storm water runoff flow rates and durations.

(1) Description

- (a) Hydromodification control in natural drainage systems shall be achieved by maintaining the Erosion Potential (Ep) in streams at a value of 1, unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in natural drainage system tributaries (see Attachment J - Determination of Erosion Potential).
- (ii) Hydromodification control may include one, or a combination of on-site, regional or sub-regional hydromodification control BMPs, LID strategies, or stream and riparian buffer restoration measures. Any in-stream restoration measure shall not adversely affect the beneficial uses of the natural drainage systems.
- (iii) Natural drainage systems that are subject to the hydromodification assessments and controls as described in this Part of the Order, include all drainages that have not been improved (e.g., channelized or armored with concrete, shotcrete, or rip-rap) or drainage systems that are tributary to a natural drainage system, except as provided in Part VI.D.7c.iv.(1)(b)--Exemptions to Hydromodification Controls [see below]. The clearing or dredging of a natural drainage system does not constitute an "improvement."
- (iv) Until the State Water Board or the Regional Water Board adopts a final Hydromodification Policy or criteria, Permittees shall implement the Hydromodification Control Criteria described in Part VI.D.7.c.iv.(1)(c) to control the potential adverse impacts of changes in hydrology that may result from new development and

redevelopment projects located within natural drainage systems as described in Part VI.D.7.c.iv.(1)(a)(iii).

- (b) Exemptions to Hydromodification Controls. Permittees may exempt the following New Development and Redevelopment projects from implementation of hydromodification controls where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse hydromodification effects to beneficial uses of Natural Drainage Systems are unlikely:
- (i) Projects that are replacement, maintenance or repair of a Permittee's existing flood control facility, storm drain, or transportation network.
 - (ii) Redevelopment Projects in the Urban Core that do not increase the effective impervious area or decrease the infiltration capacity of pervious areas compared to the pre-project conditions.
 - (iii) Projects that have any increased discharge directly or via a storm drain to a sump, lake, area under tidal influence, into a waterway that has a 100-year peak flow (Q100) of 25,000 cfs or more, or other receiving water that is not susceptible to hydromodification impacts.
 - (iv) Projects that discharge directly or via a storm drain into concrete or otherwise engineered (not natural) channels (e.g., channelized or armored with rip rap, shotcrete, etc.), which, in turn, discharge into receiving water that is not susceptible to hydromodification impacts (as in Parts VI.D.7.c.iv.(1)(b)(i)-(iii) above).
 - (v) LID BMPs implemented on single family homes are sufficient to comply with Hydromodification criteria.
- (c) Hydromodification Control Criteria. The Hydromodification Control Criteria to protect natural drainage systems are as follows:
- (i) Except as provided for in Part VI.D.7.c.iv.(1)(b), projects disturbing an area greater than 1 acre but less than 50 acres within natural drainage systems will be presumed to meet pre-development hydrology if one of the following demonstrations is made:
 1. The project is designed to retain on-site, through infiltration, evapotranspiration, and/or harvest and use, the storm water volume from the runoff of the 95th percentile, 24-hour storm, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour rainfall event. This condition may be substantiated by simple screening models, including those described in *Hydromodification Effects on Flow Peaks*

and Durations in Southern California Urbanizing Watersheds (Hawley et al., 2011) or other models acceptable to the Executive Officer of the Regional Water Board, or

3. The Erosion Potential (E_p) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J. Alternatively, Permittees can opt to use other work equations to calculate Erosion Potential with Executive Officer approval.
- (ii) Projects disturbing 50 acres or more within natural drainage systems will be presumed to meet pre-development hydrology based on the successful demonstration of one of the following conditions:
1. The site infiltrates on-site at least the runoff from a 2-year, 24-hour storm event, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition does not exceed the pre-development condition for the 2-year, 24-hour rainfall events. These conditions must be substantiated by hydrologic modeling acceptable to the Regional Water Board Executive Officer, or
 3. The Erosion Potential (E_p) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment J.

(c) Alternative Hydromodification Criteria

- (i) Permittees may satisfy the requirement for Hydromodification Controls by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than 1 acre within natural drainage systems.
- (ii) Each Permittee may alternatively develop and implement watershed specific Hydromodification Control Plans (HCPs). Such plans shall be developed no later than one year after the effective date of this Order.
- (iii) The HCP shall identify:
 1. Stream classifications
 2. Flow rate and duration control methods
 3. Sub-watershed mitigation strategies
 4. Stream and/or riparian buffer restoration measures, which will maintain the stream and tributary Erosion Potential at 1 unless

an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in natural drainage system tributaries.

(iv) The HCP shall contain the following elements:

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

v. Watershed Equivalence.

Regardless of the methods through which Permittees allow project applicants to implement alternative compliance measures, the subwatershed-wide (defined as draining to the same HUC-12 hydrologic area in the Basin Plan) result of all development must be at least the same level of water quality protection as would have been achieved if all projects utilizing these alternative compliance provisions had complied with Part VI.D.7.c.i (Integrated Water Quality/Flow Reduction/Resource Management Criteria).

vi. Annual Report

Each Permittee shall provide in their annual report to the Regional Water Board a list of mitigation project descriptions and estimated pollutant and flow reduction analyses (compiled from design specifications submitted by project

applicants and approved by the Permittee(s)). Within 4 years of Order adoption, Permittees must submit in their Annual Report, a comparison of the expected aggregate results of alternative compliance projects to the results that would otherwise have been achieved by retaining on site the SWQDv.

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

A Permittee that has adopted a local LID ordinance prior to the adoption of this Order, and which includes a retention requirement numerically equal to the 0.75-inch, 24-hour rain event or the 85th percentile, 24-hour rain event, whichever is greater, may submit documentation to the Regional Water Board that the alternative requirements in the local ordinance will provide equal or greater reduction in storm water discharge pollutant loading and volume as would have been obtained through strict conformance with Part VI.D.7.c.i. (Integrated Water Quality/Flow Reduction Resources Management Criteria) or Part VI.D.7.c.ii. (Alternative Compliance Measures for Technical Infeasibility or Opportunity for Regional Ground water Replenishment) of this Order and, if applicable, Part VI.D.7.c.iv. (Hydromodification (Flow/Volume Duration) Control Criteria).

- (1) Documentation shall be submitted within 180 days after the effective date of this Order.
- (2) The Regional Water Board shall provide public notice of the proposed equivalency determination and a minimum 30-day period for public comment. After review and consideration of public comments, the Regional Water Board Executive Officer will determine whether implementation of the local ordinance provides equivalent pollutant control to the applicable provisions of this Order. Local ordinances that do not strictly conform to the provisions of this Order must be approved by the Regional Water Board Executive Officer as being “equivalent” in effect to the applicable provisions of this Order in order to substitute for the requirements in Parts VI.D.7.c.i and, where applicable, VI.D.7.c.iv.
- (3) Where the Regional Water Board Executive Officer determines that a Permittee’s local LID ordinance does not provide equivalent pollutant control, the Permittee shall either
 - (a) Require conformance with Parts VI.D.7.c.i and, where applicable, VI.D.7.c.iv, or
 - (b) Update its local ordinance to conform to the requirements herein within two years of the effective date of this Order.

ii. Project Coordination

- (1) Each Permittee shall facilitate a process for effective approval of post-construction storm water control measures. The process shall include:
 - (a) Detailed LID site design and BMP review including BMP sizing calculations, BMP pollutant removal performance, and municipal approval; and

- (b) An established structure for communication and delineated authority between and among municipal departments that have jurisdiction over project review, plan approval, and project construction through memoranda of understanding or an equivalent agreement.

iii. Maintenance Agreement and Transfer

- (1) Prior to issuing approval for final occupancy, each Permittee shall require that all new development and redevelopment projects subject to post-construction BMP requirements, with the exception of simple LID BMPs implemented on single family residences, provide an operation and maintenance plan, monitoring plan, where required, and verification of ongoing maintenance provisions for LID practices, Treatment Control BMPs, and Hydromodification Control BMPs including but not limited to: final map conditions, legal agreements, covenants, conditions or restrictions, CEQA mitigation requirements, conditional use permits, and/or other legally binding maintenance agreements. Permittees shall require maintenance records be kept on site for treatment BMPs implemented on single family residences.
 - (a) Verification at a minimum shall include the developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either:
 - (i) A signed statement from the public entity assuming responsibility for BMP maintenance; or
 - (ii) Written conditions in the sales or lease agreement, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection at least once a year; or
 - (iii) Written text in project covenants, conditions, and restrictions (CCRs) for residential properties assigning BMP maintenance responsibilities to the Home Owners Association; or
 - (iv) Any other legally enforceable agreement or mechanism that assigns responsibility for the maintenance of BMPs.
 - (b) Each Permittee shall require all development projects subject to post-construction BMP requirements to provide a plan for the operation and maintenance of all structural and treatment controls. The plan shall be submitted for examination of relevance to keeping the BMPs in proper working order. Where BMPs are transferred to Permittee for ownership and maintenance, the plan shall also include all relevant costs for upkeep of BMPs in the transfer. Operation and Maintenance plans for private BMPs shall be kept on-site for periodic review by Permittee inspectors.

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

- (1) Each Permittee shall implement a tracking system and an inspection and enforcement program for new development and redevelopment post-construction storm water no later than 60 days after Order adoption date.
 - (a) Implement a GIS or other electronic system for tracking projects that have been conditioned for post-construction BMPs. The electronic system, at a minimum, should contain the following information:
 - (i) Municipal Project ID
 - (ii) State WDID No.
 - (iii) Project Acreage
 - (iv) BMP Type and Description
 - (v) BMP Location (coordinates)
 - (vi) Date of Acceptance
 - (vii) Date of Maintenance Agreement
 - (viii) Maintenance Records
 - (ix) Inspection Date and Summary
 - (x) Corrective Action
 - (xi) Date Certificate of Occupancy Issued
 - (xii) Replacement or Repair Date
 - (b) Inspect all development sites upon completion of construction and prior to the issuance of occupancy certificates to ensure proper installation of LID measures, structural BMPs, treatment control BMPs and hydromodification control BMPs. The inspection may be combined with other inspections provided it is conducted by trained personnel.
 - (c) Verify proper maintenance and operation of post-construction BMPs previously approved for new development and redevelopment and operated by the Permittee. The post-construction BMP maintenance inspection program shall incorporate the following elements:
 - (i) The development of a Post-construction BMP Maintenance Inspection checklist
 - (ii) Inspection at least once every 2 years after project completion, of post-construction BMPs to assess operation conditions with particular attention to criteria and procedures for post-construction

treatment control and hydromodification control BMP repair, replacement, or re-vegetation.

(d) For post-construction BMPs operated and maintained by parties other than the Permittee, the Permittee shall require the other parties to document proper maintenance and operations.

(e) Undertake enforcement action per the established Progressive Enforcement Policy as appropriate based on the results of the inspection. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.

8. Development Construction Program

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

c. Applicability

The provisions contained in Part VI.D.8.d below apply exclusively to construction sites less than 1 acre. Provisions contained in Part VI.D.8.e – j, apply exclusively to construction sites 1 acre or greater. The requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).

d. Requirements for Construction Sites Less than One Acre

- i.** For construction sites less than 1 acre, each Permittee shall:
- (1) Through the use of the Permittee's erosion and sediment control ordinance or and/or building permit, require the implementation of an effective combination of erosion and sediment control BMPs from Table 12 to prevent erosion and sediment loss, and the discharge of construction wastes.

Table 12. Applicable Set of BMPs for All Construction Sites

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

- (2) Possess the ability to identify all construction sites with soil disturbing activities that require a permit, regardless of size, and shall be able to provide a list of permitted sites upon request of the Regional Water Board. Permittees may use existing permit databases or other tracking systems to comply with these requirements.
- (3) Inspect construction sites on as needed based on the evaluation of the factors that are a threat to water quality. In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.
- (4) Implement the Permittee's Progressive Enforcement Policy to ensure that construction sites are brought into compliance with the erosion and sediment control ordinance within a reasonable time period. See Part VI.D.2 for requirements for the development and implementation of a Progressive Enforcement Policy.
- e. Each Permittee shall require operators of public and private construction sites within its jurisdiction to select, install, implement, and maintain BMPs that comply with its erosion and sediment control ordinance.
- f. The requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).
- g. Construction Site Inventory / Electronic Tracking System**

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

h. Construction Plan Review and Approval Procedures

- i. Each Permittee shall develop procedures to review and approve relevant construction plan documents.
- ii. The review procedures shall be developed and implemented such that the following minimum requirements are met:
 - (1) Prior to issuing a grading or building permit, each Permittee shall require each operator of a construction activity within its jurisdiction to prepare and submit an ESCP prior to the disturbance of land for the Permittee's review and written approval. The construction site operator shall be prohibited from commencing construction activity prior to receipt of written approval by the Permittee. Each Permittee shall not approve any ESCP unless it contains appropriate site-specific construction site BMPs that

- meet the minimum requirements of a Permittee's erosion and sediment control ordinance.
- (2) ESCPs must include the elements of a Storm Water Pollution Prevention Plan (SWPPP). SWPPPs prepared in accordance with the requirements of the Construction General Permit can be accepted as ESCPs.
 - (3) At a minimum, the ESCP must address the following elements:
 - (a) Methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area.
 - (b) Methods used to protect native vegetation and trees.
 - (c) Sediment/Erosion Control.
 - (d) Controls to prevent tracking on and off the site.
 - (e) Non-storm water controls (e.g., vehicle washing, dewatering, etc.).
 - (f) Materials Management (delivery and storage).
 - (g) Spill Prevention and Control.
 - (h) Waste Management (e.g., concrete washout/waste management; sanitary waste management).
 - (i) Identification of site Risk Level as identified per the requirements in Appendix 1 of the Construction General Permit.
 - (4) The ESCP must include the rationale for the selection and design of the proposed BMPs, including quantifying the expected soil loss from different BMPs.
 - (5) Each Permittee shall require that the ESCP is developed and certified by a Qualified SWPPP Developer (QSD).
 - (6) Each Permittee shall require that all structural BMPs be designed by a licensed California Engineer.
 - (7) Each Permittee shall require that for all sites, the landowner or the landowner's agent sign a statement on the ESCP as follows:
 - (a) "I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the ESCP to reflect current conditions, or failing to properly and/ or adequately implement the ESCP may result in revocation of grading and/ or other permits or other sanctions provided by law."
 - (8) Prior to issuing a grading or building permit, each Permittee must verify that the construction site operators have existing coverage under

applicable permits, including, but not limited to the State Water Board's Construction General Permit, and State Water Board 401 Water Quality Certification.

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

i. BMP Implementation Level

- i. Each Permittee shall implement technical standards for the selection, installation and maintenance of construction BMPs for all construction sites within its jurisdiction.
- ii. The BMP technical standards shall require:
- (1) The use of BMPs that are tailored to the risks posed by the project. Sites are to be ranked from Low Risk (Risk 1) to High Risk (Risk 3). Project risks are to be calculated based on the potential for erosion from the site and the sensitivity of the receiving water body. Receiving water bodies that are listed on the Clean Water Act (CWA) Section 303(d) list for sediment or siltation are considered High Risk. Likewise, water bodies with designated beneficial uses of SPWN, COLD, and MIGR are also considered to be High Risk. The combined (sediment/receiving water) site risk shall be calculated using the methods provided in Appendix 1 of the Construction General Permit. At a minimum, the BMP technical standards shall include requirements for High Risk sites as defined in Table 15.
 - (2) The use of BMPs for all construction sites, sites equal or greater to 1 acre, and for paving projects per Tables 14 and 16 of this Order.
 - (3) Detailed installation designs and cut sheets for use within ESCPs.
 - (4) Maintenance expectations for each BMP, or category of BMPs, as appropriate.
- iii. Permittees are encouraged to adopt respective BMPs from latest versions of the *California BMP Handbook, Construction* or *Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices (BMPs) Manual* and addenda. Alternatively, Permittees are authorized to develop or adopt equivalent BMP standards consistent for Southern California and for the range of activities presented below in Tables 13 through 16.
- iv. The local BMP technical standards shall be readily available to the development community and shall be clearly referenced within each Permittee's storm water or development services website, ordinance, permit approval process and/or ESCP review forms. The local BMP technical standards shall also be readily available to the Regional Water Board upon request.
- v. Local BMP technical standards shall be available for the following:

Table 13. Minimum Set of BMPs for All Construction Sites

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

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

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch
	Geotextiles and Mats
	Wood Mulching
Sediment Controls	Fiber Rolls
	Gravel Bag Berm
	Street Sweeping and/ or Vacuum
	Storm Drain Inlet Protection
	Scheduling
	Check Dam
Additional Controls	Wind Erosion Controls
	Stabilized Construction Entrance/ Exit
	Stabilized Construction Roadway
	Entrance/ Exit Tire Wash
Non-Storm Management	water Vehicle and Equipment Washing
	Vehicle and Equipment Fueling
	Vehicle and Equipment Maintenance
Waste Management	Material Delivery and Storage
	Spill Prevention and Control

Table 15. Additional Enhanced BMPs for High Risk Sites

Erosion Controls	Hydraulic Mulch
	Hydroseeding
	Soil Binders
	Straw Mulch

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

* Applies to public roadway projects.

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

1.	Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions.
2.	Install gravel bags and filter fabric or other equivalent inlet protection at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat.
3.	Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or receiving waters.
4.	Minimize non storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
5.	Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
6.	Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
7.	Collect solid waste by vacuuming or sweeping and securing in an

	appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
8.	Cover the “cold-mix” asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
9.	Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
10.	Minimize airborne dust by using water spray or other approved dust suppressant during grinding.
11.	Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or receiving waters.
12.	Protect stockpiles with a cover or sediment barriers during a rain.

j. Construction Site Inspection

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

Table 17. Inspection Frequencies for Sites One Acre or Greater

Site	Inspection Frequency Shall Occur
a. All sites 1 acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under the CWA § 303(d)	(1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA ²⁹ , (2) within 48 hours of a ½-inch rain event and at (3) least once every two weeks
b. Other sites 1 acre or more determined to be a significant threat to water quality ³⁰	
c. All other construction sites with 1 acre or more of soil disturbance not meeting the criteria above	At least monthly

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

(a) Prior to Land Disturbance

Prior to allowing an operator to commence land disturbance, each Permittee shall perform an inspection to ensure all necessary erosion

²⁹ www.srh.noaa.gov/forecast

³⁰ In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-storm water discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.

and sediment structural and non-structural BMP materials and procedures are available per the erosion and sediment control plan.

- (b) During Active Construction, including Land Development³¹ and Vertical Construction³²

In accordance with the frequencies specified in Part VI.D.8.j and Table 17 of this Order, each Permittee shall perform an inspection to ensure all necessary erosion and sediment structural and non-structural BMP materials and procedures are available per the erosion and sediment control plan throughout the construction process.

- (c) Final Landscaping / Site Stabilization³³

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

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

- (4) Inspection Standard Operating Procedures

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

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

³¹ Activities include cuts and fills, rough and finished grading; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; stockpiling of select material for capping operations; and excavation and street paving, lot grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm sewer system and/or other drainage improvement.

³² The build out of structures from foundations to roofing, including rough landscaping.

³³ All soil disturbing activities at each individual parcel within the site have been completed.

- (f) Tracking of the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required in Table 17 of this Order.

k. Enforcement

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

I. Permittee Staff Training

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

(1) Plan Reviewers and Permitting Staff

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

(2) Erosion Sediment Control/Storm Water Inspectors

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

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

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

9. Public Agency Activities Program

- a. Each Permittee shall implement a Public Agency Activities Program to minimize storm water pollution impacts from Permittee-owned or operated facilities and activities and to identify opportunities to reduce storm water pollution impacts

from areas of existing development. Requirements for Public Agency Facilities and Activities consist of the following components:

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

b. Public Construction Activities Management

- i. Each Permittee shall implement and comply with the Planning and Land Development Program requirements in Part VI.D.7 of this Order at Permittee-owned or operated (i.e., public or Permittee sponsored) construction projects that are categorized under the project types identified in Part VI.D.7.b of this Order.
- ii. Each Permittee shall implement and comply with the appropriate Development Construction Program requirements in Part VI.D.8 of this Order at Permittee-owned or operated construction projects as applicable.
- iii. For Permittee-owned or operated projects (including those under a capital improvement project plan) that disturb less than one acre of soil, each Permittee shall require an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program, minimum BMPs).
- iv. Each Permittee shall obtain separate coverage under the Construction General Permit for all Permittee-owned or operated construction sites that require coverage.

c. Public Facility Inventory

- i. Each Permittee shall maintain an updated inventory of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of storm water pollution. The incorporation of facility information into a GIS is recommended. Sources to be tracked include but are not limited to the following:
 - (1) Animal control facilities
 - (2) Chemical storage facilities

- (3) Composting facilities
 - (4) Equipment storage and maintenance facilities (including landscape maintenance-related operations)
 - (5) Fueling or fuel storage facilities (including municipal airports)
 - (6) Hazardous waste disposal facilities
 - (7) Hazardous waste handling and transfer facilities
 - (8) Incinerators
 - (9) Landfills
 - (10) Materials storage yards
 - (11) Pesticide storage facilities
 - (12) Fire stations
 - (13) Public restrooms
 - (14) Public parking lots
 - (15) Public golf courses
 - (16) Public swimming pools
 - (17) Public parks
 - (18) Public works yards
 - (19) Public marinas
 - (20) Recycling facilities
 - (21) Solid waste handling and transfer facilities
 - (22) Vehicle storage and maintenance yards
 - (23) Storm water management facilities (e.g., detention basins)
 - (24) All other Permittee-owned or operated facilities or activities that each Permittee determines may contribute a substantial pollutant load to the MS4.
- ii. Each Permittee shall include the following minimum fields of information for each Permittee-owned or operated facility in its inventory.
- (1) Name of facility
 - (2) Name of facility manager and contact information
 - (3) Address of facility (physical and mailing)
 - (4) A narrative description of activities performed and potential pollution sources.
 - (5) Coverage under the Industrial General Permit or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water Board pertaining to storm water discharges.

- iii. Each Permittee shall update its inventory at least once during the 5-year term of the Order. The update shall be accomplished through collection of new information obtained through field activities or through other readily available inter and intra-agency informational databases (e.g., property management, land-use approvals, accounting and depreciation ledger account, and similar information).

d. Inventory of Existing Development for Retrofitting Opportunities

- i. Each Permittee shall develop an inventory of retrofitting opportunities that meets the requirements of this Part VI.9.d. Retrofit opportunities shall be identified within the public right-of-way or in coordination with a TMDL implementation plan(s). The goals of the existing development retrofitting inventory are to address the impacts of existing development through regional or sub-regional retrofit projects that reduce the discharges of storm water pollutants into the MS4 and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards as defined in Part V.A, Receiving Water Limitations.
- ii. Each Permittee shall screen existing areas of development to identify candidate areas for retrofitting using watershed models or other screening level tools.
- iii. Each Permittee shall evaluate and rank the areas of existing development identified in the screening to prioritize retrofitting candidates. Criteria for evaluation may include but are not limited to:
 - (1) Feasibility, including general private and public land availability;
 - (2) Cost effectiveness;
 - (3) Pollutant removal effectiveness;
 - (4) Tributary area potentially treated;
 - (5) Maintenance requirements;
 - (6) Landowner cooperation;
 - (7) Neighborhood acceptance;
 - (8) Aesthetic qualities;
 - (9) Efficacy at addressing concern; and
 - (10) Potential improvements to public health and safety.
- iv. Each Permittee shall consider the results of the evaluation in the following programs:
 - (1) The Permittee's storm water management program: Highly feasible projects expected to benefit water quality should be given a high priority to implement source control and treatment control BMPs in a Permittee's SWMP.

- (2) Off-site mitigation for New Development and Redevelopment: Each Permittee shall consider high priority retrofit projects as candidates for off-site mitigation projects per Part VI.D.7.c.iii.(4).(d).
 - (3) Where feasible, at the discretion of the Permittee, the existing development retrofitting program may be coordinated with flood control projects and other infrastructure improvement programs per Part VI.D.9.e.ii.(2) below.
- v. Each Permittee shall cooperate with private landowners to encourage site specific retrofitting projects. Each Permittee shall consider the following practices in cooperating with private landowners to retrofit existing development:
- (1) Demonstration retrofit projects;
 - (2) Retrofits on public land and easements that treat runoff from private developments;
 - (3) Education and outreach;
 - (4) Subsidies for retrofit projects;
 - (5) Requiring retrofit projects as enforcement, mitigation or ordinance compliance;
 - (6) Public and private partnerships;
 - (7) Fees for existing discharges to the MS4 and reduction of fees for retrofit implementation.

e. Public Agency Facility and Activity Management

- i. Each Permittee shall obtain separate coverage under the Industrial General Permit for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General Permit.
- ii. Each Permittee shall implement the following measures for Permittee- owned and operated flood management projects:
 - (1) Develop procedures to assess the impacts of flood management projects on the water quality of receiving water bodies; and
 - (2) Evaluate existing structural flood control facilities to determine if retrofitting the facility to provide additional pollutant removal from storm water is feasible.
- iii. Each Permittee shall ensure the implementation and maintenance of activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) or an equivalent set of BMPs when such activities occur at Permittee-owned or operated facilities and field activities (e.g., project sites) including but not limited to the facility types listed in Part VI.D.9.c above, and at any area that includes the activities described in Table 18, or that have the potential to discharge pollutants in storm water.

- iv. Any contractors hired by the Permittee to conduct Public Agency Activities including, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair shall be contractually required to implement and maintain the activity specific BMPs listed in Table 18. Each Permittee shall conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.
- v. Permittee-owned or operated facilities that have obtained coverage under the Industrial General Permit shall implement and maintain BMPs consistent with the associated SWPPP and are therefore not required to implement and maintain the activity specific BMPs listed in Table 18.
- vi. Effective source control BMPs for the activities listed in Table 18 shall be implemented at Permittee-owned or operated facilities, unless the pollutant generating activity does not occur. Each Permittee shall require implementation of additional BMPs where storm water from the MS4 discharges to a significant ecological area (SEA, see Attachment A for definition), a water body subject to TMDL provisions in Part VI.E., or a CWA § 303(d) listed water body (see Part VI.E below). Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.

Table 18. BMPs for Public Agency Facilities and Activities

General and Activity Specific BMPs		
General BMPs	Scheduling and Planning	
	Spill Prevention and Control	
	Sanitary/Septic Waste Management	
	Material Use	
	Safer Alternative Products	
	Vehicle/Equipment Cleaning, Fueling and Maintenance	
	Illicit Connection Detection, Reporting and Removal	
	Illegal Spill Discharge Control	
	Maintenance Facility Housekeeping Practices	
Flexible Pavement	Asphalt Cement Crack and Joint Grinding/ Sealing	
	Asphalt Paving	
	Structural Pavement Failure (Digouts) Pavement Grinding and Paving	
	Emergency Pothole Repairs	
	Sealing Operations	
Rigid Pavement	Portland Cement Crack and Joint Sealing	
	Mudjacking and Drilling	
	Concrete Slab and Spall Repair	
Slope/ Vegetation	Drains/	Shoulder Grading
		Nonlandscaped Chemical Vegetation Control
		Nonlandscaped Mechanical Vegetation Control/

General and Activity Specific BMPs	
	Mowing
	Nonlandscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	Fence Repair
	Drainage Ditch and Channel Maintenance
	Drain and Culvert Maintenance
	Curb and Sidewalk Repair
Litter/ Debris/ Graffiti	Sweeping Operations
	Litter and Debris Removal
	Emergency Response and Cleanup Practices
	Graffiti Removal
Landscaping	Chemical Vegetation Control
	Manual Vegetation Control
	Landscaped Mechanical Vegetation Control/ Mowing
	Landscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	Irrigation Line Repairs
	Irrigation (Watering), Potable and Nonpotable
Environmental	Storm Drain Stenciling
	Roadside Slope Inspection
	Roadside Stabilization
	Stormwater Treatment Devices
	Traction Sand Trap Devices
Bridges	Welding and Grinding
	Sandblasting, Wet Blast with Sand Injection and Hydroblasting
	Painting
	Bridge Repairs
Other Structures	Pump Station Cleaning
	Tube and Tunnel Maintenance and Repair
	Tow Truck Operations
	Toll Booth Lane Scrubbing Operations
Electrical	Sawcutting for Loop Installation
Traffic Guidance	Thermoplastic Striping and Marking
	Paint Striping and Marking
	Raised/ Recessed Pavement Marker Application and Removal
	Sign Repair and Maintenance
	Median Barrier and Guard Rail Repair
	Emergency Vehicle Energy Attenuation Repair
Storm Maintenance	Minor Slides and Slipouts Cleanup/ Repair
Management and Support	Building and Grounds Maintenance
	Storage of Hazardous Materials (Working Stock)
	Material Storage Control (Hazardous Waste)

General and Activity Specific BMPs	
	Outdoor Storage of Raw Materials
	Vehicle and Equipment Fueling
	Vehicle and Equipment Cleaning
	Vehicle and Equipment Maintenance and Repair
	Aboveground and Underground Tank Leak and Spill Control

f. Vehicle and Equipment Washing

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 (BMPs for Public Agency Facilities and Activities) for all fixed vehicle and equipment washing; including fire fighting and emergency response vehicles.
- ii. Each Permittee shall prevent discharges of wash waters from vehicle and equipment washing to the MS4 by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
 - (1) Self-contain, and haul off for disposal; or
 - (2) Equip with a clarifier or an alternative pre-treatment device and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.
- iii. Each Permittee shall ensure that any municipal facilities constructed, redeveloped, or replaced shall not discharge wastewater from vehicle and equipment wash areas to the MS4 by plumbing all areas to the sanitary sewer in accordance with applicable waste water provider regulations, or self-containing all waste water/ wash water and hauling to a point of legal disposal.

g. Landscape, Park, and Recreational Facilities Management

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 for all public right-of-ways, flood control facilities and open channels, lakes and reservoirs, and landscape, park, and recreational facilities and activities.
- ii. Each Permittee shall implement an IPM program that includes the following:
 - (1) Pesticides are used only if monitoring indicates they are needed, and pesticides are applied according to applicable permits and established guidelines.
 - (2) Treatments are made with the goal of removing only the target organism.
 - (3) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial non-target organisms, and the environment.
 - (4) The use of pesticides, including Organophosphates and Pyrethroids, does not threaten water quality.

- (5) Partner with other agencies and organizations to encourage the use of IPM.
- (6) Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) for Public Agency Facilities and Activities.
- (7) Policies, procedures, and ordinances shall include commitments and a schedule to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
 - (a) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
 - (b) Quantify pesticide use by staff and hired contractors.
 - (c) Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use.

iii. Each Permittee shall implement the following requirements:

- (1) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
- (2) Ensure there is no application of pesticides or fertilizers (1) when two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA³⁴, (2) within 48 hours of a ½-inch rain event, or (3) when water is flowing off the area where the application is to occur. This requirement does not apply to the application of aquatic pesticides described in Part VI.D.9.g.iii.(1) above or pesticides which require water for activation.
- (3) Ensure that no banned or unregistered pesticides are stored or applied.
- (4) Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category.
- (5) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
- (6) Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.
 - (a) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (b) Regularly inspect storage areas.

h. Storm Drain Operation and Maintenance

³⁴ www.srh.noaa.gov/forecast

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table 18 for storm drain operation and maintenance.
- ii. Ensure that all material removed from the MS4 does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with any of the following measures:
 - (1) Self-contain, and haul off for legal disposal; or
 - (2) Applied to the land without runoff; or
 - (3) Equip with a clarifier or an alternative pre-treatment device; and plumb to the sanitary sewer in accordance with applicable waste water provider regulations.
- iii. Catch Basin Cleaning
 - (1) In areas that are not subject to a trash TMDL, each Permittee shall determine priority areas and shall update its map or list of Catch Basins with their GPS coordinates and priority:
 - Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris.
 - Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.
 - Priority C: Catch basins that are designated as generating low volumes of trash and/or debris.The map or list shall contain the rationale or data to support priority designations.
 - (2) In areas that are not subject to a trash TMDL, each Permittee shall inspect catch basins according to the following schedule:
 - Priority A: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.
 - Priority B: A minimum of once during the wet season and once during the dry season every year.
 - Priority C: A minimum of once per year.Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, Permittees shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. Permittees shall maintain inspection and cleaning records for Regional Water Board review.
 - (3) In areas that are subject to a trash TMDL, the subject Permittees shall implement the applicable provisions in Part VI.E.
- iv. Trash Management at Public Events
 - (1) Each Permittee shall require the following measures for any event in the public right of way or wherever it is foreseeable that substantial quantities

of trash and litter may be generated, including events located in areas that are subject to a trash TMDL:

- (a) Proper management of trash and litter generated; and
- (b) Arrangement for temporary screens to be placed on catch basins; or
- (c) Provide clean out of catch basins, trash receptacles, and grounds in the event area within one business day subsequent to the event.

v. Trash Receptacles

- (1) Each Permittee shall ensure trash receptacles, or equivalent trash capturing devices, are covered in areas newly identified as high trash generation areas within its jurisdiction.
- (2) Each Permittee shall ensure that all trash receptacles are cleaned out and maintained as necessary to prevent trash overflow.

vi. Catch Basin Labels and Open Channel Signage

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

vii. Additional Trash Management Practices

- (1) In areas that are not subject to a trash TMDL, each Permittee shall install trash excluders, or equivalent devices, on or in catch basins or outfalls to prevent the discharge of trash to the MS4 or receiving water no later than four years after the effective date of this Order in areas defined as Priority A (Part VI.D.9.h.iii.(1)) except at sites where the application of such BMP(s) alone will cause flooding. Lack of maintenance that causes flooding is not an acceptable exception to the requirement to install BMPs. Alternatively, each Permittee may implement alternative or enhanced BMPs beyond the provisions of this Order (such as but not limited to increased street sweeping, adding trash cans near trash generation sites, prompt enforcement of trash accumulation, increased trash collection on public property, increased litter prevention messages or trash nets within the MS4) that provide substantially equivalent removal of trash. Each Permittee shall demonstrate that BMPs, which substituted for trash excluders, provide equivalent trash removal performance as excluders. When outfall trash capture is provided, revision of the schedule for inspection and cleanout of catch basins in Part VI.D.9.h.iii.(2) shall be reported in the next year’s annual report.

viii. Storm Drain Maintenance

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

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

ix. Infiltration from Sanitary Sewer to MS4/Preventive Maintenance

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

x. Permittee Owned Treatment Control BMPs

- (1) Each Permittee shall implement an inspection and maintenance program for all Permittee owned treatment control BMPs, including post-construction treatment control BMPs.

- (2) Each Permittee shall ensure proper operation of all treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.
- (3) Any residual water³⁵ produced by a treatment control BMP and not being internal to the BMP performance when being maintained shall be:
 - (a) Hauled away and legally disposed of; or
 - (b) Applied to the land without runoff; or
 - (c) Discharged to the sanitary sewer system (with permits or authorization); or
 - (d) Treated or filtered to remove bacteria, sediments, nutrients, and meet the limitations set in Table 19 (Discharge Limitations for Dewatering Treatment BMPs), prior to discharge to the MS4.

Table 19. Discharge Limitations for Dewatering Treatment BMPs³⁶

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

i. Streets, Roads, and Parking Facilities Maintenance

- i. Each Permittee shall designate streets and/or street segments within its jurisdiction as one of the following:
 - Priority A: Streets and/or street segments that are designated as consistently generating the highest volumes of trash and/or debris.
 - Priority B: Streets and/or street segments that are designated as consistently generating moderate volumes of trash and/or debris.
 - Priority C: Streets and/or street segments that are designated as generating low volumes of trash and/or debris.
- ii. Each Permittee shall perform street sweeping of curbed streets according to the following schedule:
 - Priority A: Streets and/or street segments that are designated as Priority A shall be swept at least two times per month.
 - Priority B: Streets and/or street segments that are designated as Priority B shall be swept at least once per month.
 - Priority C: Streets and/or street segments that are designated as Priority C shall be swept as necessary but in no case less than once per year.

³⁵ See Attachment A.

³⁶ Technology based effluent limitations.

iii. Road Reconstruction

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

- (1) Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall³⁷ unless required by emergency conditions.
- (2) Install sand bags or gravel bags and filter fabric at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat;
- (3) Prevent the discharge of release agents including soybean oil, other oils, or diesel into the MS4 or receiving waters.
- (4) Prevent non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
- (5) Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
- (6) Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (7) Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (8) Cover the "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
- (9) Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
- (10) Minimize airborne dust by using water spray during grinding.
- (11) Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near MS4 or receiving waters.
- (12) Protect stockpiles with a cover or sediment barriers during a rain.

iv. Parking Facilities Maintenance

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

j. Emergency Procedures

- i. Each Permittee may conduct repairs of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order as follows:

³⁷ A probability of precipitation (POP) of 50% is required.

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

k. Municipal Employee and Contractor Training

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

- (1) Promote a clear understanding of the potential for activities to pollute storm water.
- (2) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.

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

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

- (1) The potential for pesticide-related surface water toxicity.
- (2) Proper use, handling, and disposal of pesticides.
- (3) Least toxic methods of pest prevention and control, including IPM.
- (4) Reduction of pesticide use.

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

10. Illicit Connections and Illicit Discharges Elimination Program

a. General

- i. Each Permittee shall continue to implement an Illicit Connection and Illicit Discharge Elimination (IC/ID) Program to detect, investigate, and eliminate IC/IDs to the MS4. The IC/ID Program must be implemented in accordance with the requirements and performance measures specified in this Order.
- ii. As stated in Part VI.A.2 of this Order, each Permittee must have adequate legal authority to prohibit IC/IDs to the MS4 and enable enforcement capabilities to eliminate the source of IC/IDs.
- iii. Each Permittee's IC/ID Program shall consist of at least the following major program components:
 - (1) Procedures for conducting source investigations for IC/IDs
 - (2) Procedures for eliminating the source of IC/IDs
 - (3) Procedures for public reporting of illicit discharges
 - (4) Spill response plan
 - (5) IC/IDs education and training for Permittee staff

b. Illicit Discharge Source Investigation and Elimination

- i. Each Permittee shall develop written procedures for conducting investigations to identify the source of all suspected illicit discharges, including procedures to eliminate the discharge once the source is located.
- ii. At a minimum, each Permittee shall initiate an investigation(s) to identify and locate the source within 72 hours of becoming aware of the illicit discharge.
- iii. When conducting investigations, each Permittee shall comply with the following:
 - (1) Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.
 - (2) Each Permittee shall track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.
 - (3) Each Permittee shall investigate the source of all observed illicit discharges.
- iv. When taking corrective action to eliminate illicit discharges, each Permittee shall comply with the following:
 - (1) If the source of the illicit discharge has been determined to originate within the Permittee's jurisdiction, the Permittee shall immediately notify the responsible party/parties of the problem, and require the responsible party to initiate all necessary corrective actions to eliminate the illicit discharge.

Upon being notified that the discharge has been eliminated, the Permittee shall conduct a follow-up investigation to verify that the discharge has been eliminated and cleaned-up to the satisfaction of the Permittee(s). Each Permittee shall document its follow-up investigation. Each Permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection, investigation, cleanup and oversight activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy, per Part VI.D.2.

- (2) If the source of the illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall notify the upstream jurisdiction and the Regional Water Board within 30 days of such determination and provide all of the information collected regarding efforts to identify its source. Each Permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of all inspection, investigation, cleanup and oversight activities. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy, per Part VI.D.2.
 - (3) If the source of the illicit discharge cannot be traced to a suspected responsible party, affected Permittees shall implement its spill response plan and then initiate a permanent solution as described in section 10.b.v below.
- v. In the event the Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, including the inability to find the responsible party/parties, the Permittee shall provide for diversion of the entire flow to the sanitary sewer or provide treatment. In either instance, the Permittee shall notify the Regional Water Board in writing within 30 days of such determination and shall provide a written plan for review and comment that describes the efforts that have been undertaken to eliminate the illicit discharge, a description of the actions to be undertaken, anticipated costs, and a schedule for completion.

c. Identification and Response to Illicit Connections

i. Investigation

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

ii. Elimination

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

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

iii. Documentation

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

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

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

e. Spill Response Plan

- i. Each Permittee shall implement a spill response plan for all sewage and other spills that may discharge into its MS4. The spill response plan shall clearly identify agencies responsible for spill response and cleanup, telephone numbers and e-mail address for contacts, and shall contain at a minimum the following requirements:
 - (1) Coordination with spill response teams throughout all appropriate departments, programs and agencies so that maximum water quality protection is provided.
 - (2) Initiate investigation of all public and employee spill complaints within one business day of receiving the complaint to assess validity.
 - (3) Response to spills for containment within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case the response should be within 2 hours of gaining legal access to the property.
 - (4) Spills that may endanger health or the environment shall be reported to appropriate public health agencies and the Office of Emergency Services (OES).

f. Illicit Connection and Illicit Discharge Education and Training

- i. Each Permittee must continue to implement a training program regarding the identification of IC/IDs for all municipal field staff, who, as part of their normal job responsibilities (e.g., street sweeping, storm drain maintenance, collection system maintenance, road maintenance), may come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4. Contact information, including the procedure for reporting an illicit discharge, must be readily available to field staff. Training program documents must be available for review by the permitting authority.
 - ii. Each Permittee shall ensure contractors performing privatized/contracted municipal services such as, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair are trained regarding IC/ID identification and reporting. Permittees may provide training or include contractual requirements for IC/ID identification and reporting training. Outside contractors can self-certify, providing they certify they have received all applicable training required in the Permit and have documentation to that effect.
- iii. Each Permittee's training program should address, at a minimum, the following:
 - (1) IC/ID identification, including definitions and examples,
 - (2) investigation,
 - (3) elimination,
 - (4) cleanup,

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

E. Total Maximum Daily Load Provisions

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

2. Compliance Determination

a. General

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

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

b. Commingled Discharges

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

c. Receiving Water Limitations Addressed by a TMDL

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

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

- i. A Permittee shall be considered in compliance with an applicable interim water quality-based effluent limitation and interim receiving water limitation for a pollutant associated with a specific TMDL if any of the following is demonstrated:
 - (1) There are no violations of the interim water quality-based effluent limitation for the pollutant associated with a specific TMDL at the Permittee's applicable MS4 outfall(s),³⁸ including an outfall to the receiving water that collects discharges from multiple Permittees' jurisdictions;
 - (2) There are no exceedances of the applicable receiving water limitation for the pollutant associated with a specific TMDL in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
 - (3) There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant associated with a specific TMDL; or
 - (4) The Permittee has submitted and is fully implementing an approved Watershed Management Program or EWMP pursuant to Part VI.C.
 - (a) To be considered fully implementing an approved Watershed Management Program or EWMP, a Permittee must be implementing

³⁸ An outfall may include a manhole or other point of access to the MS4 at the Permittee's jurisdictional boundary.

all actions consistent with the approved program and applicable compliance schedules, including structural BMPs.

- (b) Structural storm water BMPs or systems of BMPs should be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm, where feasible and necessary to achieve applicable WQBELs and receiving water limitations, and maintenance records must be up-to-date and available for inspection by the Regional Water Board.
 - (c) A Permittee that does not implement the Watershed Management Program in accordance with the milestones and compliance schedules shall demonstrate compliance with its interim water quality-based effluent limitations and/or receiving water limitations pursuant to Part VI.E.2.d.i.(1)-(3), above.
 - (d) Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with all of the following requirements shall constitute a Permittee's compliance with provisions pertaining to interim WQBELs with compliance deadlines occurring prior to approval of a WMP or EWMP. This subdivision (d) shall not apply to interim trash WQBELs.
 - (1) Provides timely notice of its intent to develop a WMP or EWMP,
 - (2) Meets all interim and final deadlines for development of a WMP or EWMP,
 - (3) For the area to be covered by the WMP or EWMP, targets implementation of watershed control measures in its existing storm water management program, including watershed control measures to eliminate non-storm water discharges of pollutants through the MS4 to receiving waters, to address known contributions of pollutants from MS4 discharges that cause or contribute to the impairment(s) addressed by the TMDL(s), and
 - (4) Receives final approval of its WMP or EWMP within 28 or 40 months, respectively.
- e. Final Water Quality-based Effluent Limitations and/or Receiving Water Limitations**
- i. A Permittee shall be deemed in compliance with an applicable final water quality-based effluent limitation and final receiving water limitation for the pollutant(s) associated with a specific TMDL if any of the following is demonstrated:

- (1) There are no violations of the final water quality-based effluent limitation for the specific pollutant at the Permittee's applicable MS4 outfall(s)³⁹;
- (2) There are no exceedances of applicable receiving water limitation for the specific pollutant in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
- (3) There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
- (4) In drainage areas where Permittees are implementing an EWMP, (i) all non-storm water and (ii) all storm water runoff up to and including the volume equivalent to the 85th percentile, 24-hour event is retained for the drainage area tributary to the applicable receiving water. This provision (4) shall not apply to final trash WQBELs.

3. USEPA Established TMDLs

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

- a. Each Permittee shall propose BMPs to achieve the WLAs contained in the applicable USEPA established TMDL(s), and a schedule for implementing the BMPs that is as short as possible, in a Watershed Management Program or EWMP.
- b. Each Permittee may either individually submit a Watershed Management Program, or may jointly submit a WMP or EWMP with other Permittees subject to the WLAs contained in the USEPA established TMDL.
- c. At a minimum, each Permittee shall include the following information in its Watershed Management Program or EWMP, relevant to each applicable USEPA established TMDL:
 - i. Available data demonstrating the current quality of the Permittee's MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;

³⁹ Ibid.

- ii. A detailed description of BMPs that have been implemented, and/or are currently being implemented by the Permittee to achieve the WLA(s), if any;
 - iii. A detailed time schedule of specific actions the Permittee will take in order to achieve compliance with the applicable WLA(s);
 - iv. A demonstration that the time schedule requested is as short as possible, taking into account the time since USEPA establishment of the TMDL, and technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the WLA(s);
 - (1) For the Malibu Creek Nutrient TMDL established by USEPA in 2003, in no case shall the time schedule to achieve the final numeric WLAs exceed five years from the effective date of this Order; and
 - v. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and numeric milestones and the date(s) for their achievement.
- d. Each Permittee subject to a WLA in a TMDL established by USEPA shall submit a draft of a Watershed Management Program or EWMP to the Regional Water Board Executive Officer for approval per the schedule Part VI.C.4.
 - e. If a Permittee does not submit a Watershed Management Program, or the plan is determined to be inadequate by the Regional Water Board Executive Officer and the Permittee does not make the necessary revisions within 90 days of written notification that plan is inadequate, the Permittee shall be required to demonstrate compliance with the numeric WLAs immediately based on monitoring data collected under the MRP (Attachment E) for this Order.

4. State Adopted TMDLs where Final Compliance Deadlines have Passed

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

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

5. Water Quality-Based Effluent Limitations for Trash

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

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

- vii. Peck Road Park Lake Trash TMDL (Attachment O)
- viii. Echo Park Lake Trash TMDL (Attachment O)
- ix. Legg Lake Trash TMDL (Attachment O)

b. Compliance

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

(1) Full Capture Systems:

- (a) The Basin Plan authorizes the Regional Water Board Executive Officer to certify *full capture systems*, which are systems that meet the operating and performance requirements as described in this Order, and the procedures identified in "Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System."⁴⁰
- (b) Permittees are authorized to comply with their effluent limitations through certified *full capture systems* provided the requirements of paragraph (c), immediately below, and any conditions in the certification, continue to be met.
- (c) Permittees may comply with their effluent limitations through progressive installation of *full capture systems* throughout their jurisdictional areas until all areas draining to Lake Elizabeth, Santa Monica Bay, Malibu Creek, Ballona Creek, Machado Lake, the Los Angeles River system, Legg Lake, Peck Road Park Lake, and/or Echo Park Lake are addressed. For purposes of this Order, attainment of the effluent limitations shall be conclusively presumed for any drainage area to Lake Elizabeth, Santa Monica Bay, Malibu Creek (and its tributaries), Ballona Creek (and its tributaries), Machado Lake, the Los Angeles River (and its tributaries), Legg Lake, Peck Road Park Lake, and/or Echo Park Lake where certified *full capture systems* treat all drainage from the area, provided that the *full capture systems* are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Regional Water Board.

⁴⁰ The Regional Water Board currently recognizes eight *full capture systems*. These are: Vortex Separation Systems (VSS) and seven other Executive Officer certified *full capture systems*, including specific types or designs of trash nets; two gross solids removal devices (GSRDs); catch basin brush inserts and mesh screens; vertical and horizontal trash capture screen inserts; and a connector pipe screen device. See August 3, 2004 Los Angeles Regional Water Quality Control Board Memorandum titled "Procedures and Requirements for Certification of a Best Management Practice for Trash Control as a Full Capture System."

- (i) A Permittee shall be deemed in compliance with its final effluent limitation if it demonstrates that all drainage areas under its jurisdiction and/or authority are serviced by appropriate certified *full capture systems* as described in paragraph (1)(c).
 - (ii) A Permittee shall be deemed in compliance with its interim effluent limitations, where applicable:
 - 1. By demonstrating that *full capture systems* treat the percentage of drainage areas in the watershed that corresponds to the required trash abatement.
 - 2. Alternatively, a Permittee may propose a schedule for installation of *full capture systems* in areas under its jurisdiction and/or authority within a given watershed, targeting first the areas of greatest trash generation, for the Executive Officer's approval. The Executive Officer shall not approve any such schedule that does not result in timely compliance with the final effluent limitations, consistent with the established TMDL implementation schedule and applicable State policies. A Permittee shall be deemed in compliance with its interim effluent limitations provided it is fully in compliance with any such approved schedule.
- (2) Partial Capture Devices and Institutional Controls: Permittees may comply with their interim and final effluent limitations through the installation of *partial capture devices* and the application of *institutional controls*.⁴¹
- (a) Trash discharges from areas serviced solely by *partial capture devices* may be estimated based on demonstrated performance of the device(s) in the implementing area.⁴² That is, trash reduction is equivalent to the *partial capture devices'* trash removal efficiency multiplied by the percentage of drainage area serviced by the devices.
 - (b) Except as provided in subdivision (c), immediately below, trash discharges from areas addressed by *institutional controls* and/or *partial capture devices* (where site-specific performance data is not available) shall be calculated using a mass balance approach, based on the daily generation rate (DGR) for a representative area.⁴³ The DGR shall be determined from direct measurement of trash deposited in the drainage area during any thirty-day period between June 22nd and September 22nd exclusive of rain events⁴⁴, and shall be re-calculated every year thereafter unless a less frequent period for recalculation is approved by the Regional Water Board Executive Officer. The DGR

⁴¹ While interim effluent limitations may be complied with using *partial capture devices*, compliance with final effluent limitations cannot be achieved with the exclusive use of *partial capture devices*.

⁴² Performance shall be demonstrated under different conditions (e.g. low to high trash loading).

⁴³ The area(s) should be representative of the land uses and activities within the Permittees' authority and shall be approved by the Executive Officer prior to the 30-day collection period.

⁴⁴ Provided no special events are scheduled that may affect the representative nature of that collection period.

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

$$\text{DGR} = (\text{Amount of trash collected during a 30-day collection period})^{45} / (30 \text{ days})$$

The DGR for the applicable area under the Permittees' jurisdiction and/or authority shall be extrapolated from that of the representative drainage area(s). A mass balance equation shall be used to estimate the amount of trash discharged during a storm event.⁴⁶ The *Storm Event Trash Discharge* for a given rain event in the Permittee's drainage area shall be calculated by multiplying the number of days since the last street sweeping by the DGR and subtracting the amount of any trash recovered in the catch basins.⁴⁷ For each day of a storm event that generates precipitation greater than 0.25 inch, the Permittee shall calculate a *Storm Event Trash Discharge*.

$$\text{Storm Event Trash Discharge} = [(\text{Days since last street sweeping} * \text{DGR})] - [\text{Amount of trash recovered from catch basins}]^{48}$$

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

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

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

(3) Combined Compliance Approaches:

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

(4) Minimum Frequency of Assessment and Collection Approach:

If allowed in a trash TMDL and approved by the Executive Officer, a Permittee may alternatively comply with its final effluent limitations by

⁴⁵ Between June 22nd and September 22nd

⁴⁶ Amount of trash shall refer to the uncompressed volume (in gallons) or drip-dry weight (in pounds) of trash collected.

⁴⁷ Any negative values shall be considered to represent a zero discharge.

⁴⁸ When more than one storm event occurs prior to the next street sweeping the discharge shall be calculated from the date of the last assessment.

implementing a program for *minimum frequency of assessment and collection* (MFAC) in conjunction with BMPs. To the satisfaction of the Executive Officer, the MFAC/BMP program must meet the following criteria:

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

collections is causing nuisance or otherwise adversely affecting beneficial uses.

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

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

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

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

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

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

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

- i. Each Permittee shall submit a TMDL Compliance Report as part of its Annual Report detailing compliance with the applicable interim and/or final effluent limitations. Reporting shall include the information specified below. The report shall be submitted on the reporting form specified by the Regional Water Board Executive Officer. The report shall be signed under penalty of perjury by the Permittee's principal executive officer or ranking elected official or duly authorized representative of the officer, consistent with Part V.B of Attachment D (Standard Provisions), who is responsible for ensuring compliance with this Order. Each Permittee shall be charged with and shall demonstrate compliance with its applicable effluent limitations beginning with its December 15, 2013, TMDL Compliance Report.
 - (1) Reporting Compliance based on Full Capture Systems: Permittees shall provide information on the number and location of full capture installations, the sizing of each full capture installation, the drainage areas addressed by these installations, and compliance with the applicable interim or final effluent limitation, in its TMDL Compliance Report. The Los Angeles Water Board will periodically audit sizing, performance, and other data to validate that a system satisfies the criteria established for a *full capture system* and any conditions established by the Regional Water Board Executive Officer in the certification.
 - (2) Reporting Compliance based on Partial Capture Systems and/or Institutional Controls:
 - (a) Using Performance Data Specific to the Permittee's Area: In its TMDL Compliance Report, a Permittee shall provide: (i) site-specific performance data for the applicable device(s); (ii) information on the number and location of such installations, and the drainage areas addressed by these installations; and (iii) calculated compliance with the applicable effluent limitations.
 - (b) Using Direct Measurement of Trash Discharge: Permittees shall provide an accounting of DGR and trash removal via street sweeping, catch basin clean outs, etc., in a database to facilitate the calculation of discharge for each rain event. The database shall be maintained and provided to the Regional Water Board for inspection upon request. In its TMDL Compliance Report, a Permittee shall provide information on its annual DGR, calculated storm year discharge, and compliance with the applicable effluent limitation.
 - (3) Reporting Compliance based on Combined Compliance Approaches:

Permittees shall provide the information specified in Part VI.E.5.c.i(1) for areas where *full capture systems* are installed and that are specified in Part VI.E.5.c.i(2)(a) or (b), as appropriate, for areas where *partial capture devices* and *institutional controls* are applied. In its TMDL Compliance Report, a Permittee shall also provide information on compliance with the applicable effluent limitation based on the combined compliance approaches.

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

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

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

ATTACHMENT A – DEFINITIONS

The following are definitions for terms in this Order:

Adverse Impact

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

Anti-degradation Policies

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

Applicable Standards and Limitations

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

Areas of Special Biological Significance (ASBS)

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

Arithmetic Mean ()

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

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

where:

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

Authorized Discharge

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

Authorized Non-Storm Water Discharge

Authorized non-storm water discharges are discharges that are not composed entirely of storm water and that are either: (1) separately regulated by an individual or general NPDES permit and allowed to discharge to the MS4 when in compliance with all NPDES permit conditions; (2)

authorized by USEPA¹ pursuant to sections 104(a) or 104(b) of CERCLA that either (i) will comply with water quality standards as applicable or relevant and appropriate requirements (“ARARs”) under section 121(d)(2) of CERCLA or (ii) are subject to (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation, pursuant to 40 CFR section 300.415(j); or (3) necessary for emergency responses purposes, including flows from emergency fire fighting activities.

Automotive Service Facilities

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

Average Monthly Effluent Limitation (AMEL)

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

Bacteria Total Maximum Daily Load (TMDL) Dry Weather

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

Bacteria Total Maximum Daily Load (TMDL) Wet Weather

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

Baseline Waste Load Allocation

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

Basin Plan

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

Beneficial Uses

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

¹ These typically include short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA.

Best Management Practices (BMPs)

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

Bioaccumulative

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

Biofiltration

A LID BMP that reduces storm water pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration and/or evapotranspiration, and filtration. As described in the *Ventura County Technical Guidance Manual*, studies have demonstrated that biofiltration of 1.5 times the storm water quality design volume (SWQDv) provides approximately equivalent or greater reductions in pollutant loading when compared to bioretention or infiltration of the SWQDv.² Incidental infiltration is an important factor in achieving the required pollutant load reduction. Therefore, the term “biofiltration” as used in this Order is defined to include only systems designed to facilitate incidental infiltration or achieve the equivalent pollutant reduction as biofiltration BMPs with an underdrain (subject to Executive Officer approval). Biofiltration BMPs include bioretention systems with an underdrain and bioswales.

Bioretention

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

Bioswale

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

Carcinogenic

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

Coefficient of Variation (CV)

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

² Geosyntec Consultants and Larry Walker Associates. 2011. *Ventura County Technical Guidance Manual for Stormwater Quality and Control Measures, Manual Update 2011. Appendix D*. Prepared for the Ventura Countywide Stormwater Quality Management Program. July 13, 2011. pp. D-6 – D-15.

Commercial Development

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

Commercial Malls

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

Conditionally Exempt Essential Non-Storm Water Discharge

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

Conditionally Exempt Non-Storm Water Discharge

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

Construction Activity

Construction activity includes any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that results in land disturbance. Construction does not include emergency construction activities required to immediately protect public health and safety or routine maintenance activities required to maintain the integrity of structures by performing minor repair and restoration work, maintain the original line and grade, hydraulic capacity, or original purposes of the facility. See "Routine Maintenance" definition for further explanation. Where clearing, grading or excavating of underlying soil takes place during a repaving operation, State General Construction Permit coverage is required if more than one acre is disturbed or the activities are part of a larger plan.

Control

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

Daily Discharge

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

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

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

Daily Generation Rate (DGR)

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

Dechlorinated/Debrominated Swimming Pool Discharge

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

Detected, but Not Quantified (DNQ)

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

Development

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

Directly Adjacent

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

Director

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

Discharge

When used without qualification the “discharge of a pollutant.”

Discharging Directly

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

Discharge of a Pollutant

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

Disturbed Area

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

Drinking Water Supplier Distribution Systems Releases

Sources of flows from drinking water supplier storage, supply and distribution systems including flows from system failures, pressure releases, system maintenance, distribution line testing, fire hydrant flow testing; and flushing and dewatering of pipes, reservoirs, vaults, and minor non-invasive well maintenance activities not involving chemical addition(s). It does not include wastewater discharges from activities that occur at wellheads, such as well construction, well development (i.e., aquifer pumping tests, well purging, etc.), or major well maintenance. For the purposes of this Order, drinking water supplier distribution system releases include treated and raw water (from raw water pipelines, reservoirs, storage tanks, etc.) that are dedicated for drinking water supply.

Effective Impervious Area (EIA)

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

Effluent Concentration Allowance (ECA)

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

Effluent Limitation

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

Enclosed Bays

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

Environmentally Sensitive Areas (ESAs)

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

Estimated Chemical Concentration

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

Estuaries

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

Existing Discharger

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

Flow-through treatment BMPs

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

Full Capture System

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

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

Where:

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

C = runoff coefficient (dimensionless);

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

A = sub-drainage area (acres).

General Construction Activities Storm Water Permit (GCASP)

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

General Industrial Activities Storm Water Permit (GIASP)

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

Green Roof

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

Hillside

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

Hydrologic Unit Code (HUC)

A standardized watershed classification system in which each hydrologic unit is identified by a unique hydrologic unit code (HUC). The HUC may consist of an eight (8) to twelve (12) digit number. The 8-digit HUC identifies an area based on four levels of classification: region, sub-region, hydrologic basin, and hydrologic sub-basin. The Watershed Boundary Dataset includes the 12-digit HUC delineation, which further divides each hydrologic unit into watersheds and sub-watersheds based on scientific information and not administrative boundaries. The Watershed Boundary Dataset is the highest resolution and the most detailed

delineation of the watershed boundaries. The mapping precision has been improved to a scale of 1:24,000.

Illicit Connection

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

Illicit Discharge

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

Illicit Disposal

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

Improved drainage system

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

Industrial/Commercial Facility

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

Industrial Park

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

Infiltration BMP

A LID BMP that reduces storm water runoff by capturing and infiltrating the runoff into in-situ soils or amended on-site soils. Examples of infiltration BMPs include infiltration basins, dry wells, and pervious pavement.³

Inland Surface Waters

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

³ Some types of infiltration BMPs such as dry wells, may meet the definition of a Class V, deep well injection facility and may be subject to permitting under U.S. EPA requirements.

Inspection

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

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

In the case of restaurants, a Permittee may conduct an inspection from the curbside, provided that such "curbside" inspection provides the Permittee with adequate information to determine an operator's compliance with BMPs that must be implemented per requirements of this Order, Regional Water Board Resolution No. 98-08, County and municipal ordinances, and the SQMP.

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Institutional Controls

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

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

Large Municipal Separate Storm Sewer System (MS4)

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

Local SWPPP

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

Low Impact Development (LID)

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

Major Outfall

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

Maximum Daily Effluent Limitation (MDEL)

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

Maximum Extent Practicable (MEP)

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

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

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

Median

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

Method Detection Limit (MDL)

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

Minimum Level (ML)

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

Municipal Separate Storm Sewer System (MS4)

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

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

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

(iii) Which is not a combined sewer; and

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

(40 CFR § 122.26(b)(8))

National Pollutant Discharge Elimination System (NPDES)

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

Natural Drainage System

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

New Development

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

Non-Storm Water Discharge

Any discharge into the MS4 or from the MS4 into a receiving water that is not composed entirely of storm water.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Nuisance

Anything that meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.; (3) occurs during, or as a result of, the treatment or disposal of wastes.

Ocean Waters

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Outfall

A point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances with connect segments of the same stream or other waters of the United States and are used to convey waters of the United States. (40 CFR § 122.26(b)(9))

Parking Lot

Land area or facility for the parking or storage of motor vehicles used for businesses, commerce, industry, or personal use, with a lot size of 5,000 square feet or more of surface area, or with 25 or more parking spaces.

Partial Capture Device

Any structural trash control device that has not been certified by the Executive Officer as meeting the "full capture" performance requirements.

Permittee(s)

Co-Permittees and any agency named in this Order as being responsible for permit conditions within its jurisdiction. Permittees to this Order include the Los Angeles County Flood Control District, Los Angeles County, and the cities of Agoura Hills, Alhambra, Arcadia, Artesia, Azusa, Baldwin Park, Bellflower, Bell Gardens, Beverly Hills, Bradbury, Burbank, Calabasas, Carson, Cerritos, Claremont, Commerce, Compton, Covina, Cudahy, Culver City, Diamond Bar, Downey, Duarte, El Monte, El Segundo, Gardena, Glendale, Glendora, Hawaiian Gardens, Hawthorne, Hermosa Beach, Hidden Hills, Huntington Park, Industry, Inglewood, Irwindale, La Canada Flintridge, La Habra Heights, Lakewood, La Mirada, La Puente, La Verne, Lawndale, Lomita, Los Angeles, Lynwood, Malibu, Manhattan Beach, Maywood, Monrovia, Montebello, Monterey Park, Norwalk, Palos Verdes Estates, Paramount, Pasadena, Pico Rivera, Pomona, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, Rosemead, San

Dimas, San Fernando, San Gabriel, San Marino, Santa Clarita, Santa Fe Springs, Santa Monica, Sierra Madre, Signal Hill, South El Monte, South Gate, South Pasadena, Temple City, Torrance, Vernon, Walnut, West Covina, West Hollywood, Westlake Village, and Whittier.

Persistent Pollutants

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Planning Priority Projects

Those projects that are required to incorporate appropriate storm water mitigation measures into the design plan for their respective project. These types of projects include:

1. Ten or more unit homes (includes single family homes, multifamily homes, condominiums, and apartments)
2. A 100,000 or more square feet of impervious surface area industrial/ commercial development (1 ac starting March 2003)
3. Automotive service facilities (SIC 5013, 5014, 5541, 7532-7534, and 7536-7539)
4. Retail gasoline outlets
5. Restaurants (SIC 5812)
6. Parking lots 5,000 square feet or more of surface area or with 25 or more parking spaces
7. Redevelopment projects in subject categories that meet Redevelopment thresholds
8. Projects located in or directly adjacent to or discharging directly to an ESA, which meet thresholds; and 9. Those projects that require the implementation of a site-specific plan to mitigate post-development storm water for new development not requiring a SUSMP but which may potentially have adverse impacts on post-development storm water quality, where the following project characteristics exist:
 - a) Vehicle or equipment fueling areas;
 - b) Vehicle or equipment maintenance areas, including washing and repair;
 - c) Commercial or industrial waste handling or storage;
 - d) Outdoor handling or storage of hazardous materials;
 - e) Outdoor manufacturing areas;
 - f) Outdoor food handling or processing;
 - g) Outdoor animal care, confinement, or slaughter; or
 - h) Outdoor horticulture activities.

Point Source

Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. (40 CFR § 122.2)

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce

all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to California Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollutants

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

Pollution Prevention

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

Potable Water

Water that meets the drinking water standards of the US Environmental Protection Agency.

Project

All development, redevelopment, and land disturbing activities. The term is not limited to "Project" as defined under CEQA (Pub. Resources Code §21065).

Rain Event

Any rain event greater than 0.1 inch in 24 hours except where specifically stated otherwise.

Rainfall Harvest and Use

Rainfall harvest and use is an LID BMP system designed to capture runoff, typically from a roof but can also include runoff capture from elsewhere within the site, and to provide for temporary storage until the harvested water can be used for irrigation or non-potable uses. The harvested water may also be used for potable water uses if the system includes disinfection treatment and is approved for such use by the local building department.

Rare, Threatened, or Endangered Species (RARE)

A beneficial use for waterbodies in the Los Angeles Region, as designated in the Basin Plan (Table 2-1), that supports habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Raw Water

Water that is taken from the environment by drinking water suppliers with the intent to subsequently treat or purify it to produce potable water. Raw water does not include

wastewater discharges from activities that occur at wellheads, such as well construction, well development (i.e., aquifer pumping tests, well purging, etc.), or major well maintenance.

Receiving Water

A “water of the United States” into which waste and/or pollutants are or may be discharged.

Receiving Water Limitation

Any applicable numeric or narrative water quality objective or criterion, or limitation to implement the applicable water quality objective or criterion, for the receiving water as contained in Chapter 3 or 7 of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), water quality control plans or policies adopted by the State Water Board, or federal regulations, including but not limited to, 40 CFR § 131.38.

Redevelopment

Land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of a routine maintenance activity; and land disturbing activities related to structural or impervious surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

Regional Administrator

The Regional Administrator of the Regional Office of the USEPA or the authorized representative of the Regional Administrator.

Reporting Level (RL)

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the State Implementation Policy (SIP) in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Residual Water

In the context of this Order, water remaining in a structural BMP subsequent to the drawdown or drainage period. The residual water typically contains high concentration(s) of pollutants.

Restaurant

A facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

Retail Gasoline Outlet

Any facility engaged in selling gasoline and lubricating oils.

Routine Maintenance

Routine maintenance projects include, but are not limited to projects conducted to:

1. Maintain the original line and grade, hydraulic capacity, or original purpose of the facility.
2. Perform as needed restoration work to preserve the original design grade, integrity and hydraulic capacity of flood control facilities.
3. Includes road shoulder work, regrading dirt or gravel roadways and shoulders and performing ditch cleanouts.
4. Update existing lines* and facilities to comply with applicable codes, standards, and regulations regardless if such projects result in increased capacity.
5. Repair leaks

Routine maintenance does not include construction of new** lines or facilities resulting from compliance with applicable codes, standards and regulations.

* Update existing lines includes replacing existing lines with new materials or pipes.

** New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines.

Runoff

Any runoff including storm water and dry weather flows from a drainage area that reaches a receiving water body or subsurface. During dry weather it is typically comprised of base flow either contaminated with pollutants or uncontaminated, and nuisance flows.

Screening

Using proactive methods to identify illicit connections through a continuously narrowing process. The methods may include: performing baseline monitoring of open channels, conducting special investigations using a prioritization approach, analyzing maintenance records for catch basin and storm drain cleaning and operation, and verifying all permitted connections into the storm drains. Special investigation techniques may include: dye testing, visual inspection, smoke testing, flow monitoring, infrared, aerial and thermal photography, and remote control camera operation.

Sidewalk Rinsing

Means pressure washing of paved pedestrian walkways with average water usage of 0.006 gallons per square foot, with no cleaning agents, and properly disposing of all debris collected, as authorized under Regional Water Board Resolution No. 98-08.

Significant Ecological Areas (SEAs)

An area that is determined to possess an example of biotic resources that cumulatively represent biological diversity, for the purposes of protecting biotic diversity, as part of the Los Angeles County General Plan.

Areas are designated as SEAs, if they possess one or more of the following criteria:

1. The habitat of rare, endangered, and threatened plant and animal species.
2. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.

3. Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind or are restricted in distribution in Los Angeles County.
4. Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or within Los Angeles County.
5. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent an unusual variation in a population or community.
6. Areas important as game species habitat or as fisheries.
7. Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.
8. Special areas.

Significant Natural Area (SNA)

An area defined by the California Department of Fish and Game (DFG), Significant Natural Areas Program, as an area that contains an important example of California's biological diversity. The most current SNA maps, reports, and descriptions can be downloaded from the DFG website at <ftp://maphost.dfg.ca.gov/outgoing/whdab/sna/>. These areas are identified using the following biological criteria only, irrespective of any administrative or jurisdictional considerations:

1. Areas supporting extremely rare species or habitats.
2. Areas supporting associations or concentrations of rare species or habitats.
3. Areas exhibiting the best examples of rare species and habitats in the state

Site

The land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

Source Control BMP

Any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

SQMP

The Los Angeles Countywide Stormwater Quality Management Program.

Standard Deviation (Σ)

Standard Deviation is a measure of variability that is calculated as follows:

$$\Sigma = \left(\frac{\sum[(x - \bar{x})^2]}{n - 1} \right)^{0.5}$$

where:

x is the observed value;

\bar{x} is the arithmetic mean of the observed values; and

n is the number of samples.

State Storm Water Pollution Prevention Plan (State SWPPP)

A plan, as required by a State General Permit, identifying potential pollutant sources and describing the design, placement and implementation of BMPs, to effectively prevent non-stormwater Discharges and reduce Pollutants in Stormwater Discharges during activities covered by the General Permit.

Storm Water

Storm water runoff, snow melt runoff, and surface runoff and drainage related to precipitation events (pursuant to 40 CFR § 122.26(b)(13); 55 Fed. Reg. 47990, 47995 (Nov. 16, 1990)).

Storm Water Discharge Associated with Industrial Activity

Industrial discharge as defined in 40 CFR 122.26(b)(14).

Stormwater Quality Management Program

The Los Angeles Countywide Stormwater Quality Management Program, which includes descriptions of programs, collectively developed by the Permittees in accordance with provisions of the NPDES Permit, to comply with applicable federal and state law, as the same is amended from time to time.

Structural BMP

Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

SUSMP

The Los Angeles Countywide Standard Urban Stormwater Mitigation Plan. The SUSMP shall address conditions and requirements of new development.

Total Maximum Daily Load (TMDL)

The sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background.

Toxicity Identification Evaluation (TIE)

A set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Trash Excluders

Any structural trash control device that prevents the discharge of trash to the storm drain system or to receiving waters. A trash exclude may or may not be certified by the Executive Officer as meeting the “full capture” performance requirements.

Treatment

The application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media absorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

Treatment Control BMP

Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Unconfined ground water infiltration

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

Uncontaminated Ground Water Infiltration

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

USEPA Phase I Facilities

Facilities in specified industrial categories that are required to obtain an NPDES permit for storm water discharges, as required by 40 CFR 122.26(c). These categories include:

- i. facilities subject to storm water effluent limitation guidelines, new source performance standards, or toxic pollutant effluent standards (40 CFR N)
- ii. manufacturing facilities
- iii. oil and gas/mining facilities
- iv. hazardous waste treatment, storage, or disposal facilities
- v. landfills, land application sites, and open dumps
- vi. recycling facilities
- vii. steam electric power generating facilities
- viii. transportation facilities
- ix. sewage of wastewater treatment works
- x. light manufacturing facilities

Vehicle Maintenance/Material Storage Facilities/Corporation Yards

Any Permittee owned or operated facility or portion thereof that:

- i. Conducts industrial activity, operates equipment, handles materials, and provides services similar to Federal Phase I facilities;
- ii. Performs fleet vehicle service/maintenance on ten or more vehicles per day including repair, maintenance, washing, and fueling;
- iii. Performs maintenance and/or repair of heavy industrial machinery/equipment; and

- iv. Stores chemicals, raw materials, or waste materials in quantities that require a hazardous materials business plan or a Spill Prevention, Control, and Countermeasures (SPCC) plan.

Water Quality-based Effluent Limitation

Any restriction imposed on quantities, discharge rates, and concentrations of pollutants, which are discharged from point sources to waters of the U.S. necessary to achieve a water quality standard.

Waters of the State

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

Waters of the United States or Waters of the U.S.

- a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- b. All interstate waters, including interstate "wetlands";
- c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - 1. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - 2. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - 3. Which are used or could be used for industrial purposes by industries in interstate commerce;
- d. All impoundments of waters otherwise defined as waters of the United States under this definition;
- e. Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- f. The territorial sea; and
- g. "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (a) through (f) of this definition.

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

Wet Season

The calendar period beginning October 1 through April 15.

ACRONYMS AND ABBREVIATIONS

AMEL	Average Monthly Effluent Limitation
ASBS	Areas of Special Biological Significance
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	<i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	Best Management Practices Plan
BPJ	Best Professional Judgment
BOD	Biochemical Oxygen Demand 5-day @ 20 °C
BPT	Best Practicable Treatment Control Technology
C	Water Quality Objective
CCR	California Code of Regulations
CEEIN	California Environmental Education Interagency Network
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Clean Water Act
CWC	California Water Code
Discharger	Los Angeles County MS4 Permittees
DMR	Discharge Monitoring Report
DNQ	Detected But Not Quantified
ELAP	California Department of Public Health Environmental Laboratory Accreditation Program
ELG	Effluent Limitations, Guidelines and Standards
Ep	Erosion potential
ESCP	Erosion and Sediment Control Plan
EWMP	Enhanced Watershed Management Program
Facility	Los Angeles County MS4s
GIS	Geographical Information System
gpd	gallons per day
HUC	Hydrologic Unit Code
IC	Inhibition Coefficient
IC ₁₅	Concentration at which the organism is 15% inhibited
IC ₂₅	Concentration at which the organism is 25% inhibited
IC ₄₀	Concentration at which the organism is 40% inhibited
IC ₅₀	Concentration at which the organism is 50% inhibited
IC/ID	Illicit Connection and Illicit Discharge Elimination
IPM	Integrated Pest Management
LA	Load Allocations
LID	Low Impact Development
LOEC	Lowest Observed Effect Concentration
LUPs	Linear Underground/Overhead Projects

µg/L	micrograms per Liter
MCM	Minimum Control Measure
mg/L	milligrams per Liter
MDEL	Maximum Daily Effluent Limitation
MEC	Maximum Effluent Concentration
MGD	Million Gallons Per Day
ML	Minimum Level
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NAICS	North American Industry Classification System
ND	Not Detected
NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NTR	National Toxics Rule
OAL	Office of Administrative Law
PIPP	Public Information and Participation Program
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
QA	Quality Assurance
QA/QC	Quality Assurance/Quality Control
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i>
RAP	Reasonable Assurance Program
REAP	Rain Event Action Plan
Regional Water Board	California Regional Water Quality Control Board, Los Angeles Region
RGOs	Retail Gasoline Outlets
RPA	Reasonable Potential Analysis
SCP	Spill Contingency Plan
SEA	Significant Ecological Area
SIC	Standard Industrial Classification
SIP	State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>)
SMR	Self Monitoring Reports
State Water Board	California State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
SWQDv	Storm Water Quality Design Volume
SWQPA	State Water Quality Protected Area
TAC	Test Acceptability Criteria
Thermal Plan	<i>Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California</i>
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load

TOC	Total Organic Carbon
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document
TSS	Total Suspended Solid
TU _c	Chronic Toxicity Unit
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WDID	Waste Discharge Identification
WET	Whole Effluent Toxicity
WLA	Waste Load Allocations
WMA	Watershed Management Area
WMP	Watershed Management Program
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standards
%	Percent

MS4 Discharges within the
Coastal Watersheds of Los Angeles County

ORDER NO. R4-2012-0175
NPDES NO. CAS004001

ATTACHMENT B – WATERSHED MANAGEMENT AREA MAPS

SANTA CLARA RIVER

- 5. Between West Pier Highway 99 and Blue Cut gauging station
- 6. Between Bouquet Canyon Road Bridge and West Pier Highway 99
- 7. Between Lang gauging station and Bouquet Canyon Road Bridge
- 8. Above Lang gauging station
- 9. SANTA PAULA CREEK above Santa Paula Water Works Diversion Dam
- 10. SESPE CREEK above gauging station, 500' downstream from Little Sespe Creek
- 11. PIRU CREEK above gauging station below Santa Felicia Dam

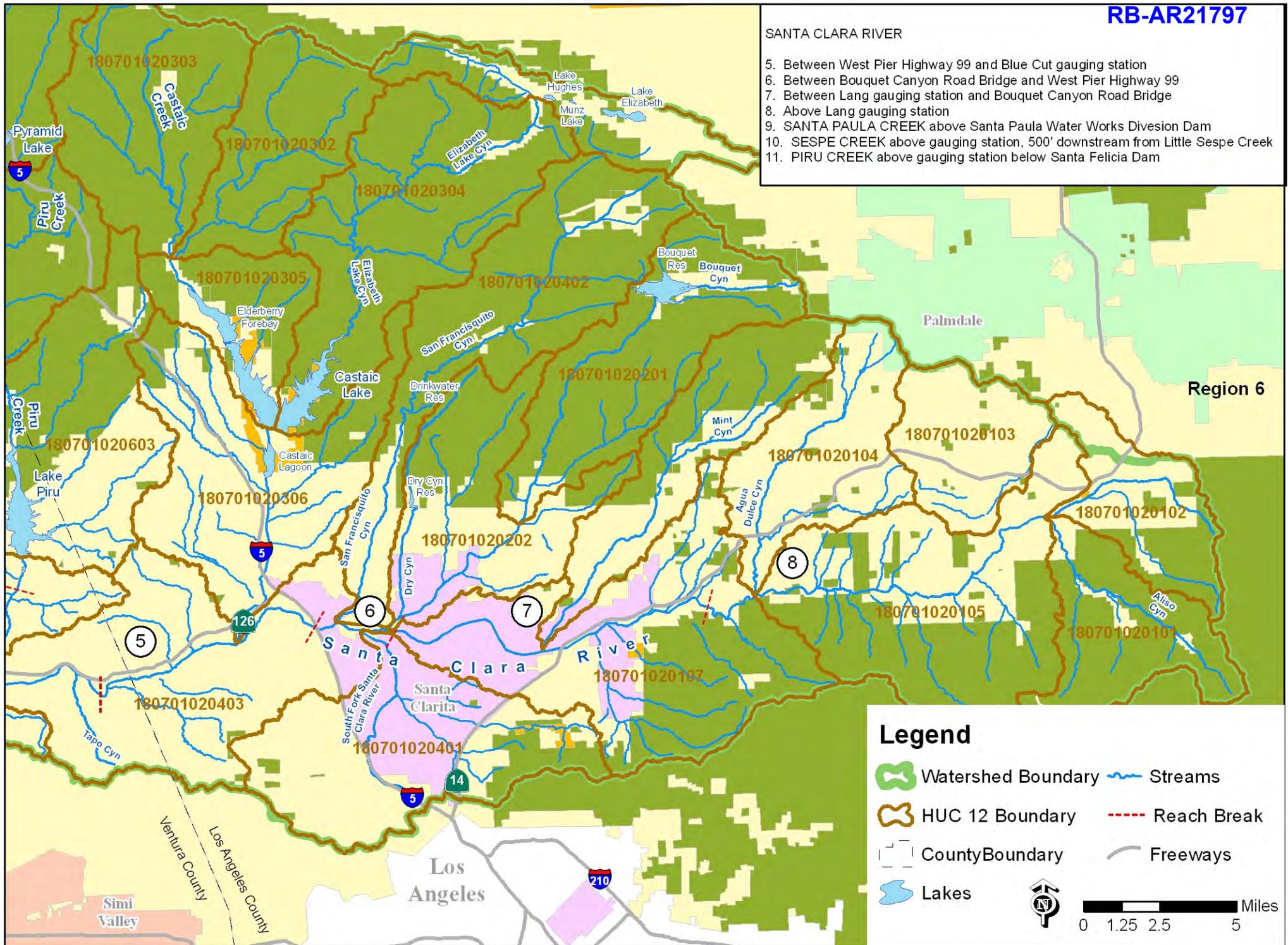


Figure B-1: Upper Santa Clara River Watershed Management Area Hydrologic Units.



Figure B-2: Santa Monica Bay Watershed Management Area Hydrologic Units.

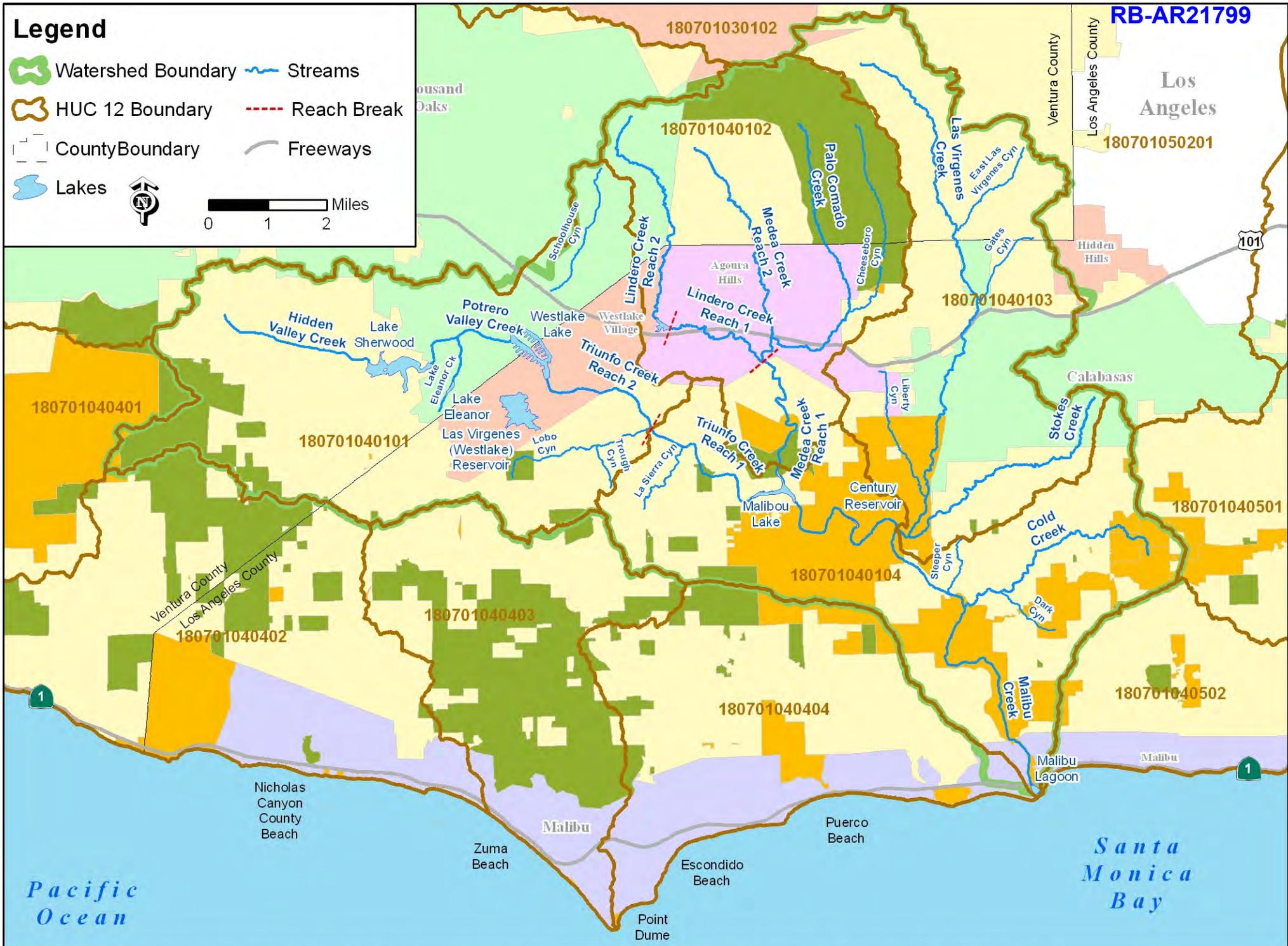


Figure B-2a: Malibu Creek Watershed Hydrologic Units (Santa Monica Bay WMA).

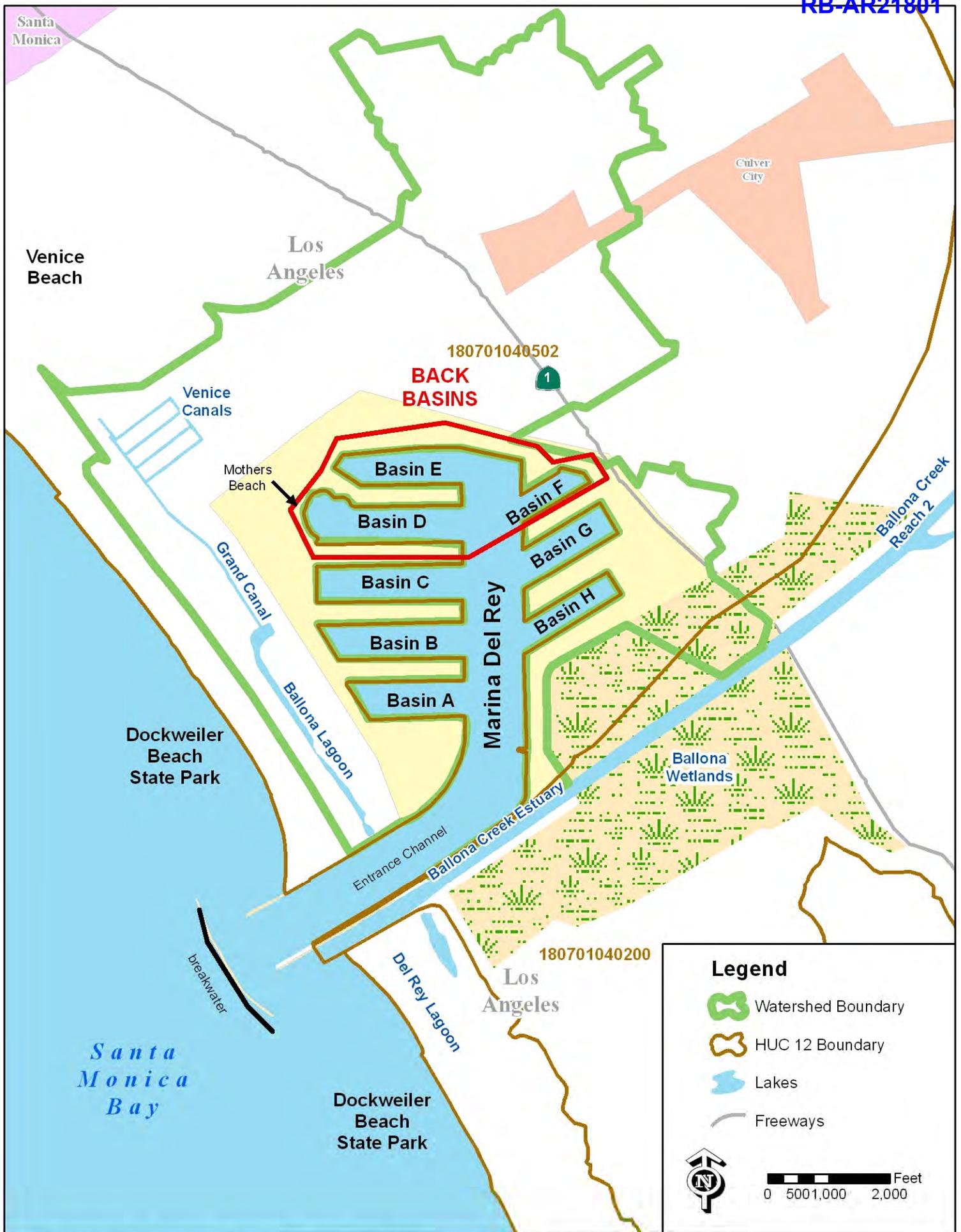


Figure B-2c: Marina Del Rey Watershed Hydrologic Units (Santa Monica Bay WMA).

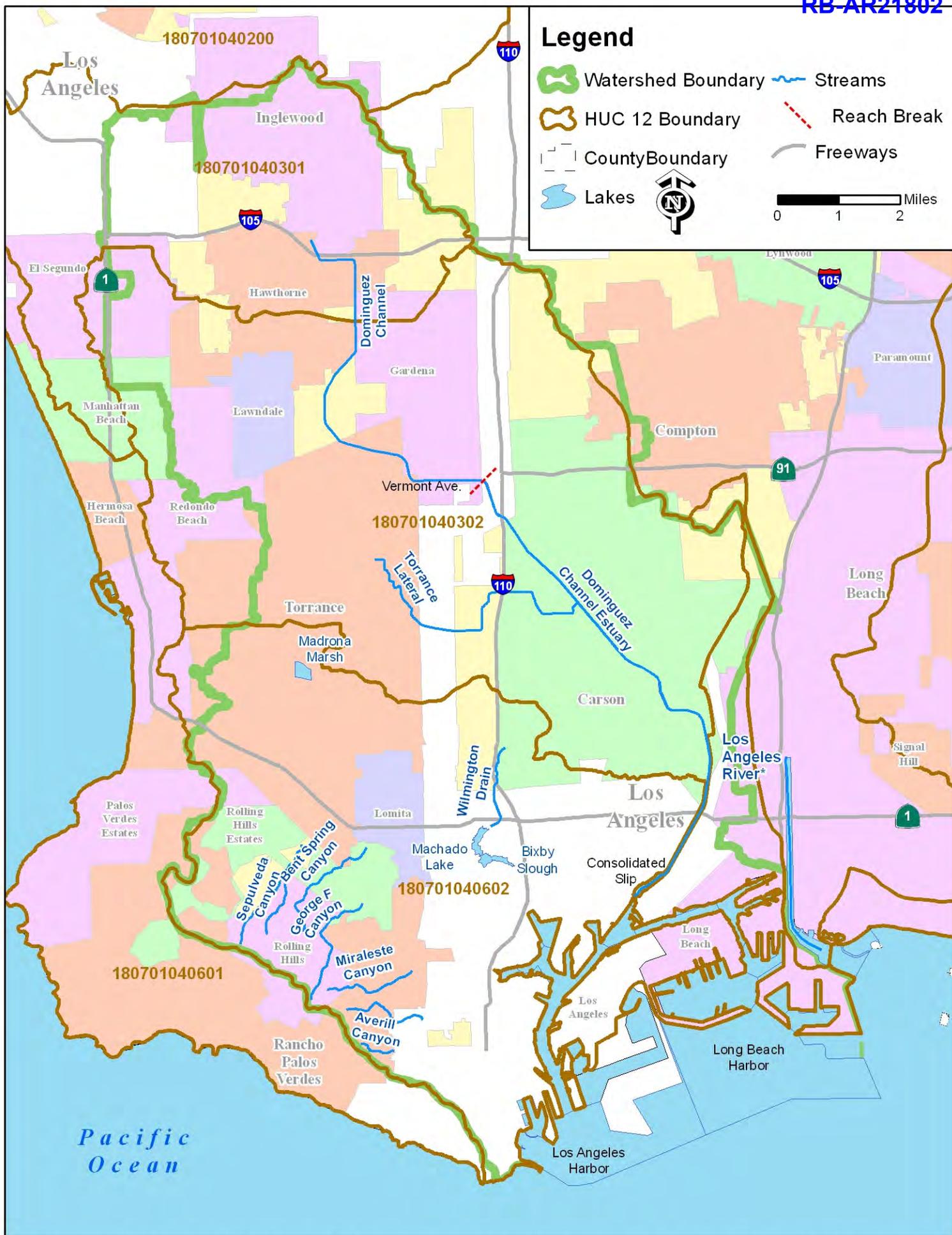


Figure B-3: Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area Hydrologic Units.

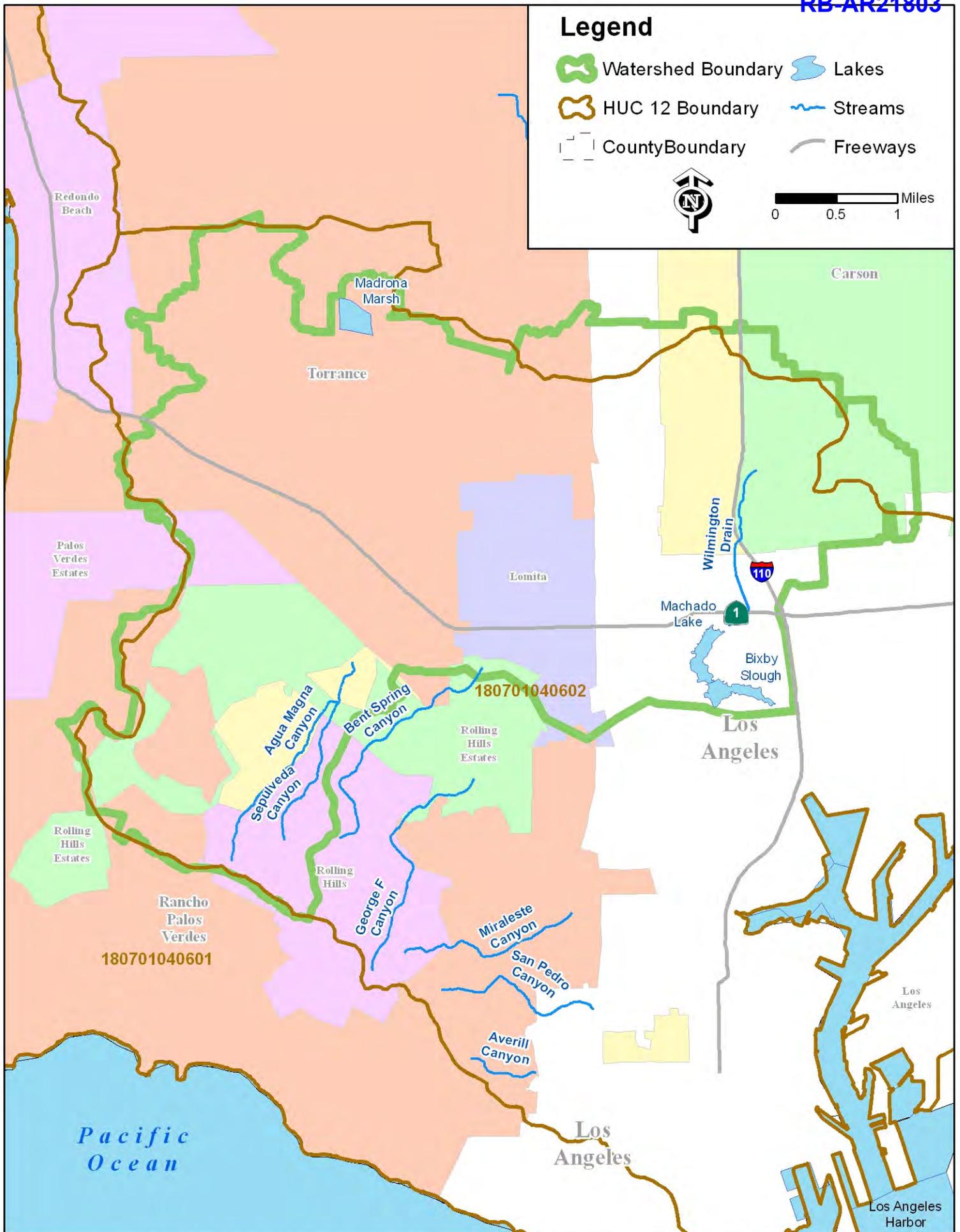


Figure B-3a: Machado Lake Watershed Hydrologic Units (Dominguez Channel & LA/LB Harbors WMA).



Figure B-4: Los Angeles River Watershed Management Area Hydrologic Units.

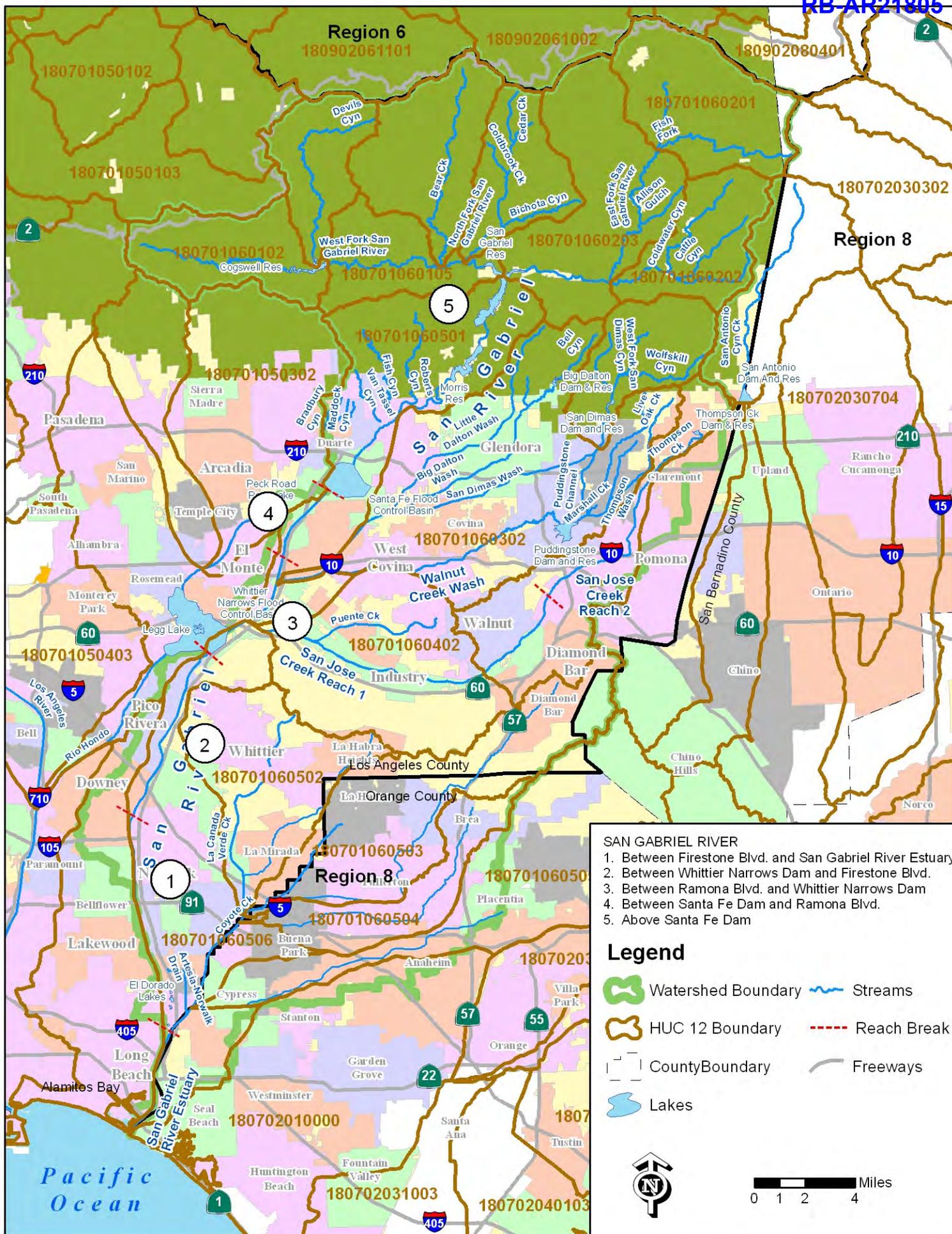


Figure B-5: San Gabriel River Watershed Management Area Hydrologic Units.

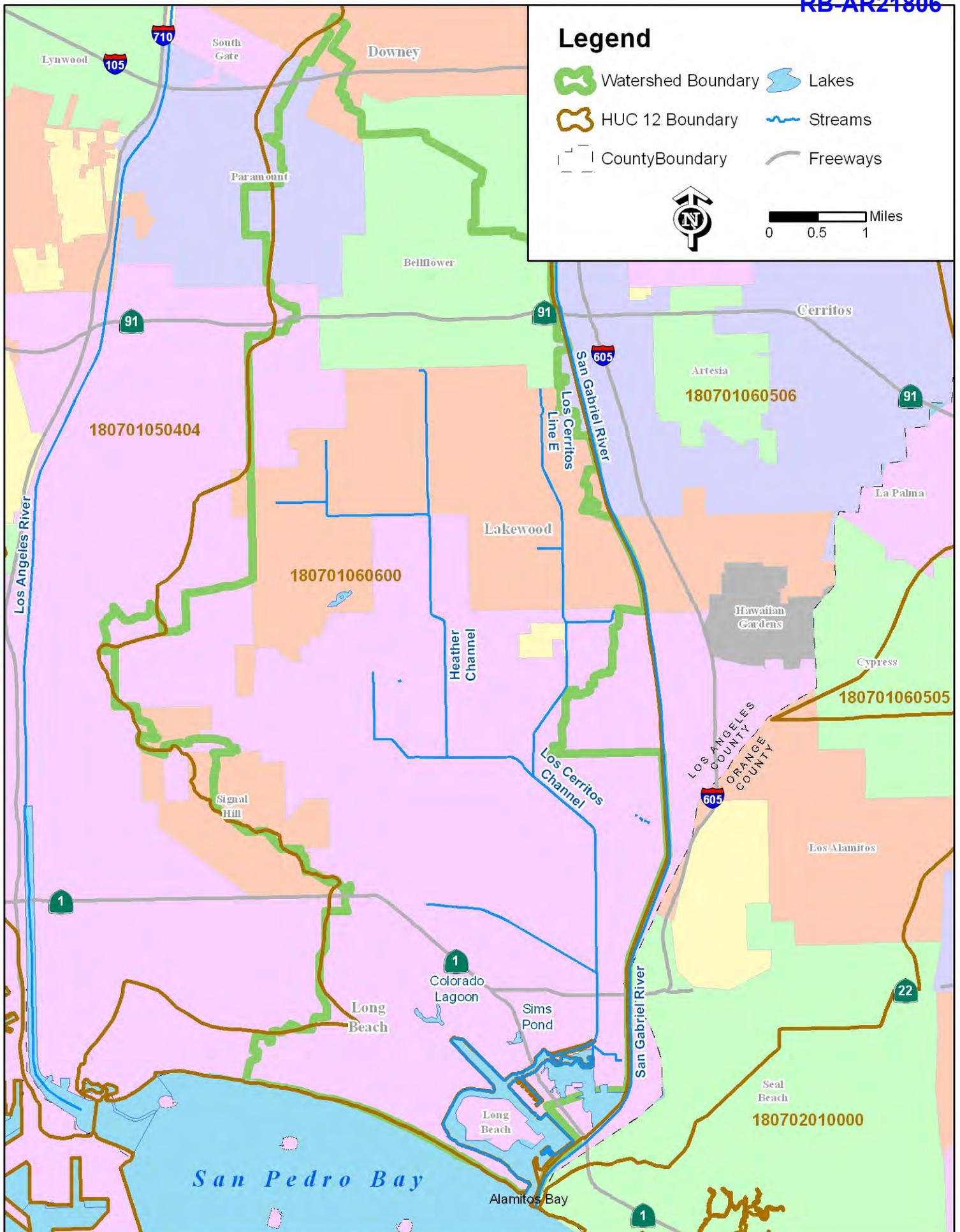


Figure B-6: Los Cerritos Channel and Alamitos Bay Watershed Management Area Hydrologic Units.

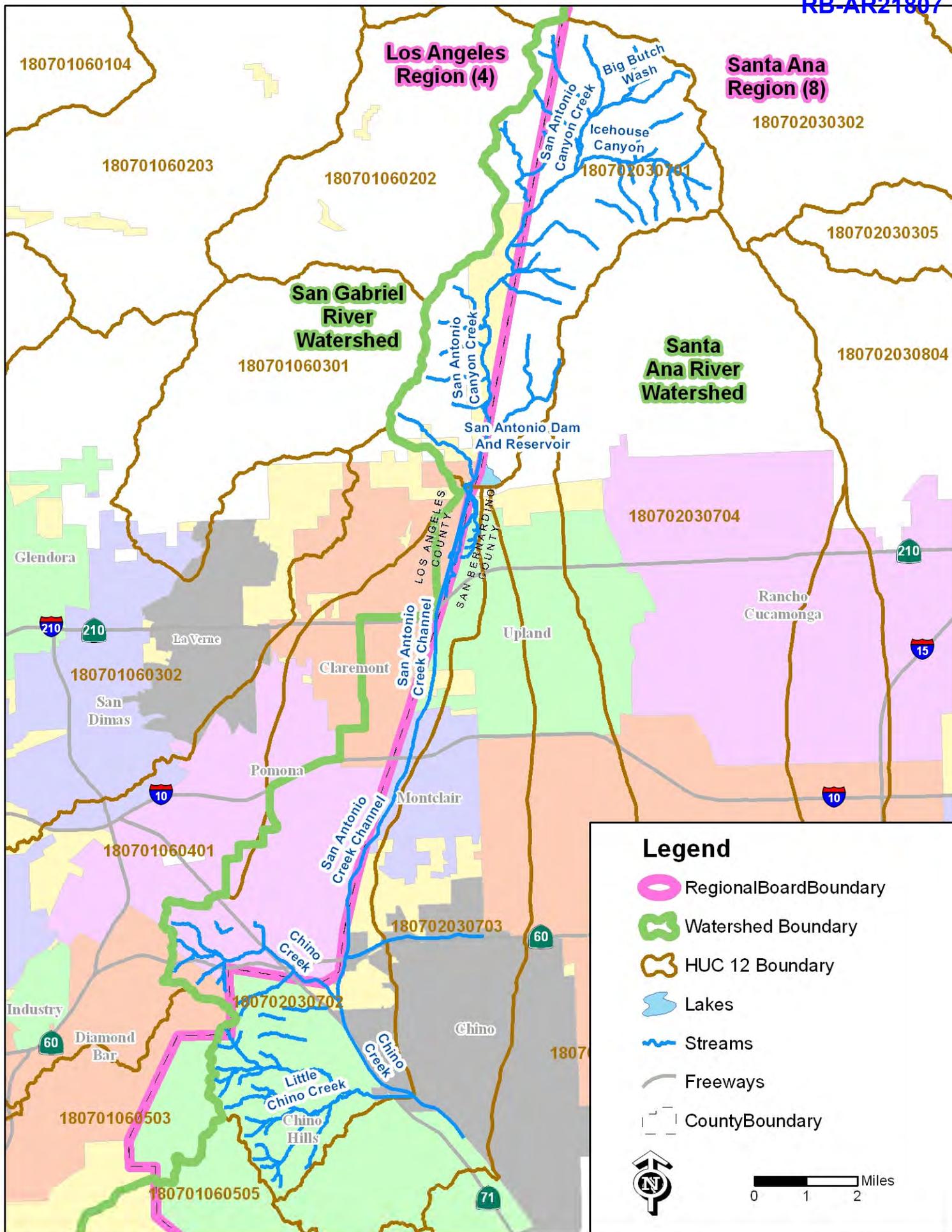


Figure B-7: Middle San Antonio Creek Subwatershed Hydrologic Units.

ATTACHMENT C – MS4 MAPS BY WATERSHED MANAGEMENT AREA

SANTA CLARA RIVER

- 5. Between West Pier Highway 99 and Blue Cut gauging station
- 6. Between Bouquet Canyon Road Bridge and West Pier Highway 99
- 7. Between Lang gauging station and Bouquet Canyon Road Bridge
- 8. Above Lang gauging station
- 9. SANTA PAULA CREEK above Santa Paula Water Works Diversion Dam
- 10. SESPE CREEK above gauging station, 500' downstream from Little Sespe Creek
- 11. PIRU CREEK above gauging station below Santa Felicia Dam

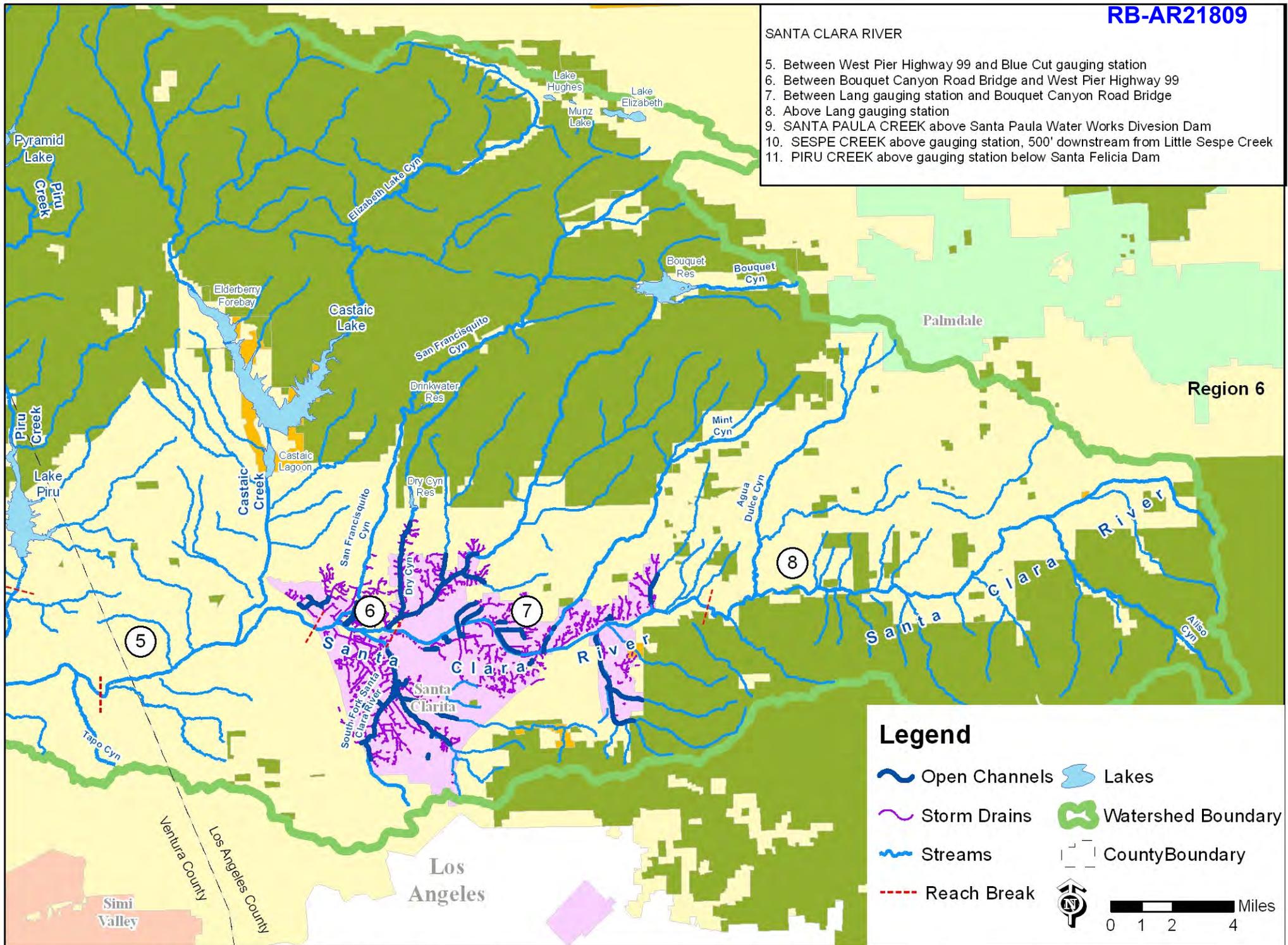


Figure C-1: Upper Santa Clara River Watershed Management Area Flow Schematic.

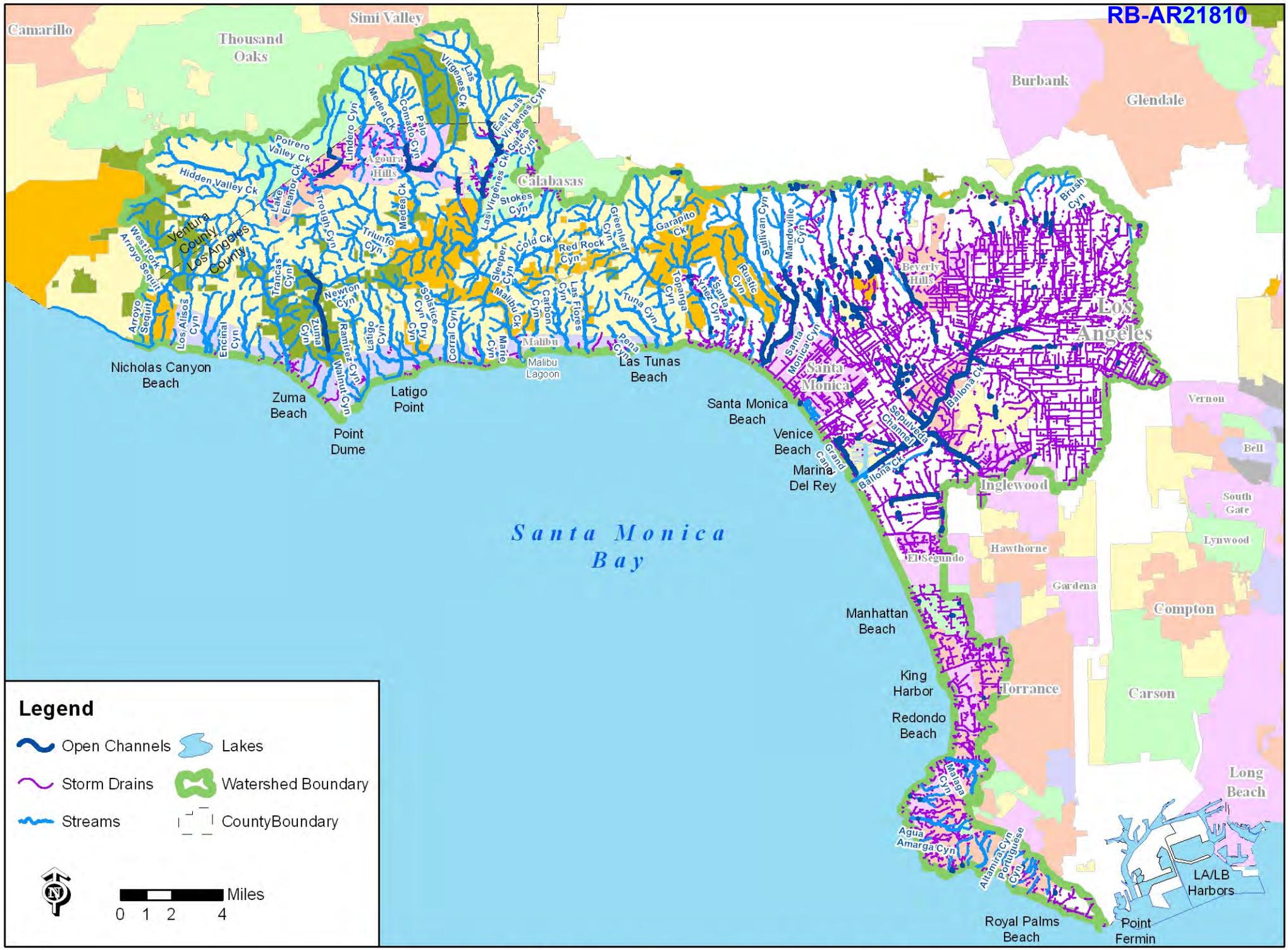


Figure C-2: Santa Monica Bay Watershed Management Area Flow Schematic.

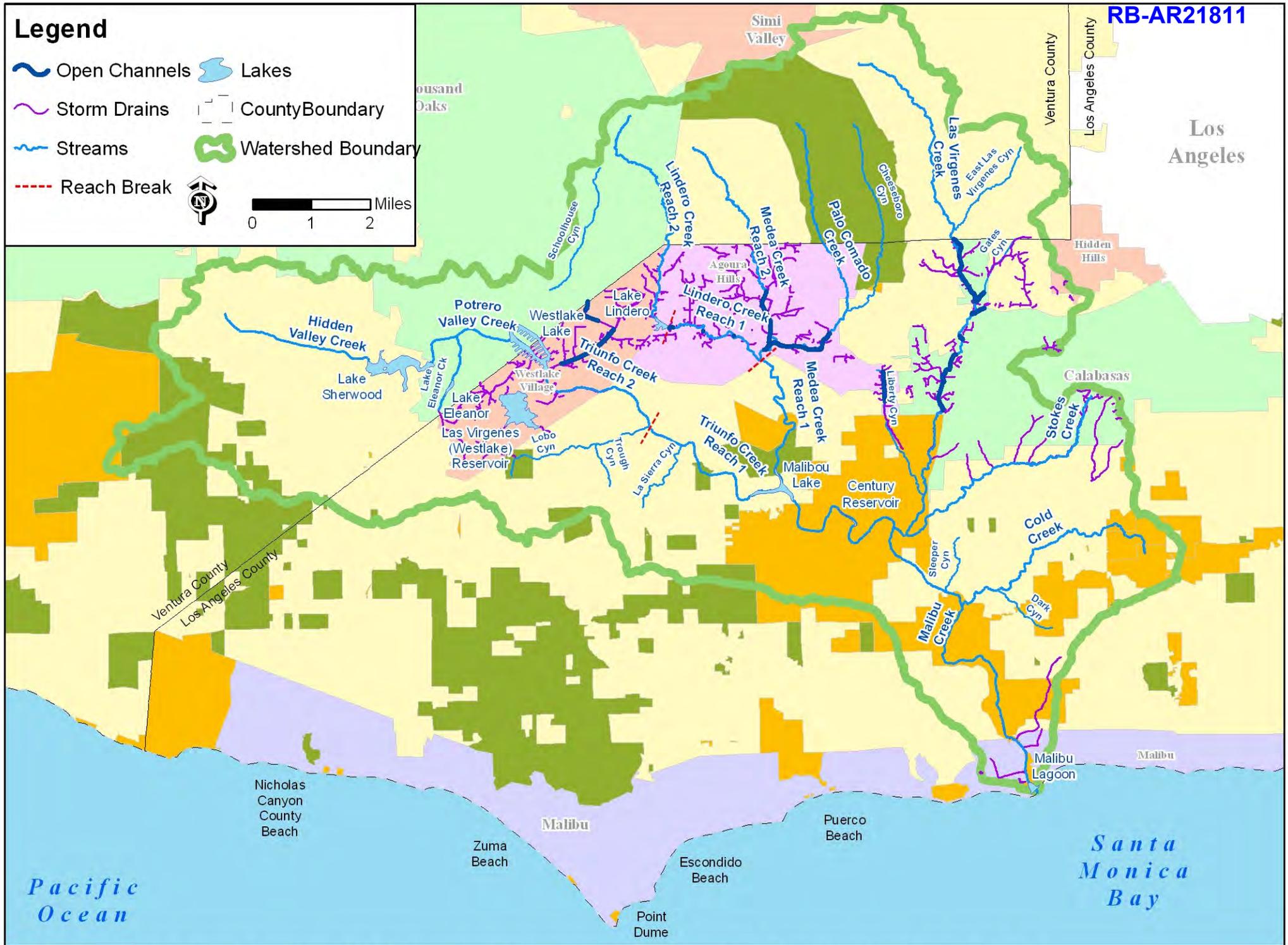


Figure C-2a: Malibu Creek Watershed Flow Schematic (Santa Monica Bay WMA).

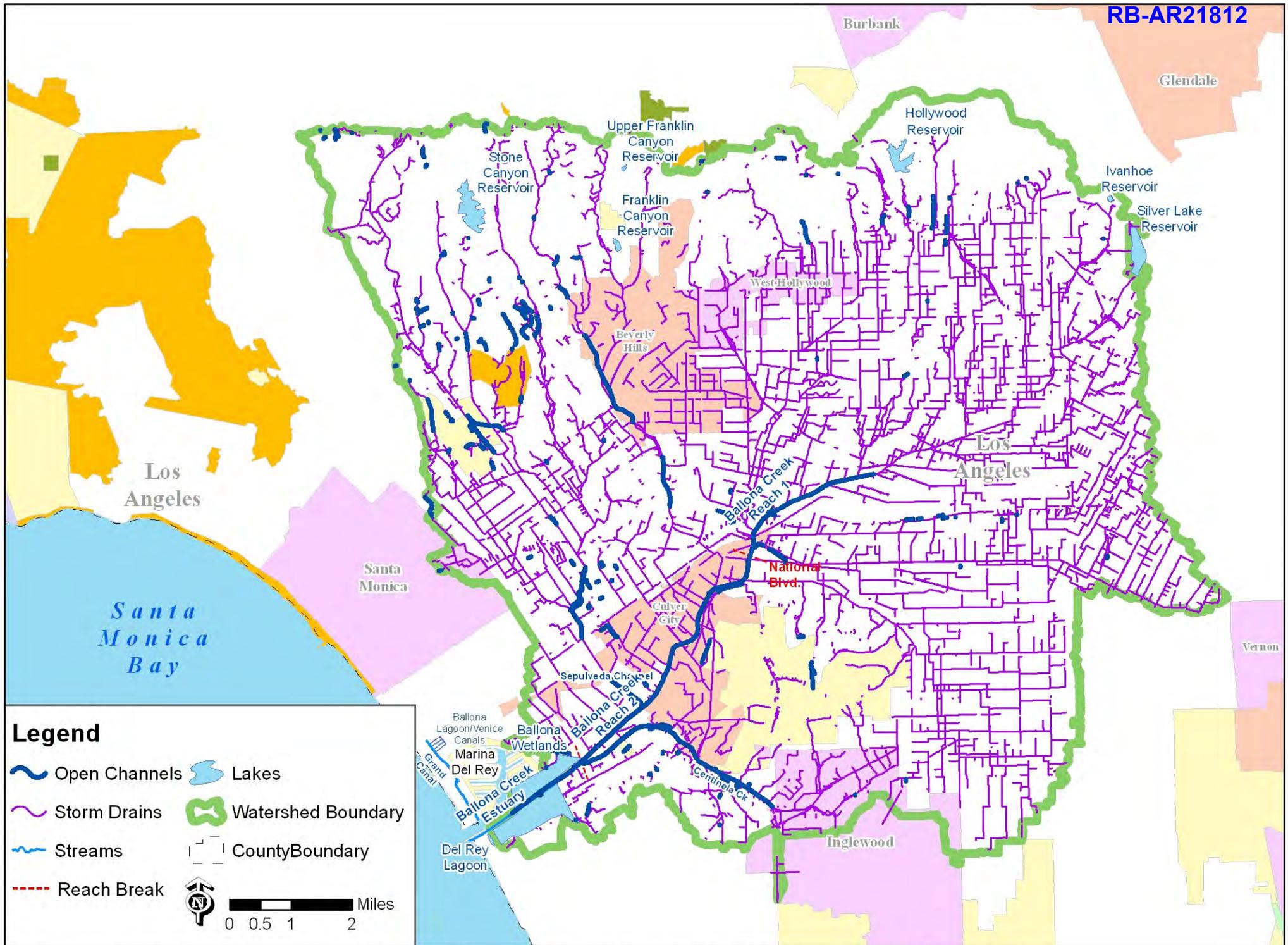


Figure C-2b: Ballona Creek Watershed Flow Schematic (Santa Monica Bay WMA).



Figure C-2c: Marina Del Rey Watershed Flow Schematic (Santa Monica Bay WMA).

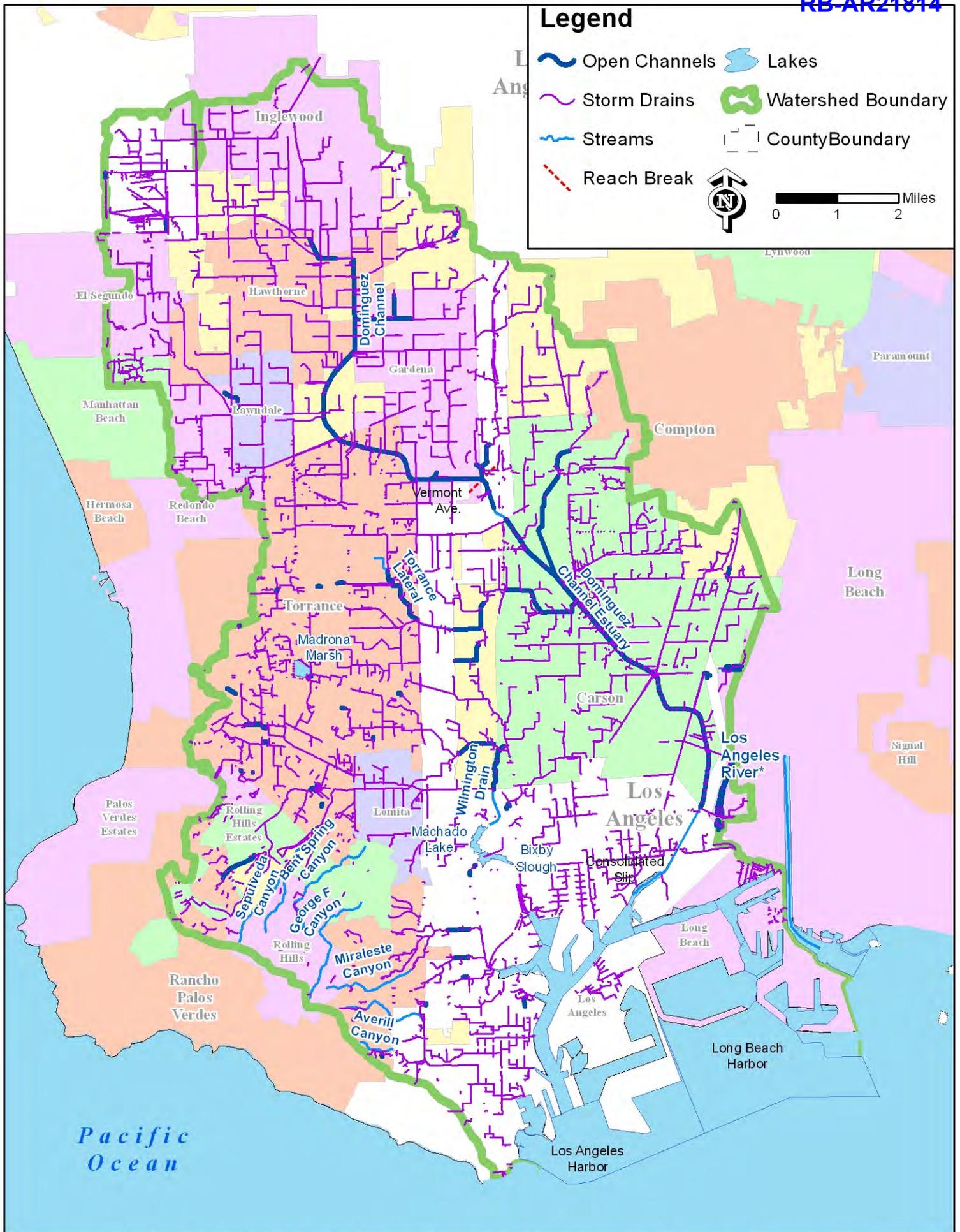


Figure C-3: Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area Flow Schematic.

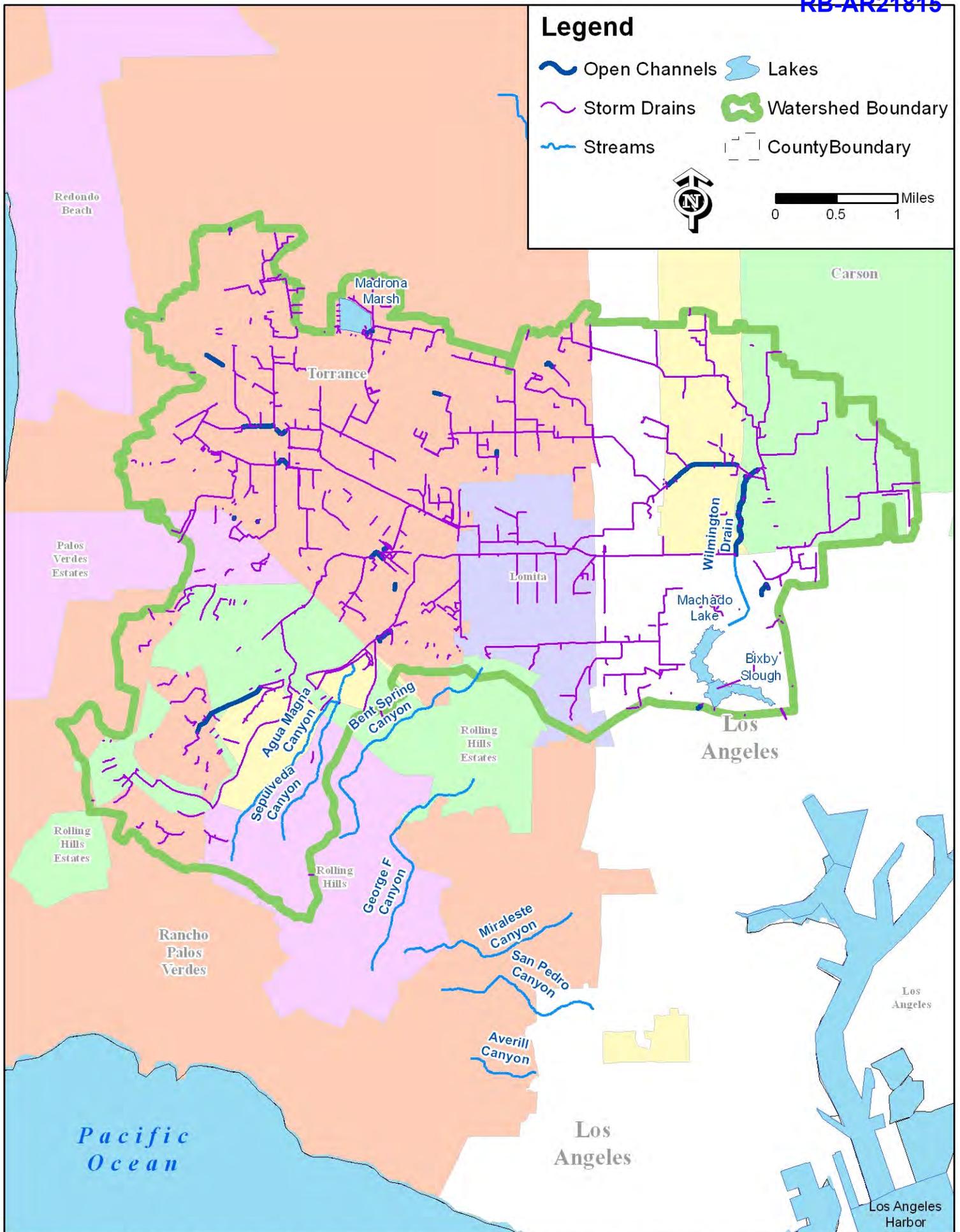
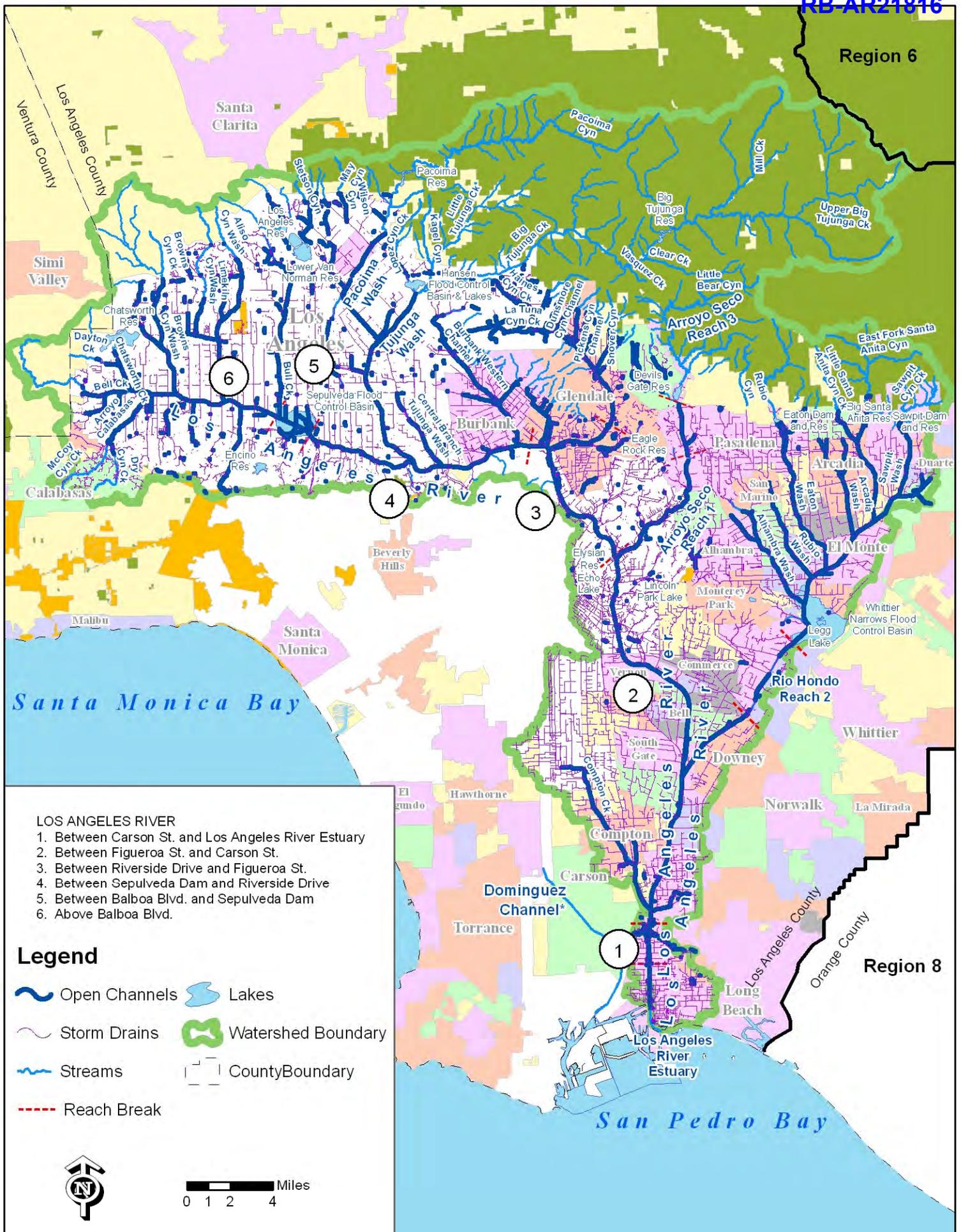


Figure C-3a: Machado Lake Watershed Flow Schematic (Dominguez Channel & LA/LB Harbors WMA).



- LOS ANGELES RIVER**
1. Between Carson St. and Los Angeles River Estuary
 2. Between Figueroa St. and Carson St.
 3. Between Riverside Drive and Figueroa St.
 4. Between Sepulveda Dam and Riverside Drive
 5. Between Balboa Blvd. and Sepulveda Dam
 6. Above Balboa Blvd.

Legend

- Open Channels
- Lakes
- Storm Drains
- Watershed Boundary
- Streams
- County Boundary
- Reach Break



0 1 2 4 Miles

Figure C-4: Los Angeles River Watershed Management Area Flow Schematic.

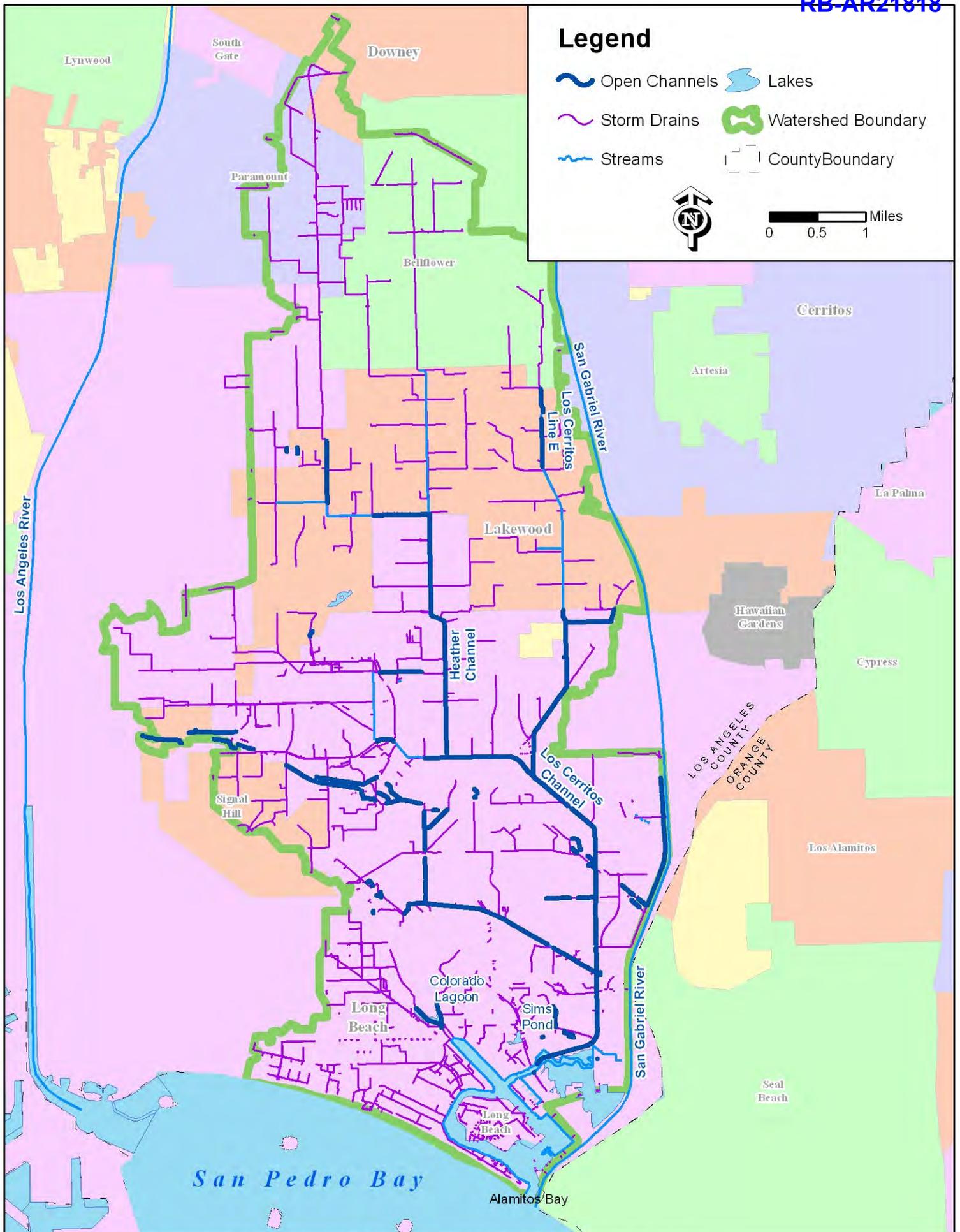


Figure C-6: Los Cerritos Channel and Alamitos Bay Watershed Management Area Flow Schematic.

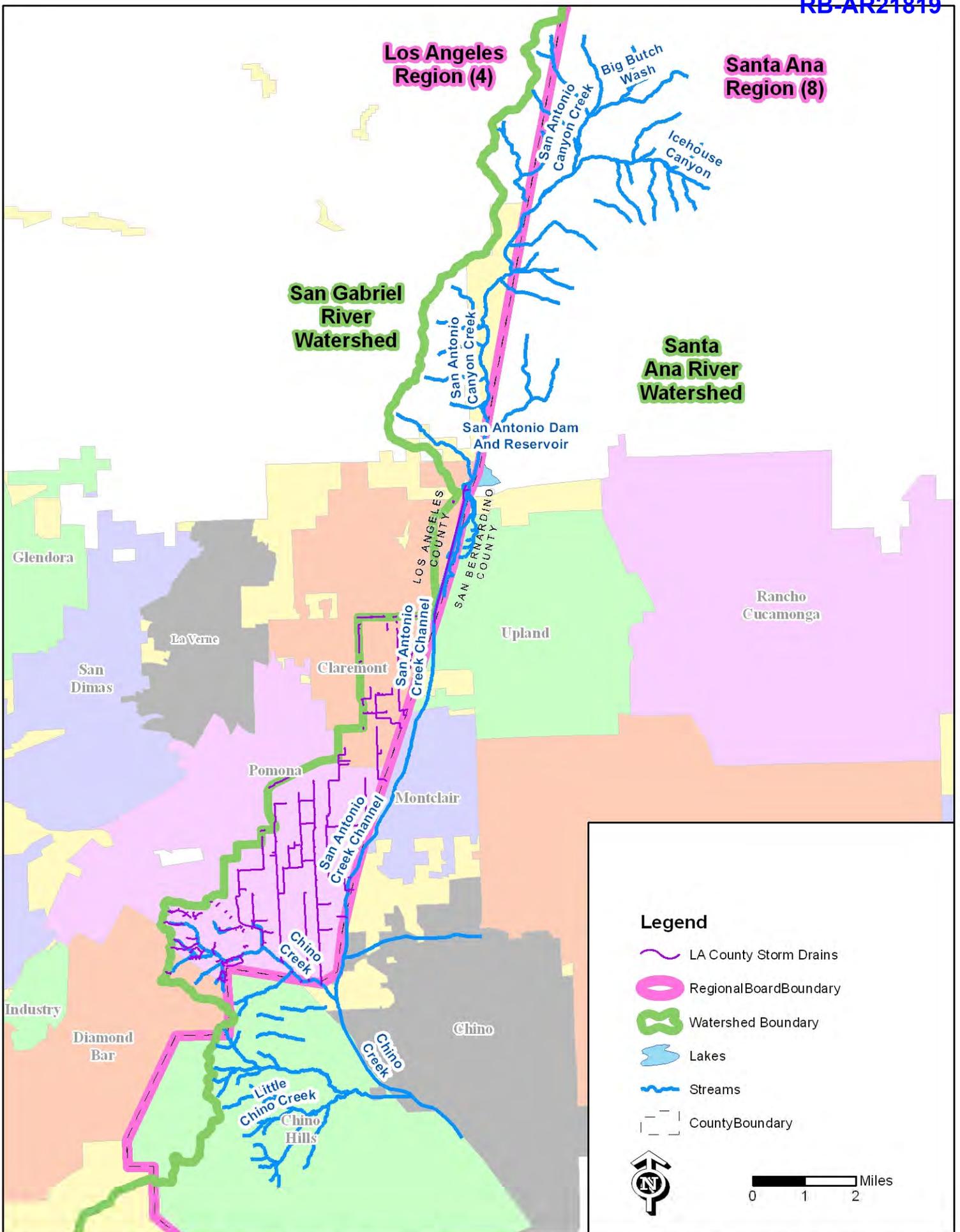


Figure C-7: Middle San Antonio Creek Subwatershed Flow Schematic.

ATTACHMENT D – STANDARD PROVISIONS**I. STANDARD PROVISIONS – PERMIT COMPLIANCE****A. Duty to Comply**

1. Dischargers must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act, its regulations, and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof [40 CFR section 122.41(a); California Water Code sections 13261, 13263, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350, 13385].
2. Dischargers must comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [40 CFR section 122.41(a)(1)].

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 CFR section 122.41(c)].

C. Duty to Mitigate

Dischargers shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR section 122.41(d)].

D. Proper Operation and Maintenance

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

E. Property Rights

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

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

F. Inspection and Entry

Dischargers shall allow the Regional Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [33 U.S.C. section 1318(a)(4)(B); 40 CFR section 122.41(i); California Water Code sections 13267 and 13383]:

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [33 U.S.C. section 1318(a)(4)(B)(i); 40 CFR section 122.41(i)(1); California Water Code sections 13267 and 13383];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [33 U.S.C. section 1318(a)(4)(B)(ii); 40 CFR section 122.41(i)(2); California Water Code sections 13267 and 13383];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [33 U.S.C. section 1318(a)(4)(B)(ii); 40 CFR section 122.41(i)(3); California Water Code sections 13267 and 13383; and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the California Water Code, any substances or parameters at any location [33 U.S.C. section 1318(a)(4)(B)(ii); 40 CFR section 122.41(i)(4); California Water Code sections 13267 and 13383].

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR section 122.41(m)(1)(i)].
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR section 122.41(m)(1)(ii)].
2. *Bypass not exceeding limitations.* Dischargers may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is also for essential maintenance to assure efficient operation. These bypasses are not subject to the

provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below [40 CFR section 122.41(m)(2)].

3. *Prohibition of bypass.* Bypass is prohibited, and the Regional Water Board may take enforcement action against a Permittee for bypass, unless [40 CFR section 122.41(m)(4)(i)]:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR section 122.41(m)(4)(i)(A)];
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR section 122.41(m)(4)(i)(B)]; and
 - c. The Permittee submitted notices to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below [40 CFR section 122.41(m)(4)(i)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR section 122.41(m)(4)(ii)].
5. Notice
 - a. *Anticipated bypass.* If a Permittee knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR section 122.41(m)(3)(i)].
 - b. *Unanticipated bypass.* Dischargers shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice) [40 CFR section 122.41(m)(3)(ii)].

H. Upset

“Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR section 122.41(n)(1)].

1. *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the

requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR section 122.41(n)(2)].

2. *Conditions necessary for a demonstration of upset.* A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR section 122.41(n)(3)]:
 - a. An upset occurred and that the Permittee can identify the cause(s) of the upset [40 CFR section 122.41(n)(3)(i)];
 - b. The permitted facility was, at the time, being properly operated [40 CFR section 122.41(n)(3)(ii)];
 - c. The Permittee submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [40 CFR section 122.41(n)(3)(iii)]; and
 - d. The Permittee complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR section 122.41(n)(3)(iv)].
3. *Burden of proof.* In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof [40 CFR section 122.41(n)(4)].

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

If a Permittee wishes to continue an activity regulated by this Order after the expiration date of this Order, the Permittee must apply for and obtain a new permit [40 CFR section 122.41(b)].

C. Transfers

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

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR section 122.41(j)(1)].
- B. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 for the analysis of pollutants unless another test procedure is required under 40 CFR subchapters N or O or is otherwise specified in this Order for such pollutants [40 CFR sections 122.41(j)(4) and 122.44(i)(1)(iv)].

IV. STANDARD PROVISIONS – RECORDS

- A. Except for records of monitoring information required by this Order related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR section 122.41(j)(2)].
- B. Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements [40 CFR section 122.41(j)(3)(i)];
 - 2. The individual(s) who performed the sampling or measurements [40 CFR section 122.41(j)(3)(ii)];
 - 3. The date(s) analyses were performed [40 CFR section 122.41(j)(3)(iii)];
 - 4. The individual(s) who performed the analyses [40 CFR section 122.41(j)(3)(iv)];
 - 5. The analytical techniques or methods used [40 CFR section 122.41(j)(3)(v)]; and
 - 6. The results of such analyses [40 CFR section 122.41(j)(3)(vi)].
- C. Claims of confidentiality for the following information will be denied [40 CFR section 122.7(b)]:
 - 1. The name and address of any permit applicant or Permittee [40 CFR section 122.7(b)(1)]; and
 - 2. Permit applications and attachments, permits, and effluent data [40 CFR section 122.7(b)(2)].

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

Dischargers shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, Dischargers shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [40 CFR section 122.41(h); California Water Code section 13383].

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below [40 CFR section 122.41(k)(1)].
2. All applications submitted to the Regional Water Board shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer includes: (i) the chief executive officer of the agency (e.g., Mayor), or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., City Manager, Director of Public Works, City Engineer, etc.).[40 CFR section 122.22(a)(3)].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [40 CFR section 122.22(b)(1)];
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [40 CFR section 122.22(b)(2)]; and
 - c. The written authorization is submitted to the Regional Water Board [40 CFR section 122.22(b)(3)].
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard

Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR section 122.22(c)].

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” [40 CFR section 122.22(d)].

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 CFR section 122.41(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [40 CFR section 122.41(l)(4)(i)].
3. If a Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR section 122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified by the Regional Water Board in this Order [40 CFR section 122.41(l)(4)(iii)].

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date [40 CFR section 122.41(l)(5)].

E. Twenty-Four Hour Reporting

1. Dischargers shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR section 122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR section 122.41(l)(6)(ii)]:
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR sections 122.41(l)(6)(ii)(A) and 122.41(g)].
 - b. Any upset that exceeds any effluent limitation in this Order [40 CFR section 122.41(l)(6)(ii)(B)].
 - c. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Regional Water Board in this Order to be reported within 24 hours [40 CFR section (l)(6)(ii)(C) and 122.44(g)].
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 CFR section 122.41(l)(6)(iii)].

F. Planned Changes

Dischargers shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 CFR section 122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR section 122.29(b) [40 CFR section 122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order [40 CFR section 122.41(l)(1)(ii)].

The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application

process or not reported pursuant to an approved land application plan [40 CFR section 122.41(l)(1)(iii)].

G. Anticipated Noncompliance

Dischargers shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements [40 CFR section 122.41(l)(2)].

H. Other Noncompliance

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

I. Other Information

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

VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board and State Water Board is authorized to enforce the terms of this Order under several provisions of the California Water Code, including, but not limited to, sections 13268, 13385, 13386, and 13387.
- B.** The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the CWA is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318

or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR section 122.41(a)(2)] [California Water Code sections 13385 and 13387].

- C. Any person may be assessed an administrative penalty by the Regional Water Board for violating section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the CWA. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR section 122.41(a)(3)].
- D. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR section 122.41(j)(5)].
- E. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR section 122.41(k)(2)].

VII. ADDITIONAL STANDARD CONDITIONS APPLICABLE TO SPECIFIC CATEGORIES OF NPDES PERMITS [40 CFR SECTION 122.42]

- A. *Municipal separate storm sewer systems.* The operator of a large or medium MS4 or a municipal separate storm sewer that has been designated by the Regional Water Board or USEPA under 40 CFR section 122.26(a)(1)(v) must submit an annual report by the anniversary of the date of the issuance of the permit for such MS4. The report shall include [40 CFR section 122.42(c)]:
 1. The status of implementing the components of the storm water management program that are established as permit conditions [40 CFR section 122.42(c)(1)];

2. Proposed changes to the storm water management programs that are established as permit condition. Such proposed changes shall be consistent with 40 CFR section 122.26(d)(2)(iii) [40 CFR section 122.42(c)(2)]; and
 3. Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under 40 CFR section 122.26(d)(2)(iv) and (d)(2)(v) [40 CFR section 122.42(c)(3)];
 4. A summary of data, including monitoring data, that is accumulated throughout the reporting year [40 CFR section 122.42(c)(4)];
 5. Annual expenditures and budget for year following each annual report [40 CFR section 122.42(c)(5)];
 6. A summary describing the number and nature of enforcement actions, inspections, and public education programs [40 CFR section 122.42(c)(6)];
 7. Identification of water quality improvements or degradation [40 CFR section 122.42(c)(7)];
- B. Storm water discharges.** The initial permits for discharges composed entirely of storm water issued pursuant to 40 CFR section 122.26(e)(7) shall require compliance with the conditions of the permit as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit. [40 CFR section 122.42(d)].

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

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MONITORING AND REPORTING PROGRAM - No. CI-6948

FOR

**ORDER R4-2012-0175
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS FOR
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES
WITHIN THE COASTAL WATERSHEDS OF LOS ANGELES COUNTY, EXCEPT
THOSE DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH MS4**

November 8, 2012

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I. MONITORING AND REPORTING PROGRAM (MRP)

Section 308(a) of the federal Clean Water Act and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations require that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code section 13383 further authorizes the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

II. PURPOSE AND SCOPE

A. Primary Objectives

The primary objectives of the Monitoring Program are to:

1. Assess the chemical, physical, and biological impacts of discharges from the municipal storm water sewer system (MS4) on receiving waters.
2. Assess compliance with receiving water limitations and water quality-based effluent limitations (WQBELs) established to implement Total Maximum Daily Load (TMDL) wet weather and dry weather wasteload allocations (WLAs).
3. Characterize pollutant loads in MS4 discharges.
4. Identify sources of pollutants in MS4 discharges.
5. Measure and improve the effectiveness of pollutant controls implemented under this Order.

B. Purpose

The results of the monitoring requirements outlined below shall be used to refine control measures for the reduction of pollutant loading and the protection and enhancement of the beneficial uses of the receiving waters in Los Angeles County.

C. Provision for Integrated Approach

The Monitoring Program provides flexibility to allow Permittees to develop an integrated monitoring program to address all of the monitoring requirements of this Order and other monitoring obligations or requirements in a cost efficient and effective manner.

D. Provision for a Coordinated Integrated Approach

The Monitoring Program provides flexibility to allow Permittees to coordinate monitoring efforts on a watershed or subwatershed basis to leverage monitoring resources in an effort to increase cost-efficiency and effectiveness and to closely

align monitoring with TMDL monitoring requirements and Watershed Management Programs.

E. Monitoring Program Elements

The Monitoring Program shall include the following elements:

1. **Receiving water monitoring** shall be performed at previously designated mass emission stations, TMDL receiving water compliance points, as designated in Regional Water Board Executive Officer approved TMDL Monitoring Plans (see Table E-1 for a list of approved TMDL Monitoring Plans), and additional receiving water locations representative of the impacts from MS4 discharges. The objectives of the receiving water monitoring include the following:
 - a. Determine whether the receiving water limitations are being achieved,
 - b. Assess trends in pollutant concentrations over time, or during specified conditions,
 - c. Determine whether the designated beneficial uses are fully supported as determined by water chemistry, as well as aquatic toxicity and bioassessment monitoring.
2. **Storm water outfall based monitoring**; including TMDL monitoring requirements specified in approved TMDL Monitoring Plans (see Table E-1). Outfall monitoring locations shall be representative of the land uses within the Permittee's jurisdiction. The objectives of the storm water outfall based monitoring program include the following:
 - a. Determine the quality of a Permittee's discharge relative to municipal action levels, as described in Attachment G of this Order,
 - b. Determine whether a Permittee's discharge is in compliance with applicable storm water WQBELs derived from TMDL WLAs,
 - c. Determine whether a Permittee's discharge causes or contributes to an exceedance of receiving water limitations.
3. **Non-storm water outfall based monitoring**; including TMDL monitoring requirements specified in approved TMDL Monitoring Plans (see Table E-1). Outfalls with significant non-storm water discharges that remain unaddressed after source identification shall be monitored. The objectives of the non-storm water outfall based monitoring program include the following:
 - a. Determine whether a Permittee's discharge is in compliance with applicable non-storm water WQBELs derived from TMDL WLAs,
 - b. Determine whether a Permittee's discharge exceeds non-storm water action levels, as described in Attachment G of this Order,
 - c. Determine whether a Permittee's discharge contributes to or causes an exceedance of receiving water limitations,

- d. Assist a Permittee in identifying illicit discharges as described in Part VI.D.10 of this Order.
4. **New Development/Re-development effectiveness tracking.** The objectives of best management practices (BMP) effectiveness tracking is to track whether the conditions in the building permit issued by the Permittee are implemented to ensure the volume of storm water associated with the design storm is retained on-site as required by Part VI.D.7.c.i. of this Order.
5. **Regional studies** are required to further characterize the impact of the MS4 discharges on the beneficial uses of the receiving waters. Regional studies shall include the Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program (bioassessment) and special studies as specified in approved TMDLs (see Section XIX TMDL Reporting, below).

III. GENERAL MONITORING AND REPORTING REQUIREMENTS

- A. Monitoring shall be conducted in accordance with the requirements specified in Attachment D to this Order (Part III, Standard Provisions - Monitoring).
- B. Records of monitoring information shall include information required under Attachment D to this Order (Part IV, Standard Provisions - Records).
- C. All applications, reports, plans, or other information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Attachment D to this Order (Part V.B, Standard Provisions - Reporting, Signatory and Certification Requirements).
- D. Monitoring results shall be reported in accordance with the requirements specified in Attachment D to this Order (Part V.C, Standard Provisions - Reporting, Monitoring Reports).
- E. All monitoring and reporting shall be conducted in accordance with the Standard Monitoring Provisions specified in Part XIV of this MRP.
- F. **Sampling Methods**
 1. Sampling methods shall be fully described in each Permittee's Integrated Monitoring Program (IMP) or Coordinated Integrated Monitoring Program (CIMP) and according to the provisions of the Standard Provisions for Monitoring described in Attachment D to this Order and Part XIV of this MRP.
 2. Grab samples shall be taken for constituents that are required to be collected as such (e.g., pathogen indicator bacteria, oil and grease, cyanides, and volatile organics); in instances where grab samples are generally expected to be sufficient to characterize water quality conditions (primarily dry weather); and where the sample location limits Permittees' ability to install an automated sampler, as provided for in an approved IMP or CIMP.

3. At a minimum, a sufficient volume of sample must be collected to perform all of the required biological and chemical tests, including TIEs where aquatic toxicity is observed during the sample event.
4. Sampling and monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.
5. Flow may be estimated using USEPA methods at receiving water monitoring stations where flow measuring equipment is not in place.
6. Flow may be estimated for storm water outfall monitoring based on drainage area, impervious cover, and precipitation data as approved in an IMP or CIMP.

G. Analytical Procedures

1. Suspended-Sediment Concentration (SSC) shall be analyzed per American Society for Testing and Materials (ASTM) Standard Test Method D-3977-97.
2. Monitoring methods for trash shall be conducted in accordance with the applicable requirements specified in Part VI.E.5 of this Order.
3. Aquatic toxicity shall be monitored in accordance with Part XI of this MRP.
4. All other parameters shall be analyzed according to the provisions of the Standard Provisions for Monitoring described in Attachment D to this Order and Part XIV of this MRP.

H. Reporting

1. Reporting requirements related to the monitoring of trash shall be conducted in accordance with Part VI.E.5.c of this Order.
2. Monitoring results submitted to the Regional Water Board shall be consistent with the requirements identified in Part XVIII.A.5 and Part XVIII.A.7 of this MRP.

IV. INTEGRATED MONITORING PROGRAMS

A. Integrated Monitoring Program (IMP)

1. Each Permittee may develop an Integrated Monitoring Program designed to satisfy the monitoring requirements of this Order.
2. The monitoring requirements contained in TMDL Monitoring Plans approved by the Executive Officer of the Regional Water Board are incorporated by reference into this MRP (See Table E-1 for a list of approved TMDL Monitoring Plans).

3. The Integrated Monitoring Program may leverage monitoring resources by selecting monitoring locations, parameters, or monitoring techniques that will satisfy multiple monitoring requirements.
4. Where appropriate, the Integrated Monitoring Program may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A). Sufficient justification shall be provided in the IMP for the alternative approach(es). Such alternative approaches shall be subject to public review and final approval by the Regional Water Board Executive Officer.
5. The requirements of an approved TMDL Monitoring Plan may be modified by an IMP that is subsequently approved by the Executive Officer of the Regional Water Board.
6. At a minimum, the IMP must address all TMDL and Non-TMDL monitoring requirements of this Order, including receiving water monitoring, storm water outfall based monitoring, non-storm water outfall based monitoring, and regional water monitoring studies, except as provided in Parts IV.B.2 and 3 of this MRP.

B. Coordinated Integrated Monitoring Program (CIMP)

1. Benefits of the CIMP Approach

- a. The CIMP provides Permittees opportunities to increase the cost efficiency and effectiveness of the monitoring program. The greatest efficiency may be achieved when a CIMP is designed and implemented on a watershed basis.
 - b. A CIMP may be employed to implement regional studies, where a single Permittee takes the lead in directing the study, and the other Permittees provide funding or in lieu services.
2. Permittees are encouraged to coordinate their monitoring programs with other Permittees to develop and implement a CIMP. A CIMP may be developed to address one or more of the required monitoring elements (i.e., receiving water monitoring, outfall based monitoring, regional monitoring or special studies) and may be county-wide or limited to a single watershed, sub-watershed or defined jurisdictional boundary.
 3. The requirements of an approved TMDL Monitoring Plan may be modified by an IMP or CIMP that is subsequently approved by the Executive Officer of the Regional Water Board.
 4. A Permittee shall not be required to submit an IMP if all of the applicable monitoring requirements in this Order are addressed in a CIMP, to which the Permittee is a participant.
 5. If the CIMP addresses some but not all of the applicable monitoring requirements required under this Order, then each Permittee shall submit an IMP that references the CIMP. The Permittees must describe how together, the IMP and CIMP, fulfill all of the applicable monitoring requirements contained in this Order.

6. Where appropriate, the CIMP may develop and utilize alternative approaches to meet the Primary Objectives (Part II.A). Sufficient justification shall be provided in the CIMP for the alternative approach(es). Such alternative approaches shall be subject to public review and final approval by the Regional Water Board Executive Officer.

C. Schedule for Submitting the Monitoring Plan to the Regional Water Board and Conducting Outfall Screening

1. Within six (6) months after the effective date of this Order, each Permittee shall submit a letter of intent to the Executive Officer of the Regional Water Board describing whether it intends to follow an IMP or CIMP approach for each of the required monitoring plan elements.
2. Each Permittee not electing to develop a Watershed Management Program (WMP) or Enhanced Watershed Management Program (EWMP) shall submit an IMP plan addressing monitoring requirements that the Permittee intends to implement individually to the Executive Officer of the Regional Water Board within twelve (12) months after the effective date of this Order.
3. Permittees electing to develop a WMP or EWMP shall submit an IMP or CIMP plan, to the Executive Officer of the Regional Water Board concurrently with their draft WMP.
4. Permittees electing to develop an enhanced WMP shall submit an IMP or CIMP plan to the Executive Officer of the Regional Water Board within 18 months after the effective date of this Order.
5. If upon finalization of the CIMP plan, a Permittee that has developed an IMP determines that its IMP plan must be revised to include monitoring requirements not covered under the final CIMP, the revised IMP plan shall be submitted to the Executive Officer of the Regional Water Board within 60 days after approval of the CIMP plan by the Executive Officer of the Regional Water Board.
6. Monitoring shall commence within 30 days after approval of the IMP, or within 90 days after approval of the CIMP, by the Executive Officer of the Regional Water Board.
7. If a Permittee elects not to develop or participate in an IMP or CIMP, monitoring shall be conducted on a jurisdictional basis per the requirements of this MRP, beginning six (6) months after the effective date of this Order.
8. Monitoring requirements pursuant to Order No. 01-182 and Monitoring and Reporting Program CI 6948, and pursuant to approval TMDL monitoring plans identified in Table E-1, shall remain in effect until the Executive Officer of the Regional Water Board approves a Permittee(s) IMP and/or CIMP plan(s).

V. TMDL MONITORING PLANS

Table E-1. Approved TMDL Monitoring Plans by Watershed Management Area

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Santa Clara River Watershed Management Area			
Santa Clara River Nitrogen Compounds TMDL	Monitoring Plan was due March 23, 2005.	March 2006	Has not been approved.
Upper Santa Clara River Chloride TMDL	Monitoring Plan was not required.	N/A	N/A
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)	The County of Los Angeles Trash TMDL Monitoring and Reporting Plan for Lake Elizabeth, Munz Lake, and Lake Hughes	June 25, 2009	March 25, 2009
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL	Monitoring Plan is due on March 21, 2013.	---	---
Santa Monica Bay Watershed Management Area			
Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry)	Santa Monica Bay Beaches Bacterial TMDLs Coordinated Shoreline Monitoring Plan	April 7, 2004	January 8, 2004
Santa Monica Bay Nearshore and Offshore Debris TMDL	Monitoring Plan is due on September 20, 2012.	---	---
Santa Monica Bay TMDL for DDTs and PCBs	USEPA Established TMDL	N/A	N/A
Malibu Creek Subwatershed			
Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring Plan	February 25, 2008	April 8, 2008
Malibu Creek Watershed Trash TMDL	Malibu Creek Watershed Trash Monitoring and Reporting Plan (TMRP)	April 28, 2010	Has not been approved.

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Malibu Creek Watershed Nutrients TMDL	USEPA Established TMDL	N/A	N/A
Ballona Creek Subwatershed			
Ballona Creek Trash TMDL	Monitoring Plan was not required.	N/A	N/A
Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Coordinated Monitoring Plan	May 4, 2009	June 25, 2009
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek, Ballona Estuary, & Sepulveda Channel Bacteria TMDL Coordinated Monitoring Plan	January 29, 2009	December 16, 2008
Ballona Creek Metals TMDL	Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Coordinated Monitoring Plan	May 4, 2009	June 25, 2009
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	USEPA Established TMDL	N/A	N/A
Marina del Rey Subwatershed			
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina Del Rey Harbor Mothers' Beach and Back Basins Bacterial TMDL Coordinated Monitoring Plan	June 25, 2007	February 1, 2007
Marina del Rey Harbor Toxic Pollutants TMDL	Marina Del Rey Harbor Toxic Pollutants Total Maximum Daily Load Coordinated Monitoring Plan	March 31, 2008	March 3, 2009
Dominguez Channel and Greater Harbors Waters Watershed Management Area			

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)	Monitoring Plan was not required.	N/A	N/A
Machado Lake Trash TMDL	Trash Monitoring & Reporting Plan: Machado Lake Trash TMDL	September 5, 2008	December 9, 2008
	City of Rolling Hills Trash Monitoring and Reporting Plan Machado Lake Trash TMDL	September 5, 2008	December 9, 2008
Machado Lake Nutrient TMDL	Palos Verdes Peninsula Coordinated Monitoring Plan In Compliance with the Machado Lake Nutrient Total Maximum Daily Load	February 1, 2011	December 14, 2010
	Machado Lake Nutrients TMDL Lake Water Quality Management Plan for City of Los Angeles	August 18, 2010	February 14, 2011
	Machado Lake Nutrient TMDL Monitoring and Reporting Program Plan for the City of Carson	March 27, 2012	March 7, 2012
	Machado Lake Multipollutant TMDL Monitoring and Reporting Program for the Unincorporated Areas of Los Angeles County within the Machado Lake Watershed	September 12, 2011	April 25, 2012

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
	Monitoring Plans were due from the City of Lomita on April 25, 2011, City of Redondo Beach on March 11, 2010, and City of Torrance on May 16, 2012.	---	---
Machado Lake Pesticides and PCBs TMDL	Monitoring Plan is due on September 20, 2012 ¹ .	---	---
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	Monitoring Plan is due on November 23, 2013.	---	---
Los Angeles River Watershed Management Area			
Los Angeles River Watershed Trash TMDL	Monitoring Plan was not required.	N/A	N/A
Los Angeles River Nitrogen Compounds and Related Effects TMDL	Monitoring Plan was due on March 23, 2005.	March 23, 2005	Has not been approved.
Los Angeles River and Tributaries Metals TMDL	Los Angeles River Metals TMDL Coordinated Monitoring Plan	March 25, 2008	April 11, 2008
Los Angeles River Watershed Bacteria TMDL	Monitoring Plan is due on March 23, 2013.	---	---
Legg Lake Trash TMDL	Legg Lake Trash Monitoring & Reporting Plan: Legg Lake Trash TMDL	September 5, 2008	March 25, 2009
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	USEPA Established TMDL	N/A	N/A

¹ The deadline for Permittees assigned both WLAs and LAs to submit one document to address both WLA and LA monitoring requirements and implementation activities shall be September 20, 2013.

TMDL	Comment	Date of Final Plan	Regional Water Board Approval Date
Los Angeles Area Lakes TMDLs (Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake)	USEPA Established TMDL	N/A	N/A
San Gabriel River Watershed Management Area			
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	USEPA Established TMDL	N/A	N/A
Los Angeles Area Lakes TMDLs (Puddingstone Reservoir)	USEPA Established TMDL	N/A	N/A
Los Cerritos Channel and Alamitos Bay Watershed Management Area			
Los Cerritos Channel Metals TMDL	USEPA Established TMDL	N/A	N/A
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Colorado Lagoon TMDL Monitoring Plan (CLTMP)	June 15, 2012	August 23, 2012
Middle Santa Ana River Watershed Management Area			
Middle Santa Ana River Watershed Bacteria Indicator TMDL	Monitoring Plan was due on November 16, 2007.	---	---

VI. RECEIVING WATER MONITORING

A. IMP Receiving Water Monitoring Requirements

1. All IMP plans must contain the following information for receiving water monitoring:
 - a. Declaration of whether receiving water monitoring is conducted under an IMP, CIMP or both.
 - b. If receiving water monitoring is performed under the IMP, the plan must contain the following information:

- i. A map (preferably GIS) identifying the proposed receiving water monitoring stations for both dry weather and wet weather monitoring.
- ii. An explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the Permittee's MS4 discharges on the receiving water.
- iii. Identification of applicable TMDLs and TMDL compliance points, based on approved TMDL Monitoring Plans and/or as identified in the Basin Plan for the applicable TMDLs.
- iv. A description of how the Permittee is fulfilling its obligations for TMDL receiving water monitoring under this IMP, CIMP or other monitoring plans.
- v. A description of how the Permittee is contributing to the monitoring of mass emission stations or a discussion of why monitoring at mass emission stations is not being supported.

B. CIMP Receiving Water Monitoring Requirements

1. The CIMP plan must contain the following information for receiving water monitoring:
 - a. A list of the participating Permittees.
 - b. A map (preferably GIS) delineating the geographic boundaries of the monitoring plan including the receiving waters, the MS4 catchment drainages and outfalls, subwatershed boundaries (i.e., HUC 12), political boundaries, land use, and the proposed receiving water monitoring stations for both dry weather and wet weather receiving water monitoring.
 - c. An explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the MS4 discharges on the receiving water.
2. TMDLs
 - a. A list of applicable TMDLs and TMDL compliance points, based on approved TMDL Monitoring Plans and/or as identified in the Basin Plan for the applicable TMDLs.
 - b. Identification of the proposed receiving water monitoring stations that fulfill the TMDL Monitoring Plan(s) requirements.
 - c. Shoreline Monitoring Stations monitored pursuant to a bacteria TMDL. Sampling for bacterial indicators (total coliform, fecal coliform (or E. coli), and enterococcus) at shoreline monitoring locations addressed by a TMDL shall be conducted 5 times per week at sites subject to the reference system criterion for allowable exceedance days, and weekly at sites subject to the antidegradation criterion for allowable exceedance days.
3. Mass Emission Stations
 - a. Location of mass emission stations,

- b. Description of monitoring at mass emission stations or justification of why monitoring at the mass emission stations will be discontinued.

C. Minimum Wet Weather Receiving Water Monitoring Requirements

1. The IMP or CIMP shall incorporate the following minimum requirements for monitoring the receiving water during wet weather conditions:
 - a. The receiving water shall be monitored a minimum of three times per year for all parameters except aquatic toxicity, which must be monitored at least twice per year, or more frequently if required by applicable TMDL Monitoring Plans.
 - b. Monitoring shall be performed in the receiving water during wet weather conditions, defined for the purposes of this monitoring program as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuarine water body, wet weather occurs during a storm event of greater than or equal to 0.1 inch of precipitation, as measured from at least 50 percent of the Los Angeles County controlled rain gauges within the watershed, or based on an alternative precipitation threshold as provided for in an approved IMP or CIMP.
 - ii. When the receiving water body is a river, stream or creek, wet weather shall be defined as when the flow within the receiving water is at least 20 percent greater than the base flow or an alternative threshold as provided for in an approved IMP or CIMP, or as defined by effective TMDLs within the watershed.
 - iii. Monitoring shall occur during wet weather conditions, including targeting the first significant rain event of the storm year following the criteria below, and at least two additional wet weather events within the same wet weather season. Permittees shall target the first storm event of the storm year with a predicted rainfall of at least 0.25 inch at a seventy percent probability of rainfall at least 24 hours prior to the event start time. Permittees shall target subsequent storm events that forecast sufficient rainfall and runoff to meet program objectives and site specific study needs. Sampling events shall be separated by a minimum of three days of dry conditions (less than 0.1 inch of rain each day).
 - c. Receiving water monitoring shall begin as soon as possible after storm water outfall-based monitoring, in order to be reflective of potential impacts from MS4 discharges.
 - d. At a minimum, the following parameters shall be monitored unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board.
 - i. Flow

- ii. Pollutants assigned a receiving water limitation derived from TMDL WLAs (See Attachments L-R of this Order),
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. Total Suspended Solids (TSS) and Suspended-Sediment Concentration (SSC) if the receiving water is listed on the CWA section 303(d) list for sedimentation, siltation or turbidity,²
 - v. Field measurements applicable to inland freshwater bodies only: hardness, pH, dissolved oxygen, temperature, and specific conductivity,
 - vi. Aquatic Toxicity (twice per year, once during first storm event of the storm year as specified above).
- e. Additionally, the screening parameters in Table E-2 shall be monitored in the first year of monitoring during the first significant rain event of the storm year. If a parameter is not detected at the Method Detection Limit (MDL) for its respective test method or the result is below the lowest applicable water quality objective, and is not otherwise identified in subparts d.i.-d.vi. above, it need not be further analyzed. If a parameter is detected exceeding the lowest applicable water quality objective then the parameter shall be analyzed for the remainder of the Order during wet weather at the receiving water monitoring station where it was detected.

D. Minimum Dry Weather Receiving Water Monitoring

1. The IMP and/or CIMP plan shall incorporate the following minimum requirements for monitoring the receiving water during dry weather conditions:
 - a. The receiving water shall be monitored a minimum of two times per year for all parameters, or more frequently if required by applicable TMDL Monitoring Plans. One of the monitoring events shall be during the month with the historically lowest instream flows, or where instream flow data are not available, during the historically driest month.
 - b. Monitoring shall be performed in the receiving water during dry weather conditions, defined as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuary water body, dry weather occurs on days with less than 0.1 inch of rain and those days not less than three days after a rain event of 0.1 inch or greater within the watershed, as measured from at least 50 percent of Los Angeles County controlled rain gauges within the watershed, or an alternative criterion as provided for in an approved IMP or CIMP.

² Gray, John, R., G. Douglas Glysson, Lisa M. Turcios, and Gregory E. Schwarz. 2000. *Comparability of Suspended-Sediment Concentration and Total Suspended Solids Data*. United States Geological Survey. Water Resources Investigations Report 00-4191. August 2000.

- ii. When the receiving water body is a river, stream or creek, dry weather shall be defined as when the flow is less than 20 percent greater than the base flow or as defined by effective TMDLs within the watershed, or an alternative criterion as provided for in an approved IMP or CIMP.
- c. At a minimum the following parameters shall be monitored during dry weather conditions, unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board:
 - i. Flow
 - ii. Pollutants assigned receiving water limitations derived from TMDL dry weather WLAs,
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. TSS and hardness, when metals are monitored,
 - v. Field measurements for monitoring of inland freshwater bodies: dissolved oxygen, pH, temperature, and specific conductivity,
 - vi. Aquatic Toxicity (once per year, during the month with the historically lowest flows).
- d. Additionally, the parameters in Table E-2 shall be monitored in the first year of monitoring during the critical dry weather event. If a parameter is not detected at the Method Detection Limit (MDL) for its respective test method or the result is below the lowest applicable water quality objective, and is not otherwise identified in subparts c.i.-c.iii. or c.v.-c.vii. above, it need not be further analyzed. If a parameter is detected exceeding the lowest applicable water quality objective then the parameter shall be analyzed for the remainder of the Order during dry weather at the receiving water monitoring station where it was detected.

Table E-2. Storm Water Monitoring Program’s Constituents with Associated Minimum Levels (MLs)³

CONSTITUENTS	MLs
CONVENTIONAL POLLUTANTS	mg/L
Oil and Grease	5
Total Phenols	0.1
Cyanide	0.005
pH	0 - 14
Temperature	N/A
Dissolved Oxygen	Sensitivity to 5 mg/L
BACTERIA (single sample limits)	MPN/100ml
Total coliform (marine waters)	10,000

³ For priority pollutants, MLs published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (SIP) shall be used for all analyses, unless otherwise specified. Method Detection Levels (MDLs) must be lower than or equal to the ML value, unless otherwise approved by the Regional Board.

CONSTITUENTS	MLs
Enterococcus (marine waters)	104
Fecal coliform (marine & fresh waters)	400
E. coli (fresh waters)	235
GENERAL	mg/L
Dissolved Phosphorus	0.05
Total Phosphorus	0.05
Turbidity	0.1 NTU
Total Suspended Solids	2
Total Dissolved Solids	2
Volatile Suspended Solids	2
Total Organic Carbon	1
Total Petroleum Hydrocarbon	5
Biochemical Oxygen Demand	2
Chemical Oxygen Demand	20-900
Total Ammonia-Nitrogen	0.1
Total Kjeldahl Nitrogen	0.1
Nitrate-Nitrite	0.1
Alkalinity	2
Specific Conductance	1 umho/cm
Total Hardness	2
MBAS	0.5
Chloride	2
Fluoride	0.1
Methyl tertiary butyl ether (MTBE)	1
Perchlorate	4 µg/L
METALS (Dissolved & Total)	µg/L
Aluminum	100
Antimony	0.5
Arsenic	1
Beryllium	0.5
Cadmium	0.25
Chromium (total)	0.5
Chromium (Hexavalent)	5
Copper	0.5
Iron	100
Lead	0.5
Mercury	0.5
Nickel	1
Selenium	1
Silver	0.25
Thallium	1
Zinc	1
SEMIVOLATILE ORGANIC COMPOUNDS	
ACIDS	µg/L
2-Chlorophenol	2
4-Chloro-3-methylphenol	1
2,4-Dichlorophenol	1
2,4-Dimethylphenol	2
2,4-Dinitrophenol	5
2-Nitrophenol	10
ACIDS	µg/L
4-Nitrophenol	5

CONSTITUENTS	MLs
Pentachlorophenol	2
Phenol	1
2,4,6-Trichlorophenol	10
BASE/NEUTRAL	µg/L
Acenaphthene	1
Acenaphthylene	2
Anthracene	2
Benzidine	5
1,2 Benzanthracene	5
Benzo(a)pyrene	2
Benzo(g,h,i)perylene	5
3,4 Benzoflouranthene	10
Benzo(k)flouranthene	2
Bis(2-Chloroethoxy) methane	5
Bis(2-Chloroisopropyl) ether	2
Bis(2-Chloroethyl) ether	1
Bis(2-Ethylhexl) phthalate	5
4-Bromophenyl phenyl ether	5
Butyl benzyl phthalate	10
2-Chloroethyl vinyl ether	1
2-Chloronaphthalene	10
4-Chlorophenyl phenyl ether	5
Chrysene	5
Dibenzo(a,h)anthracene	0.1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
1,2-Dichlorobenzene	1
3,3-Dichlorobenzidine	5
Diethyl phthalate	2
Dimethyl phthalate	2
di-n-Butyl phthalate	10
2,4-Dinitrotoluene	5
2,6-Dinitrotoluene	5
4,6 Dinitro-2-methylphenol	5
1,2-Diphenylhydrazine	1
di-n-Octyl phthalate	10
Fluoranthene	0.05
Fluorene	0.1
Hexachlorobenzene	1
Hexachlorobutadiene	1
Hexachloro-cyclopentadiene	5
Hexachloroethane	1
Indeno(1,2,3-cd)pyrene	0.05
Isophorone	1
Naphthalene	0.2
Nitrobenzene	1
N-Nitroso-dimethyl amine	5
N-Nitroso-diphenyl amine	1
N-Nitroso-di-n-propyl amine	5
Phenanthrene	0.05
BASE/NEUTRAL	µg/L
Pyrene	0.05

CONSTITUENTS	MLs
1,2,4-Trichlorobenzene	1
CHLORINATED PESTICIDES	µg/L
Aldrin	0.005
alpha-BHC	0.01
beta-BHC	0.005
delta-BHC	0.005
gamma-BHC (lindane)	0.02
alpha-chlordane	0.1
gamma-chlordane	0.1
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
Dieldrin	0.01
alpha-Endosulfan	0.02
beta-Endosulfan	0.01
Endosulfan sulfate	0.05
Endrin	0.01
Endrin aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Toxaphene	0.5
POLYCHLORINATED BIPHENYLS	µg/L
Aroclor-1016	0.5
Aroclor-1221	0.5
Aroclor-1232	0.5
Aroclor-1242	0.5
Aroclor-1248	0.5
Aroclor-1254	0.5
Aroclor-1260	0.5
ORGANOPHOSPHATE PESTICIDES	µg/L
Atrazine	2
Chlorpyrifos	0.05
Cyanazine	2
Diazinon	0.01
Malathion	1
Prometryn	2
Simazine	2
HERBICIDES	µg/L
2,4-D	10
Glyphosate	5
2,4,5-TP-SILVEX	0.5

VII. OUTFALL BASED MONITORING

A. Storm Drains, Channels and Outfalls Map(s) and/or Database. The IMP and/or CIMP plan(s) shall include a map(s) and/or database of the MS4 to include the following information:

1. Surface water bodies within the Permittee(s) jurisdiction
2. Sub-watershed (HUC 12) boundaries

3. Land use overlay
4. Effective Impervious Area (EIA) overlay (if available)
5. Jurisdictional boundaries
6. The location and length of all open channel and underground pipes 18 inches in diameter or greater (with the exception of catch basin connector pipes)
7. The location of all dry weather diversions
8. The location of all major MS4 outfalls within the Permittee's jurisdictional boundary. Each major outfall shall be assigned an alphanumeric identifier, which must be noted on the map
9. Notation of outfalls with significant non-storm water discharges (to be updated annually)
10. Storm drain outfall catchment areas for each major outfall within the Permittee(s) jurisdiction
11. Each mapped MS4 outfall shall be linked to a database containing descriptive and monitoring data associated with the outfall. The data shall include:
 - a. Ownership
 - b. Coordinates
 - c. Physical description
 - d. Photographs of the outfall, where possible, to provide baseline information to track operation and maintenance needs over time
 - e. Determination of whether the outfall conveys significant non-storm water discharges
 - f. Storm water and non-storm water monitoring data

VIII. STORM WATER OUTFALL BASED MONITORING

A. Storm Water Outfall Based Monitoring

1. Storm water discharges from the MS4 shall be monitored at outfalls and/or alternative access points such as manholes or in channels at the Permittee's jurisdictional boundary.
2. The Permittee shall consider the following criteria when selecting outfalls for storm water discharge monitoring:
 - a. The storm water outfall based monitoring program should ensure representative data by monitoring at least one major outfall per subwatershed (HUC 12) drainage area, within the Permittee's jurisdiction, or alternate approaches as approved in an IMP or CIMP.
 - b. The drainage(s) to the selected outfall(s) shall be representative of the land uses within the Permittee's jurisdiction.

- c. If a Permittee is implementing an IMP, to the extent possible, the selected outfalls shall not receive drainage from another jurisdiction. If this is not possible, and a Permittee is pursuing an individual outfall based IMP program, the Permittee shall conduct “upstream” and “downstream” monitoring as the system enters and exits the Permittee’s jurisdiction.
- d. The Permittee shall select outfalls with configurations that facilitate accurate flow measurement and in consideration of safety of monitoring personnel.
- e. The specific location of sample collection may be within the MS4 upstream of the actual outfall to the receiving water if field safety or accurate flow measurement require it.

B. Minimum Storm Water Outfall Based Monitoring Requirements

1. The IMP and/or CIMP shall incorporate the following minimum requirements for monitoring storm water:
 - a. Storm water discharges shall be monitored a minimum of three times per year for all parameters except aquatic toxicity.
 - b. Monitoring shall be performed at the selected outfalls during wet weather conditions, defined for the purposes of this monitoring program as follows:
 - i. When the receiving water is the Santa Monica Bay or other ocean or estuary water body, wet weather occurs during a storm event equal to or greater than 0.1 inch of precipitation, as determined by the closest Los Angeles County rain gauge to the catchment area draining to the outfall, or based on an alternative precipitation threshold as provided for in an approved IMP or CIMP.
 - ii. When the receiving water body is a river, stream or creek, wet weather shall be defined as when the flow within the receiving water is at least 20 percent greater than the base flow or an alternative threshold as provided for in an approved IMP or CIMP, or as defined by effective TMDLs within the watershed.
 - iii. Monitoring of storm water discharges shall occur during wet weather conditions resulting from the first rain event of the year, and at least two additional wet weather events within the same wet weather season. Permittees shall target the first storm event of the storm year with a predicted rainfall of at least 0.25 inch at a seventy percent probability of rainfall at least 24 hours prior to the event start time. Permittees shall target subsequent storm events that forecast sufficient rainfall and runoff to meet program objectives and site specific study needs. Sampling events shall be separated by a minimum of three days of dry conditions (less than 0.1 inch of rain each day).
 - c. At a minimum, the following parameters shall be monitored unless a surrogate pollutant has been approved by the Executive Officer of the Regional Water Board:

- i. Flow
 - ii. Pollutants assigned a WQBEL derived from TMDL WLAs (See Attachments L-R of this Order),
 - iii. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - iv. Total Suspended Solids (TSS) and Suspended-Sediment Concentration (SSC) if the receiving water is listed on the CWA Section 303(d) list for sedimentation, siltation or turbidity,
 - v. Field measurements applicable to inland freshwater bodies only: hardness, pH, dissolved oxygen, temperature, and specific conductivity,
 - vi. Pollutants identified in a TIE conducted at the downstream receiving water monitoring station during the most recent sample event, or where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity. If the discharge exhibits aquatic toxicity, then a TIE shall be conducted.
- d. Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.C.1.e.

C. Sampling Methods

1. Samples shall be collected during the first 24 hours of the storm water discharge or for the entire storm water discharge if it is less than 24 hours.
2. If a Permittee is not participating in a IMP or CIMP, the flow-weighted composite sample for a storm water discharge shall be taken with a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour of discharge for the first 24 hours of the discharge or for the entire discharge if the storm event is less than 24 hours, with each aliquot being separated by a minimum of 15 minutes within each hour of discharge, unless the Regional Water Board Executive Officer approves an alternate protocol.

IX. NON-STORM WATER OUTFALL BASED SCREENING AND MONITORING

A. Objectives of the Non-Storm Water Outfall Screening and Monitoring Program

The outfall screening and monitoring process is intended to meet the following objectives.

1. Develop criteria or other means to ensure that all outfalls with significant non-storm water discharges are identified and assessed during the term of this Order.
2. For outfalls determined to have significant non-storm water flow, determine whether flows are the result of illicit connections/illicit discharges (IC/IDs),

- authorized or conditionally exempt non-storm water flows, natural flows, or from unknown sources.
3. Refer information related to identified IC/IDs to the IC/ID Elimination Program (Part VI.D.10 of this Order) for appropriate action.
 4. Based on existing screening or monitoring data or other institutional knowledge, assess the impact of non-storm water discharges (other than identified IC/IDs) on the receiving water.
 5. Prioritize monitoring of outfalls considering the potential threat to the receiving water and applicable TMDL compliance schedules.
 6. Conduct monitoring or assess existing monitoring data to determine the impact of non-storm water discharges on the receiving water.
 7. Conduct monitoring or other investigations to identify the source of pollutants in non-storm water discharges.
 8. Use results of the screening process to evaluate the conditionally exempt non-storm water discharges identified in Parts III.A.2 and III.A.3 of this Order and take appropriate actions pursuant to Part III.A.4.d of this Order for those discharges that have been found to be a source of pollutants. Any future reclassification shall occur per the conditions in Parts III.A.2 or III.A.6 of this Order.
 9. Maximize the use of Permittee resources by integrating the screening and monitoring process into existing or planned IMP and/or CIMP efforts.

B. Outfall Screening and Monitoring Plan

1. Concurrent with the development of an IMP or CIMP, or within one (1) year of the effective date of this Order, each Permittee shall submit a non-storm water outfall-based screening and monitoring program plan that documents with written procedures an explanation of how the program is to be implemented. The procedures must be updated as needed to reflect the Permittee's program. The plan may be a separate stand-alone document or may be part of an IMP or CIMP.
2. Each Permittee shall conduct at least one re-assessment of its non-storm water outfall-based screening and monitoring program during the term of this Order to determine whether changes or updates are needed. Where changes are needed, the Permittee shall make the changes in its written program documents, implement these changes in practice, and describe the changes within the next annual report.

C. Identification of Outfalls with Significant with Non-Storm Water Discharge

1. Based on the inventory of MS4 outfalls required under Part VII of this MRP, each Permittee shall identify MS4 outfalls with significant non-storm water discharges. Significant non-storm water discharges may be determined by one or more of the following characteristics:

- a. Discharges from major outfalls subject to dry weather TMDLs.
- b. Discharges for which existing monitoring data exceeds non-storm water Action Levels identified in Attachment G of this Order.
- c. Non-storm water discharges that have caused or have the potential to cause overtopping of downstream diversions.
- d. Discharges exceeding a proposed threshold discharge rate as determined by the Permittee.
- e. Other characteristics as determined by the Permittee and incorporated within their screening program plan.

D. Inventory of MS4 Outfalls with Non-Storm Water Discharges

1. Each Permittee shall develop and maintain an inventory of MS4 outfalls and identify those with known significant non-storm water discharges and those requiring no further assessment. If the MS4 outfall requires no further assessment, the inventory must include the rationale for the determination of no further action required. This inventory shall be recorded in a database with outfall locations linked to the Storm Drains, Channels and Outfalls map required in Part VII.A of this MRP. GIS is preferred.
2. As a component of the inventory, each Permittee shall record existing data from past outfall screening and monitoring and initiate data collection efforts as warranted. The data shall include the physical attributes of those MS4 outfalls or alternative monitoring locations determined to have significant non-storm water discharges. Attributes to be obtained shall, at a minimum, include:
 - a. Date and time of last visual observation or inspection
 - b. Outfall alpha-numeric identifier
 - c. Description of outfall structure including size (e.g., diameter and shape)
 - d. Description of receiving water at the point of discharge (e.g., natural, soft-bottom with armored sides, trapezoidal, concrete channel)
 - e. Latitude/longitude coordinates
 - f. Nearest street address
 - g. Parking, access, and safety considerations
 - h. Photographs of outfall condition
 - i. Photographs of significant non-storm water discharge (or indicators of discharge) unless safety considerations preclude obtaining photographs
 - j. Estimation of discharge rate
 - k. All diversions either upstream or downstream of the outfall

- I. Observations regarding discharge characteristics such as turbidity, odor, color, presence of debris, floatables, or characteristics that could aid in pollutant source identification.
4. Each year, the Storm Drains, Channels and Outfalls map and associated outfall database required in Part VII.A of the MRP shall be updated to incorporate the most recent characterization data for outfalls with significant non-storm water discharge.

E. Prioritized Source Identification

1. Outfalls within the inventory shall be prioritized in the following order (a= highest priority, etc.) for source identification activities:
 - a. Outfalls discharging directly to receiving waters with WQBELs or receiving water limitations in the TMDL provisions for which final compliance deadlines have passed.
 - b. All major outfalls and other outfalls that discharge to a receiving water subject to a TMDL shall be prioritized according to TMDL compliance schedules.
 - c. Outfalls for which monitoring data exist and indicate recurring exceedances of one or more of the Action Levels identified in Attachment G of this Order.
 - d. All other major outfalls identified to have significant non-storm water discharges.
2. Each Permittee shall develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-storm water discharges. The schedule shall ensure that source investigations are conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this Order and 100% of the outfalls in the inventory within 5 years of the effective date of this Order.
3. Alternatively, a Permittee may request an alternative prioritization and schedule from the Regional Water Board if it can demonstrate an equivalent level of source investigation and abatement through an approved IMP or CIMP.

F. Identify Source(s) of Significant Non-Storm Water Discharge

1. If the source is determined to be an illicit discharge, each Permittee shall implement procedures to eliminate the discharge consistent with IC/ID requirements and document the actions in the next annual report.
2. If the source is determined to be an NPDES permitted discharge, a discharge subject to a Record of Decision approved by USEPA pursuant to section 121 of CERCLA, a conditionally exempt essential non-storm water discharge, or entirely comprised of natural flows as defined at Part III.A.d of this Order, document the source and report to the Regional Water Board in the next annual report.

3. If the source is either unknown or a conditionally exempt, but non-essential, non-storm water discharge, each Permittee shall conduct monitoring required in Part IX.G of this MRP.
4. If the discharge is comprised of more than one source, the Permittee shall attempt to quantify the relative contribution from the individual or group of similar sources (e.g., irrigation overspray) and classify the contributions as authorized, conditionally exempt essential, natural, illicit discharge, conditionally exempt non-essential, or unknown.
5. If the source of non-storm water discharge is unknown, the Permittee shall describe the efforts undertaken to identify the source. Methods for identifying the source of non-storm water discharge may include inspection and/or surveillance, discharge monitoring and data loggers, video or physical inspection, monitoring for indicator parameters (e.g., surfactants, chlorine, Pyrethroids), or other means.
6. If a source originates within an upstream jurisdiction, the Permittee shall inform in writing both the upstream jurisdiction and the Regional Water Board within 30 days of determination of the presence of the discharge, all available characterization data, contribution determination efforts, and efforts taken to identify its source.
7. MS4 outfalls requiring no further action shall be maintained in the Storm Drains, Channels and Outfalls map and associated database (see Part VII.A. of this MRP).

G. Monitor Non-Storm Water Discharges Exceeding Criteria

1. Within 90 days after completing the source identification or after the Executive Officer of the Regional Water Board approves the IMP or CIMP, whichever is later, each Permittee shall monitor outfalls that have been determined to convey significant discharges comprised of either unknown or conditionally exempt non-storm water discharges, or continuing discharges attributed to illicit discharges. The following parameters shall be monitored:
 - a. Flow,
 - b. Pollutants assigned a WQBEL or receiving water limitation to implement TMDL Provisions for the respective receiving water, as identified in Attachments L - R of this Order,
 - c. Other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters,
 - d. Pollutants identified in a TIE conducted in response to observed aquatic toxicity during dry weather at the nearest downstream receiving water monitoring station during the last sample event or, where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity. If the discharge exhibits aquatic toxicity, then a TIE shall be conducted.

- e. Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.D.1.d.
2. For outfalls subject to a dry weather TMDL, monitoring frequency shall be per the approved TMDL Monitoring Plan or as otherwise specified in the TMDL, or as specified in an IMP or CIMP approved by the Executive Officer of the Regional Water Board.
3. For outfalls not subject to dry weather TMDLs, monitoring frequency shall be four times during the first year following source identification, distributed approximately quarterly, during dry weather conditions or as specified in an IMP or CIMP approved by the Executive Officer of the Regional Water Board.
4. Except as required by an applicable TMDL Monitoring Plan, IMP, or CIMP approved by the Executive Officer of the Regional Water Board, monitoring frequency may be reduced to twice per year, beginning in the second year of monitoring, if pollutant concentrations measured during the first year do not exceed WQBELs, non-storm water Action Levels or water quality standards for other pollutants identified on the CWA section 303(d) List for the receiving water or downstream receiving waters.
5. Following one year of monitoring, the Permittee may submit a written request to the Executive Officer of the Regional Water Board to reduce or eliminate monitoring of specified pollutants, based on an evaluation of the monitoring data.

H. Sampling Methods

1. For the purposes of this monitoring program, non-storm water discharges shall be monitored during days when precipitation is < 0.1 inch and those days not less than 3 days after a rain day unless an alternative criterion is provided for in an approved IMP or CIMP. A rain day is defined as those with ≥ 0.1 inch of rain.
2. Flow-weighted composite samples shall be taken for a non-storm water discharge using a continuous sampler, or it shall be taken as a combination of a minimum of 3 sample aliquots, taken in each hour during a 24-hour period, unless the Regional Water Board Executive Officer approves an alternate protocol.

X. NEW DEVELOPMENT/RE-DEVELOPMENT EFFECTIVENESS TRACKING

- A. Each Permittee shall maintain a database providing the following information for each new development/re-development subject to the requirements of Part VI.D.6 of this Order that is approved by the Permittee on or after the effective date of this Order:
 1. Name of the Project and Developer,
 2. Project location and map (preferably linked to the GIS storm drain map),
 3. Date of Certificate of Occupancy,

4. 85th percentile storm event for the project design (inches per 24 hours),
5. 95th percentile storm event for projects draining to natural water bodies (inches per 24 hours),
6. Other design criteria required to meet hydromodification requirements for drainages to natural water bodies,
7. Project design storm (inches per 24-hours),
8. Project design storm volume (gallons or MGD),
9. Percent of design storm volume to be retained on site,
10. Design volume for water quality mitigation treatment BMPs, if any.
11. If flow through, water quality treatment BMPs are approved, provide the one-year, one-hour storm intensity as depicted on the most recently issued isohyetal map published by the Los Angeles County Hydrologist,
12. Percent of design storm volume to be infiltrated at an off-site mitigation or groundwater replenishment project site,
13. Percent of design storm volume to be retained or treated with biofiltration at an off-site retrofit project,
14. Location and maps (preferably linked to the GIS storm drain map required in Part VII.A of this MRP) of off-site mitigation, groundwater replenishment, or retrofit sites,
15. Documentation of issuance of requirements to the developer.

XI. REGIONAL STUDIES

A. Southern California Stormwater Monitoring Coalition Watershed Monitoring Program

1. The Southern California Stormwater Monitoring Coalition (SMC) Regional Watershed Monitoring Program was initiated in 2008. This program is conducted in collaboration with the Southern California Coastal Water Research Project (SCCWRP), State Water Board's Surface Water Ambient Monitoring Program, three Southern California Regional Water Quality Control Boards (Los Angeles, Santa Ana, and San Diego) and several county storm water agencies (Los Angeles, Ventura, Orange, Riverside, San Bernardino and San Diego). SCCWRP acts as the facilitator to organize the program and completes data analysis and report preparation.
2. The SMC monitoring program seeks to coordinate and leverage existing monitoring efforts to produce regional estimates of condition, improve data comparability and quality assurance, and maximize data availability, while conserving monitoring expenditures. The primary goal of this program is to implement an ongoing, large-scale regional monitoring program for southern California's coastal streams and rivers. The monitoring program addresses three main questions:

- a. What is the condition of streams in southern California?
 - b. What are the stressors that affect stream condition?; and
 - c. Are conditions getting better or worse?
3. A comprehensive program was designed by the SMC, in which each participating group assesses its local watersheds and then contributes their portion to the overall regional assessment. The program utilizes the following indicators: benthic macroinvertebrate community bioassessment, benthic algal community bioassessment (soft algae and diatoms), riparian wetland evaluation (using California Rapid Assessment Methodology), water chemistry (nutrients and certain pesticides), water toxicity (using *Ceriodaphnia*), and physical habitat. Sampling occurs in 15 coastal southern California watersheds from Ventura to the US-Mexico border, and sites are sampled randomly across three land use types (open space, urban and agriculture). Six sites are sampled per year per watershed, resulting in monitoring of 90 sites per year and 450 sites overall over a five-year period (reaching the statistically desirable target of 30 data points per watershed).
4. To continue to implement the SMC design, each Permittee shall be responsible for supporting the monitoring described at the sites within the watershed management area(s) that overlap with the Permittee's jurisdictional area. These include six random sites annually in the Santa Monica Bay Watershed Management area and at three random sites annually in the Santa Clara River Watershed (the other three sites are funded by the Ventura County MS4 Permittees). Permittees shall continue to contribute monitoring resources to the San Gabriel River and Los Angeles River Regional Watershed Monitoring Programs (overall, both of these programs fund six sites per year to contribute to the SMC Program).

XII. AQUATIC TOXICITY MONITORING METHODS

- A. Aquatic Toxicity Monitoring as required in Parts VI (Receiving Water Monitoring), VIII (Storm Water Outfall Based Monitoring), and IX (Non-storm Water Outfall Based Monitoring) of this MRP, shall be conducted according to the procedures described in this Part. When the State Water Board's *Policy for Toxicity Assessment and Control* is fully approved and in effect, the Regional Water Board Executive Officer may direct the Permittee(s) to replace current toxicity program elements with standardized procedures in the policy.
- B. The Permittee(s) shall collect and analyze samples taken from receiving water monitoring locations to evaluate the extent and causes of toxicity in receiving waters.
- C. Toxicity samples may be flow-weighted composite samples, or grab samples, for wet and dry event sampling.

- D. The total sample volume shall be determined both by the specific toxicity test method used and the additional volume necessary for TIE studies. Sufficient sample volume shall be collected to perform both the required toxicity tests and TIE studies.
- E. Holding Times. All toxicity tests shall be conducted as soon as possible following sample collection. The 36-hour sample holding time for test initiation shall be targeted. However, no more than 72 hours shall elapse before the conclusion of sample collection and test initiation.
- F. Definition of Chronic Toxicity. Chronic toxicity measures a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or receiving waters compared to that of the control organisms.

G. Chronic Toxicity Monitoring Programs.

1. Freshwater Test Species and Methods.

If samples are collected in receiving waters with salinity <1 ppt, or from outfalls discharging to receiving waters with salinity <1 ppt, then the Permittee(s) shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and short-term test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136). In no case shall the following test species be substituted with another organism unless written authorization from the Regional Water Board Executive Officer is received.

- i. A static renewal toxicity test with the fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0⁴).
- ii. A static renewal toxicity test with the daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0⁵).
- iii. A static renewal toxicity test with the green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0).

2. Marine and Estuarine Test Species and Methods.

If samples are collected in receiving waters with salinity ≥ 1 ppt, or from outfalls discharging to receiving waters with salinity ≥ 1 ppt, then the Permittee(s) shall conduct the following critical life stage chronic toxicity tests on undiluted samples in accordance with species and short-term test methods in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts shall be used to increase sample salinity. In no case shall the following test species be substituted with

⁴ Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (e.g., a 7-day acute endpoint).

another organism unless written authorization from the Regional Water Board Executive Officer is received.

- a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01⁵);
- b. A static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus* (Fertilization Test Method 1008.0); and
- c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

3. Test Species Sensitivity Screening.

To determine the most sensitive test species, the Permittee(s) shall conduct two wet weather and two dry weather toxicity tests with a vertebrate, an invertebrate, and a plant. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. Sensitive test species determinations shall also consider the most sensitive test species used for proximal receiving water monitoring. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species. Rescreening shall occur in the fourth year of the permit term.

4. Chronic toxicity test biological endpoint data shall be analyzed using the Test of Significant Toxicity t-test approach specified in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C. EPA 833-R-10-003, 2010). For this monitoring program, the critical chronic instream waste concentration (IWC) is set at 100% receiving water for receiving water samples and 100% effluent for wet- and dry-weather outfall samples. A 100% receiving water/outfall effluent sample and a control shall be tested.

H. Quality Assurance.

1. If the receiving water or outfall effluent test does not meet all test acceptability criteria (TAC) specified in the test methods manuals (*Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002) and *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995)), then the Permittee(s) must re-sample and re-test at the earliest time possible.
2. Control water, including brine controls, shall be laboratory water prepared and used as specified in the test methods manuals.
3. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests

and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

I. Toxicity Identification Evaluation (TIE).

1. A toxicity test sample is immediately subject to TIE procedures to identify the toxic chemical(s), if either the survival or sublethal endpoint demonstrates a Percent Effect value equal to or greater than 50% at the IWC. Percent Effect is defined as the effect value—denoted as the difference between the mean control response and the mean IWC response, divided by the mean control response—multiplied by 100.
2. A TIE shall be performed to identify the causes of toxicity using the same species and test method and, as guidance, U.S. EPA manuals: *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F, 1992); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996).
3. The TIE should be conducted on the test species demonstrating the most sensitive toxicity response at a sampling station. A TIE may be conducted on a different test species demonstrating a toxicity response with the caveat that once the toxicant(s) are identified, the most sensitive test species triggering the TIE shall be further tested to verify that the toxicant has been identified and addressed.
4. A TIE Prioritization Metric (see Appendix 5 in SMC Model Monitoring Program) may be utilized to rank sites for TIEs.

J. Toxicity Reduction Evaluation (TRE).

1. When a toxicant or class of toxicants is identified through a TIE conducted at a receiving water monitoring station, Permittees shall analyze for the toxicant(s) during the next scheduled sampling event in the discharge from the outfall(s) upstream of the receiving water location.
2. If the toxicant is present in the discharge from the outfall at levels above the applicable receiving water limitation, a TRE shall be performed for that toxicant.
3. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. No later than 30 days after the source of toxicity and appropriate BMPs are identified, the Permittee(s) shall submit a TRE Corrective Action Plan to the Regional Water Board Executive Officer for approval. At minimum, the plan shall include a discussion of the following:
 - a. The potential sources of pollutant(s) causing toxicity.

XIII. SPECIAL STUDIES

- A. Each Permittee shall be responsible for conducting special studies required in an effective TMDL or an approved TMDL Monitoring Plan applicable to a watershed that transects its political boundary.

XIV. STANDARD MONITORING AND REPORTING PROVISIONS

- A. All monitoring and reporting activities shall meet the following requirements.
1. Monitoring and Records [40 CFR section 122.41(j)(1)]
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. Monitoring and Records [40 CFR section 122.41(j)(2)] [California Water Code § 13383(a)]
 - i. Permittees shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge (ROWD) and application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Water Board Executive Officer or USEPA at any time.
 - c. Monitoring and Records [40 CFR section 122.41(j)(3)]
 - i. Records of monitoring information shall include:
 1. The date, time of sampling or measurements, exact place, weather conditions, and rain fall amount.
 2. The individual(s) who performed the sampling or measurements.
 3. The date(s) analyses were performed.
 4. The individual(s) who performed the analyses.
 5. The analytical techniques or methods used.
 6. The results of such analyses.
 7. The data sheets showing toxicity test results.
 - d. Monitoring and Records [40 CFR section 122.41(j)(4)]. All monitoring, sampling, sample preservation, and analyses must be conducted according to test procedures approved under 40 CFR Part 136 for the analysis of pollutants, unless another test procedure is required under 40 CFR subchapter N or O or is otherwise specified in this Order for such pollutants. If a particular Minimum Level (ML) is not attainable in accordance with procedures set forth in 40 CFR Part 136, the lowest

quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure may be used instead.

- e. Monitoring and Records [40 CFR section 122.41(j)(5)]. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both.
- B.** All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory:
1. Certified for such analyses by an appropriate governmental regulatory agency.
 2. Participated in "Intercalibration Studies" for storm water pollutant analysis conducted by the SMC.⁵
 3. Which performs laboratory analyses consistent with the storm water monitoring guidelines as specified in, the *Stormwater Monitoring Coalition Laboratory Guidance Document*, 2nd Edition R. Gossettt and K. Schiff (2007), and its revisions.
- C.** For priority toxic pollutants that are identified in the CTR (40 CFR §131.38), the MLs published in Appendix 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California* (SIP) shall be used for all analyses, unless otherwise specified.
- D.** The Monitoring Report shall specify the analytical method used, the Method Detection Level (MDL) and the ML for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported with one of the following methods, as appropriate:
1. An actual numerical value for sample results greater than or equal to the ML.
 2. "Not-detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.
 3. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML. The estimated chemical concentration of the sample shall also be reported. This is the concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

⁵ The 'Intercalibration Studies' are conducted periodically by the SMC to establish a consensus based approach for achieving minimal levels of comparability among different testing laboratories for storm water samples to minimize analytical procedure bias. Stormwater Monitoring Coalition Laboratory Document, Technical Report 420 (2004) and subsequent revisions and augmentations.

- E.** For priority toxic pollutants, if the Permittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Permittee must submit documentation from the laboratory to the Regional Water Board Executive Officer for approval prior to raising the ML for any constituent.
- F. Monitoring Reports [40 CFR § 122.41(I)(4)(ii)].**
1. If a Permittee monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136, or another method specified in this Order, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Annual Monitoring Reports.
- G. Monitoring Reports [40 CFR § 122.41(I)(4)(iii)]**
1. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order.
- H.** If no flow occurred during the reporting period, then the Monitoring Report shall so state.
- I.** The Regional Water Board or its Executive Officer, consistent with 40 CFR section 122.41, may approve changes to the Monitoring and Reporting Program, after providing the opportunity for public comment, either:
1. By request of a Permittee or by an interested person after submittal of the Monitoring Report. Such request shall be in writing and filed not later than 60 days after the Monitoring Report submittal date, or
 2. As deemed necessary by the Regional Water Board Executive Officer, following notice to the Permittees.
- J.** Permittees must provide a copy of the Standard Operation Procedures (SOPs) for the Monitoring and Reporting Program No. CI 6948 to the Regional Water Board upon request. The SOP will consist of five elements: Title page, Table of Contents, Procedures, Quality Assurance/ Quality Control (QA/ QC), and References. Briefly describe the purpose of the work or process, including any regulatory information or standards that are appropriate to the SOP process, and the scope to indicate what is covered. Denote what sequential procedures should be followed, divided into significant sections; e.g., possible interferences, equipment needed, equipment/instrument maintenance and calibration, personnel qualifications, and safety considerations. Describe QA/ QC activities, and list any cited or significant references.
- K.** When monitoring cannot be performed to comply with the requirements of this Order due to circumstances beyond a Permittee's control, then within two working days, the following shall be submitted to the Regional Water Board Executive Officer:

1. Statement of situation.
 2. Explanation of circumstance(s) with documentation.
 3. Statement of corrective action for the future.
- L. Results of monitoring from each receiving water or outfall based monitoring station conducted in accordance with the Standard Operating Procedure submitted under Standard Provision 14 of this MRP shall be sent electronically to the Regional Water Board's Storm Water site at MS4stormwaterRB4@waterboards.ca.gov, semi-annually, highlighting exceedances of applicable WQBELs, receiving water limitations, action levels, or aquatic toxicity thresholds for all test results, with corresponding sampling dates per receiving water monitoring station. The sample data transmitted shall be in the most recent update of the Southern California Municipal Storm Water Monitoring Coalition's (SMC) Standardized Data Transfer Formats (SDTFs).

XV. ANNUAL REPORT SUBMITTAL TIMELINES

- A. Each Permittee or group of Permittees shall submit by December 15th of each year beginning in 2013, an Annual Report to the Regional Water Board Executive Officer in the form of three compact disks (CD) (or equivalent electronic format).

XVI. ANNUAL REPORTING REQUIREMENT OBJECTIVES

- A. The annual reporting process is intended to meet the following objectives.
1. Present summary information that allows the Regional Water Board to assess:
 - a. Each Permittee's participation in one or more Watershed Management Programs.
 - b. The impact of each Permittee(s) storm water and non-storm water discharges on the receiving water.
 - c. Each Permittee's compliance with receiving water limitations, numeric water quality-based effluent limitations, and non-storm water action levels.
 - d. The effectiveness of each Permittee(s) control measures in reducing discharges of pollutants from the MS4 to receiving waters.
 - e. Whether the quality of MS4 discharges and the health of receiving waters is improving, staying the same, or declining as a result watershed management program efforts, and/or TMDL implementation measures, or other Minimum Control Measures.
 - f. Whether changes in water quality can be attributed to pollutant controls imposed on new development, re-development, or retrofit projects.
 2. Present detailed data and information in an accessible format to allow the Regional Water Board to verify conclusions presented in a Permittee's summary information.

3. Provide the Permittee(s) a forum to discuss the effectiveness of its past and ongoing control measure efforts and to convey its plans for future control measures.
4. Present data and conclusions in a transparent manner so as to allow review and understanding by the general public.
5. Focus each Permittee's reporting efforts on watershed condition, water quality assessment, and an evaluation of the effectiveness of control measures.

XVII. WATERSHED SUMMARY INFORMATION, ORGANIZATION AND CONTENT

B. Each Permittee shall include the information requested in A.1 through A.3 below in its odd year Annual Report (e.g., Year 1, 3, 5). The requested information shall be provided for each watershed within the Permittee's jurisdiction. Alternatively, Permittees participating in a Watershed Management Program may provide the requested information through the development and submission of a Watershed Management Program plan and any updates thereto.

1. Watershed Management Area. Where a Permittee has individually or collaboratively developed a Watershed Management Program Plan (WMPP) as described in Part VI.C of this Order, reference to the Watershed Management Program plan and any revisions thereto may suffice for baseline information regarding the Watershed Management Area.

a. The following information shall be included for each Watershed Management Area within the Permittee(s) jurisdiction, where not included in a WMPP:

- i.** A description of effective TMDLs, applicable WQBELs and receiving water limitations, and implementation and reporting requirements, and compliance dates
- ii.** CWA section 303(d) listings of impaired waters not addressed by TMDLs
- iii.** Results of regional bioassessment monitoring
- iv.** A description of known hydromodifications to receiving waters and a description, including locations, of natural drainage systems
- v.** Description of groundwater recharge areas including number and acres
- vi.** Maps and/or aerial photographs identifying the location of ESAs, ASBS, natural drainage systems, and groundwater recharge areas

2. Subwatershed (HUC-12) Description. The following information shall be included for each Subwatershed (HUC-12) within the Permittee(s) jurisdiction. Where a Permittee has individually or collaboratively developed a WMPP as described in Part VI.C of this Order, reference to the WMPP and any revisions thereto may suffice for baseline information regarding the subwatershed (HUC-12) descriptions, where the required information is

already included in the WMPP. The summary information describing the subwatershed shall include the following information:

- a. Description including HUC-12 number, name and a list of all tributaries named in the Basin Plan
 - b. Land Use map of the HUC-12 subwatershed
 - c. 85th percentile, 24-hour rainfall isohyetal map for the subwatershed
 - d. One-year, one-hour storm intensity isohyetal map for the subwatershed
 - e. MS4 map for the subwatershed, including major MS4 outfalls and all low-flow diversions
- 3. Description of the Permittee(s) Drainage Area within the Subwatershed.** Where a Permittee has individually or collaboratively developed a WMPP as described in Part VI.C of this Order, reference to the WMPP and any revisions thereto may suffice for baseline information regarding the Permittee's Drainage Area within the subwatershed (HUC-12), where the required information is already included in the Watershed Management Program. The following information shall be included for each jurisdiction within the Subwatershed (HUC-12):
- a. A subwatershed map depicting the Permittee(s) jurisdictional area and the MS4, including major outfalls (with identification numbers), and low flow diversions (with identifying names or numbers) located, within the Permittee's jurisdiction.
 - b. Provide the estimated baseline percent of effective impervious area (EIA) within the Permittee(s) jurisdictional area as existed at the time that this Order became effective.

XVIII. ANNUAL ASSESSMENT AND REPORTING

- A.** Each Permittee or group of Watershed Permittees shall include the information requested in A.1 through A.7 below in its Annual Report. The requested information shall be provided for each watershed within the Permittee's jurisdiction. Each Permittee shall format its Annual Report to align with the reporting requirements identified in Parts A.1 through A.7 below.

Annual Reports submitted on behalf of a group of Watershed Permittees shall clearly identify all data collected and strategies, control measures, and assessments implemented by each Permittee within its jurisdiction as well as those implemented by multiple Permittees on a watershed scale.

- 1. Storm Water Control Measures.** Each Permittee shall make all reasonable efforts to determine, compile, analyze, and summarize the following information.
 - a. Estimated cumulative change in percent EIA since the effective date of this Order and, if possible, the estimated change in the storm water runoff volume during the 85th percentile storm event.

- b. Summary of New Development/Re-development Projects constructed within the Permittee(s) jurisdictional area during the reporting year.
- c. Summary of Retrofit Projects that reduced or disconnected impervious area from the MS4 during the reporting year.
- d. Summary of other projects designed to intercept storm water runoff prior to discharge to the MS4 during the reporting year.
- e. For the projects summarized above in 1.b through 1.d, estimate the total runoff volume retained on site by the implemented projects.
- f. Summary of actions taken in compliance with TMDL implementation plans or approved Watershed Management Programs to implement TMDL provisions in Part VI.E and Attachments L-R of this Order.
- g. Summary of riparian buffer/wetland restoration projects completed during the reporting year. For riparian buffers include width, length and vegetation type; for wetland include acres restored, enhanced or created.
- h. Summary of other Minimum Control Measures implemented during the reporting year, as the Permittee deems relevant.
- i. Status of all multi-year efforts that were not completed in the current year and will therefore continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

2. Effectiveness Assessment of Storm Water Control Measures

- a. Rainfall summary for the reporting year. Summarize the number of storm events, highest volume event (inches/24 hours), highest number of consecutive days with measureable rainfall, total rainfall during the reporting year compared to average annual rainfall for the subwatershed. Precipitation data may be obtained from Los Angeles County Department of Public Works rain gauge stations available at <http://www.ladpw.org/wrd/precip/>.
- b. Provide a summary table describing rainfall during storm water outfall and wet-weather receiving water monitoring events. The summary description shall include the date, time that the storm commenced and the storm duration in hours, the highest 15-minute recorded storm intensity (converted to inches/hour), the total storm volume (inches), and the time between the storm event sampled and the end of the previous storm event.
- c. Where control measures were designed to reduce impervious cover or storm water peak flow and flow duration, provide hydrographs or flow data of pre- and post-control activity for the 85th percentile, 24-hour rain event, if available.

- d. For natural drainage systems, develop a reference watershed flow duration curve and compare it to a flow duration curve for the subwatershed under current conditions.
- e. Provide an assessment as to whether the quality of storm water discharges as measured at designed outfalls is improving, staying the same or declining. The Permittee may compare water quality data from the reporting year to previous years with similar rainfall patterns, conduct trends analysis, or use other means to develop and support its conclusions (e.g., use of non-storm water action levels or municipal action levels as provided in Attachment G of this Order).
- f. Provide an assessment as to whether wet-weather receiving water quality within the jurisdiction of the Permittee is improving, staying the same or declining, when normalized for variations in rainfall patterns. The Permittee may compare water quality data from the reporting year to previous years with similar rainfall patterns, conduct trends analysis, draw from regional bioassessment studies, or use other means to develop and support its conclusions.
- g. Status of all multi-year efforts, including TMDL implementation, that were not completed in the current year and will continue into the subsequent year(s). Additionally, if any of the requested information cannot be obtained, the Permittee shall provide a discussion of the factor(s) limiting its acquisition and steps that will be taken to improve future data collection efforts.

3. Non-Storm Water Control Measures

- a. Estimate the number of major outfalls within the Permittee's jurisdiction in the subwatershed.
- b. Provide the number of outfalls that were screened for significant non-storm water discharges during the reporting year.
- c. Provide the cumulative number of outfalls that have been screened for significant non-storm water discharges since the date this Order was adopted through the reporting year.
- d. Provide the number of outfalls with confirmed significant non-storm water discharge.
- e. Provide the number of outfalls where significant non-storm water discharge was attributed to other NPDES permitted discharges; other authorized non-storm water discharges; or conditionally exempt discharges pursuant to Part III.A of this Order.
- f. Provide the number of outfalls where significant non-storm water discharges were abated as a result of the Permittee's actions.
- g. Provide the number of outfalls where non-storm water discharges was monitored.

- e. Where Receiving Water Limitations were exceeded, provide a description of efforts that were taken to determine whether discharges from the MS4 caused or contributed to the exceedances and all efforts that were taken to control the discharge of pollutants from the MS4 to those receiving waters in response to the exceedances.

6. Adaptive Management Strategies

- a. Identify the most effective control measures and describe why the measures were effective and how other control measures will be optimized based on past experiences.
- b. Identify the least effective control measures and describe why the measures were deemed ineffective and how the control measures will be modified or terminated.
- c. Identify significant changes to control measures during the prior year and the rationale for the changes.
- d. Describe all significant changes to control measures anticipated to be made in the next year and the rationale for the changes. Those changes requiring approval of the Regional Water Board or its Executive Officer shall be clearly identified at the beginning of the Annual Report.
- e. Include a detailed description of control measures to be applied to New Development or Re-development projects disturbing more than 50 acres.
- f. Provide the status of all multi-year efforts that were not completed in the current year and will continue into the subsequent year(s).

7. Supporting Data and Information

- a. All monitoring data and associated meta data used to prepare the Annual Report shall be summarized in an Excel spreadsheet and sorted by watershed, subwatershed and monitoring station/outfall identifier linked to the subwatershed map. The data summary must include the date, sample type (flow-weighted composite, grab, field measurement), sample start and stop times, parameter, analytical method, value, and units. The date field must be linked to a database summarizing the weather data for the sampling date including 24-hour rainfall, rainfall intensity, and days since the previous rain event.
- b. Optional. The Permittee may at its option, provide an additional detailed summary table describing control measures that are not otherwise described in the reporting requirements.

XIX. TMDL REPORTING

Permittees shall report on the progress of TMDL implementation per the schedules identified below in Sections A – G.

A. Reporting Requirements for Santa Clara River WMA TMDLs

Deliverable	Description	Due Date(s)
Santa Clara River Nitrogen Compounds TMDL		
Progress Reports	Annual progress reports on the Implementation Plan must be submitted to the Regional Water Board.	December 15, 2013, and annually thereafter
Upper Santa Clara River Chloride TMDL		
Monitoring Results	Permittees shall conduct chloride, TDS, and sulfate monitoring to ensure that water quality objectives are being met.	December 15, 2013, and annually thereafter
Lake Elizabeth, Munz Lake, and Lake Hughes Trash		
Progress Reports	Report compliance with the installation of full capture systems.	December 15, 2013, and annually thereafter
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL		
Receiving Water Monitoring Plan and Outfall Monitoring Plan	Permittees must submit a comprehensive in-stream bacteria water quality monitoring plan for the Santa Clara River Watershed. The monitoring plan should include all applicable bacteria water quality objectives and the sampling frequency must be adequate to assess compliance with the geometric mean objectives. At a minimum, at least one sampling station shall be located in each impaired reach. The outfall monitoring plan shall propose an adequate number of representative outfalls to be sampled, a sampling frequency, and protocol for enhanced outfall monitoring as a result of an in-stream exceedance. The Monitoring Plans must be approved by the Regional Water Board Executive Officer before the monitoring data can be considered during the implementation of the TMDL. Once the monitoring plan is approved by the Executive Officer, monitoring shall commence within 30 days.	March 21, 2013, or Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.
Draft Implementation Plan	Permittees must submit a draft Implementation Plan outlining how each intends to cooperatively or individually achieve compliance with the water quality-based effluent limitations and the receiving water limitations. The Implementation Plan shall include implementation methods, an implementation schedule and proposed milestones.	March 21, 2015
Final Implementation Plan	Permittees must submit a final Implementation Plan.	Six months after receipt of Regional Water Board comments on the draft Implementation Plan.
Board Briefing	Permittees shall provide a verbal update to the Regional Water Board on the progress of TMDL implementation.	March 21, 2017

B. Reporting Requirements for Santa Monica Bay WMA TMDLs

Deliverable	Description	Due Date(s)
Santa Monica Bay Beaches Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month. Two agencies will submit the monthly reports on behalf of all Permittees: City of Los Angeles, Department of Public Works, Bureau of Sanitation, Environmental Monitoring Division (on behalf of Jurisdictional Groups 1 through 6, 8, and 9); and Los Angeles County Sanitation Districts (on behalf of Jurisdictional Group 7).	Monthly on the last day of the month.
Santa Monica Bay Nearshore and Offshore Debris TMDL		
Trash Monitoring and Reporting Plan (TMRP)	Permittees shall develop a Trash Monitoring and Reporting Plan (TMRP) for Regional Water Board Executive Officer approval that describes the methodologies that will be used to assess and monitor trash in their responsible areas within the Santa Monica Bay WMA or along Santa Monica Bay. The TMRP shall include a plan to establish a site specific trash baseline water quality-based effluent limitation if Permittees elect to not use the default baseline effluent limitation. Requirements for the TMRP shall include, but are not limited to, assessment and quantification of trash collected from source areas in the Santa Monica Bay WMA, and shoreline of the Santa Monica Bay. The monitoring plan shall provide details on the frequency, location, and reporting format. Permittees shall propose a metric (e.g., weight, volume, pieces of trash) to measure the amount of trash discharged from their jurisdictional areas.	Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the TMRP 12 months after the effective date of this Order.
Implement TMRP	Implement TMRP	If TMRP is submitted by September 20, 2012, then implement the TMRP 6 months from receipt of letter of approval from Regional Water Board Executive Officer, or the date a plan is established by the Executive Officer; or If an IMP or CIMP is submitted, then monitoring shall commence within 30 days after approval of the IMP or CIMP plan by the Executive Officer.
Plastic Pellets Monitoring and Reporting Plan	Permittees identified as responsible jurisdictions and agencies for point sources of trash in the Santa Monica Bay Debris TMDL and in the existing Malibu Creek and Ballona Creek Trash TMDLs, including the Los Angeles County Flood Control District, shall either prepare a Plastic	September 20, 2013, or Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.

	<p>Pellet Monitoring and Reporting Plan (PMRP) or demonstrate that a PMRP is not required.</p> <p>The PMRP shall include protocols for a timely and appropriate response to possible plastic pellets spills within a Permittees' jurisdictional area, and a comprehensive plan to ensure that plastic pellets are contained.</p>	
Implement PMRP	Implement PMRP	March 20, 2016
Submit results of implementing TMRP and PMRP	Submit results of implementing TMRP and PMRP, recommend trash baseline water quality-based effluent limitations, and propose prioritization of Full Capture System installation or implementation of other measures to attain the required trash and plastic pellet reduction.	December 15, 2013, and annually thereafter
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)		
Monitoring and Reporting Plan	Permittees shall develop a Monitoring and Reporting Plan for Regional Water Board Executive Officer approval that describes the methodologies that will be used to monitor and assess sediment for DDT and PCBs. The monitoring design and assessment framework should be designed to provide credible estimates of the total mass loadings to the Santa Monica Bay. Monitoring should be conducted on a coordinated watershed-wide basis using sufficiently sensitive analytical methods for DDT and PCBs. Monitoring sediments in catch basins designed for pollutant prevention may be a way for Permittees to quantify load reductions to the Santa Monica Bay.	<p>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</p>
Malibu Creek and Lagoon Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Malibu Creek Watershed Trash TMDL		
Submit results of TMRP	Submit results of Trash Monitoring and Reporting Plan (TMRP), recommend trash baseline water quality-based effluent limitations, and propose prioritization of Full Capture System installation or implementation of other measures to attain the required trash.	December 15, 2013, and annually thereafter
Malibu Creek Watershed Nutrients TMDL (USEPA established)		
Monitoring and Reporting Plan	Permittees shall develop a Monitoring and Reporting Plan for Regional Water Board Executive Officer approval that demonstrates compliance with the water quality-based effluent limitations for total nitrogen and total phosphorus.	<p>Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.</p>

Ballona Creek Trash TMDL		
Annual Progress Reports	Report compliance with the required percent reduction of trash discharged to Ballona Creek.	December 15, 2013, and annually thereafter.
Ballona Creek Estuary Toxic Pollutants TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013, and annually thereafter.
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Ballona Creek Metals TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013, and annually thereafter.
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)		
Monitoring and Reporting Plan	Permittees shall develop a Sediment Monitoring and Reporting Plan for Regional Water Board Executive Officer approval to quantify the annual loading of sediment from the Ballona Creek Watershed and the impact of the sediment loading into the Ballona Creek Wetlands.	Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the Monitoring and Reporting Plan 12 months after the effective date of this Order.
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Marina del Rey Harbor Toxic Pollutants TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports, which include compliance summary tables, to the Regional Water Board.	December 15, 2013, and annually thereafter.

C. Reporting Requirements for Dominguez Channel and Greater Harbors Waters WMA TMDLs

Deliverable	Description	Due Date(s)
Los Angeles Harbor Bacteria TMDL		
Monitoring Results	Monthly data summary reports shall be submitted to the Regional Water Board by the last day of each month for data collected during the previous month.	Monthly on the last day of the month.
Machado Lake Trash TMDL		
Progress Reports	Report compliance with the required percent reduction of trash discharged to Machado Lake.	December 15, 2013, and annually thereafter.
Machado Lake Nutrient TMDL		
Annual Monitoring Report	The Cities of Palos Verdes Estates, Ranch Palos Verdes, Rolling Hills and Rolling Hills Estates shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The City of Los Angeles shall submit annual monitoring reports that demonstrate compliance with the Lake Water Quality Management Plan and reduces the external nutrient loading to attain the receiving water limitations for Machado Lake.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The City of Carson shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The County of Los Angeles shall submit annual monitoring reports that demonstrate compliance with the mass-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The City of Torrance shall submit annual monitoring reports that demonstrate compliance with the mass-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Annual Monitoring Report	The Cities of Lomita and Redondo Beach shall submit annual monitoring reports that demonstrate compliance with the concentration-based water quality-based effluent limitations.	December 15, 2013, and annually thereafter.
Machado Lake Pesticides and PCBs TMDL		
Monitoring and Reporting Plan and Quality Assurance Project Plan	Permittees shall develop a Monitoring and Reporting Plan (MRP) and Quality Assurance Project Plan (QAPP) for Regional Water Board Executive Officer approval. The MRP shall demonstrate compliance and non-compliance with the water quality-based effluent limitations as part of reports submitted to the Regional Water Board. The QAPP shall include protocols for sample collection, standard analytical procedures, and	The deadline for Permittees assigned both WLAs and LAs to submit one document to address both the WLA and LA monitoring requirements and implementation activities shall be September 20, 2013.

	laboratory certification. All samples shall be collected in accordance with applicable SWAMP protocols.	Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the work plan 12 months after the effective date of this Order.
Begin Phase 1 Monitoring	Begin Phase 1 Monitoring as outlined in the approved MRP and QAPP.	30 days from date of Executive Officer approval of MRP and QAPP
Phase 1 Monitoring	Conduct Phase 1 Monitoring for 2 years.	2 year monitoring period
Draft Implementation Plan	Based on the results of Phase 1 Monitoring, Permittees shall submit an Implementation Plan to attain water quality-based effluent limitations or document that water quality-based effluent limitations are attained.	6 months from completion of Phase 1 Monitoring
Final Implementation Plan	Permittees shall submit Final Implementation Plan.	1 year from completion of Phase 1 Monitoring
Implementation	Permittees shall begin implementation actions to attain water quality-based effluent limitation, as necessary.	30 days from date of Implementation Plan approval
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL		
Monitoring and Reporting Plan and Quality Assurance Project Plan	Permittees shall develop Monitoring and Reporting Plans (MRPs) and Quality Assurance Project Plans (QAPPs) for Regional Water Board Executive Officer approval in accordance with the TMDL. The MRPs shall include a requirement that the responsible parties report compliance and non-compliance with water quality-based effluent limitations as part of annual reports submitted to the Regional Water Board. The QAPPs shall include protocols for sample collection, standard analytical procedures, and laboratory certification. All samples shall be collected in accordance with applicable SWAMP protocols.	November 23, 2013, or Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP.
Monitoring Plan	Permittees shall implement monitoring as outlined in the approved MRP and QAPP.	30 days after MRP and QAPP is approved by Regional Water Board Executive Officer.
Annual Monitoring Reports	Permittees shall submit annual monitoring reports to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan and Contaminated Sediment Management Plan (CSMP)	Permittees in the Dominguez Channel and Greater Harbors Waters Watershed Management Area shall develop and submit an Implementation Plan and Contaminated Sediment Management Plan (CSMP). The CSMP shall include concrete milestones with numeric estimates of load reductions or removal, including milestones for remediating hot spots, including but not limited to Dominguez Channel Estuary, Consolidated Slip and Fish Harbor, for Regional Water Board Executive Officer approval.	Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the Implementation Plan and CSMP 12 months after the effective date of this Order.
Report of Implementation	Permittees in the Los Angeles River and San Gabriel River Watersheds shall submit a Report of Implementation to the Regional Water Board.	December 15, 2013, and annually thereafter
Implementation Reports	Permittees shall submit annual implementation reports to the Regional	December 15, 2014, and annually thereafter

MS4 Discharges within the
Coastal Watersheds of Los Angeles County

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	Water Board. Report on implementation progress and demonstrate progress toward meeting the water quality-based effluent limitations.	
Updated Implementation Plan and CSMP	Permittees in the Dominguez Channel and Greater Harbors Waters Watershed Management Area shall submit an updated Implementation Plan and Contaminated Sediment Management Plan (CSMP).	March 23, 2017

D. Reporting Requirements for the Los Angeles River WMA TMDLs

Deliverable	Description	Due Date(s)
Los Angeles River Watershed Trash TMDL		
Reporting	Report compliance with the installation of full capture systems.	December 15, 2013, and annually thereafter.
Los Angeles River Nitrogen Compounds and Related Effects TMDL		
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles River and Tributaries Metals TMDL		
Annual Monitoring Report	Permittees shall submit annual monitoring reports as detailed in the approved coordinated monitoring plan to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles River Watershed Bacteria TMDL		
Bacteria Coordinated Monitoring Plan	<p>Permittees shall submit a Bacteria Coordinated Monitoring Plan (CMP), which shall be submitted for Regional Water Board Executive Officer approval. The CMP shall detail: the number and location of sites, including at least one monitoring station per each river segment, reach and tributary addressed under this TMDL; measurements and sample collection methods; and monitoring frequencies. Permittees may also include in the CMP, for Executive Officer consideration, other meteorological stations which may be more representative of the existing hydrology and climate.</p> <p>Each segment, reach, and tributary addressed under this TMDL shall be monitored at least monthly until the subject segment, reach or tributary is at the end of the execution part of its first implementation phase (i.e. 7 years after beginning the segment or tributary-specific phase), to determine compliance with the interim water quality based effluent limitations. Each segment, reach and tributary addressed under this TMDL shall be monitored at least weekly to determine compliance with the instream targets after the first implementation phase.</p> <p>For parties pursuing a Load Reduction Strategy (LRS), intensive outfall monitoring will be conducted before and after implementation of the LRS. Pre-LRS monitoring will be used to estimate the <i>E. coli</i> loading from MS4 outfalls to the segment or tributary, and identify the outfalls and types of implementation actions that are expected to be necessary to attain the water quality based limits. Post-LRS monitoring will be used to evaluate compliance with the interim water quality based limits and to plan for additional implementation actions to meet the final water quality based limits, in a second implementation phase, if necessary.</p>	<p>March 23, 2013, or</p> <p>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP.</p>

	When applicable, outfall monitoring shall including <i>E. coli</i> by USEPA- approved methods and flow rate at <i>all</i> MS4 outfalls (“snapshots”) that are discharging to a segment or tributary or across jurisdictional boundaries during a given monitoring event. For each LRS, at least six (6) snapshots shall be conducted for pre-LRS monitoring, and at least three (3) snapshots shall be conducted for post- LRS monitoring. For MS4s that choose to follow a non-LRS implementation approach, but choose to demonstrate compliance with Equivalent Conditions, at least six (6) snapshots shall be conducted.	
Implement CMP	Permittees shall begin implementation actions to attain water quality-based effluent limitation, as necessary.	30 days after approval of the CMP
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan for wet weather with interim milestones for approval of the Regional Water Board Executive Officer.	March 23, 2022
Legg Lake Trash TMDL		
TMRP Reports MFAC	Report compliance with the approved MFAC program.	December 15, 2013, and annually thereafter
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL		
Compliance Monitoring	<p>To evaluate compliance with numeric targets, monitoring shall take place at existing monitoring sites as well as any new monitoring locations in the ambient water. For beach monitoring locations, daily or systematic weekly sampling in the wave wash at all major drains and creeks, existing monitoring stations at beaches without storm drains, and freshwater outlets is recommended to evaluate compliance. At all beach locations, samples should be taken at ankle depth and on an incoming wave, consistent with section 7961(b) of title 17 of the California Code of Regulations. At locations where there is a freshwater outlet, during wet weather, samples should be taken as close as possible to the wave wash, and no further away than 10 meters down current of the storm drain or outlet.</p> <p>A robust monitoring program shall be developed for the LAR Estuary. Available data includes bi-weekly monitoring from May through September of 2009, and 2010. Monitoring shall be expanded to include year round monitoring requirements, and at least three monitoring locations within the Estuary. We understand that adequate data to establish a reference estuary approach is currently not available. If in the future, adequate data from reference estuary studies become available, it may be appropriate to consider a reference estuary approach to evaluate compliance with these TMDLs.</p>	<p>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Plan 12 months after the effective date of this Order.</p>

Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Los Angeles Area Lakes TMDLs		
Lake Calabasas Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll a. Measurements of the temperature, DO, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Supplemental Water Monitoring	At Lake Calabasas, water quality based limits are assigned to supplemental water additions. This source should be monitoring for at minimum; ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Once a year during the summer months (critical conditions).
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Echo Park Lake Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll a. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually

		thereafter.
Echo Park Lake PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, and dieldrin; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, and dieldrin. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	December 15, 2013, and annually thereafter.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs, a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five largemouth bass each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, and dieldrin. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	Once a year during a wet weather event.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Echo Park Lake Trash TMDL		
Compliance Monitoring	Responsible jurisdictions should monitor the trash quantity deposited in the vicinity of Echo Park Lake as well as on the waterbody to comply with the TMDL target and to understand the effectiveness of various implementation efforts. The Rapid Trash Assessment Method is recommended.	Quarterly.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Legg Lake System Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll <i>a</i> . Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.

Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Peck Road Park Lake Nutrient TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll a. Measurements of the temperature, DO, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. Deep lakes, such as Peck Road Park Lake, must meet the DO and pH targets in the water column from the surface to 0.3 meters above the bottom of the lake when the lake is not stratified. However, when stratification occurs (i.e., a thermocline is present) then the DO and pH targets must be met in the epilimnion, the portion of the water column above the thermocline. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Peck Road Park Lake PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, total DDTs, and dieldrin; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, total DDTs, and dieldrin. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	December 15, 2013, and annually thereafter.
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs, a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to	Once a year during a wet weather event.

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	allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, total DDTs, and dieldrin. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Peck Road Park Lake Trash TMDL		
Compliance Monitoring	Responsible jurisdictions should monitor the trash quantity deposited in the vicinity of Peck Road Park Lake as well as in the waterbody to comply with the TMDL target and to understand the effectiveness of various implementation efforts. The Rapid Trash Assessment Method is recommended.	Quarterly.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.

E. Reporting Requirements for San Gabriel River WMA TMDLs

Deliverable	Description	Due Date(s)
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL		
Coordinated Monitoring Plan	<p>Permittees shall develop a Coordinated Monitoring Plan, to be approved by the Regional Water Board Executive Officer, which includes both TMDL effectiveness monitoring and ambient monitoring. The ambient monitoring program shall contain monitoring in all reaches and major tributaries of the San Gabriel River, including but not limited to additional dry- and wet-weather monitoring in the San Gabriel River Reaches 4 and 5 and Walnut Creek, additional dry-weather monitoring in San Gabriel River Reach 2, and additional wet-weather monitoring in San Jose Creek, San Gabriel River Reaches 1 and 3, and the Estuary. Sediment samples shall be collected semi-annually in the Estuary and analyzed for sediment toxicity resulting from copper, lead, selenium, and zinc.</p> <p>The TMDL effectiveness monitoring shall demonstrate the effectiveness of the phased implementation schedule for reducing pollutant loads to achieve the dry- and wet-weather water quality based effluent limitations. Monitoring stations specified for the ambient monitoring program may be used for the TMDL effectiveness monitoring. The final dry-weather monitoring stations shall be located in San Jose Creek Reach 1 and the Estuary. The final wet-weather TMDL effectiveness monitoring stations may be located at the existing Los Angeles County Department of Public Works mass emission sites in San Gabriel River Reach 2 and Coyote Creek.</p> <p>Permittees shall sample once per month, during dry-weather conditions, at each proposed TMDL effectiveness monitoring location. Permittees shall sample at least 4 wet-weather events where flow meets wet-weather conditions (260 cfs in San Gabriel River Reach 2 and 156 cfs in Coyote Creek) in a given storm season (November to March), unless there are fewer than 4 wet-weather events, at each proposed TMDL effectiveness monitoring location. Permittees are encouraged to coordinate with the San Gabriel watershed-wide monitoring program to avoid duplication and leverage resources.</p>	<p>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Coordinated Monitoring Plan 12 months after the effective date of this Order.</p>
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan outlining how to achieve compliance with the water quality based effluent limitations, for approval of the Regional Water Board Executive Officer. The Plan shall include implementation methods, an implementation schedule, and proposed milestones.	1 year after the effective date of this Order
Los Angeles Area Lakes TMDLs		
Puddingstone Reservoir Nutrient TMDL		

Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids, total dissolved solids and chlorophyll a. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. All parameters must meet target levels at half the Secchi depth. DO and pH must meet target levels from the surface of the water to 0.3 meters above the lake bottom when the lake is not stratified. However, when stratification occurs (i.e., a thermocline is present) then the DO and pH targets must be met in the epilimnion, the portion of the water column above the thermocline. Additionally, in order to accurately calculate compliance with water quality based limits to the lake expressed in yearly loads, monitoring should include flow estimation or monitoring as well as the water quality concentration measurements.	At a minimum twice during summer months and once during winter.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: ammonia, TKN or organic nitrogen, nitrate plus nitrite, orthophosphate, total phosphorus, total suspended solids and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Puddingstone Reservoir Mercury TMDL		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total mercury, methylmercury, chloride, sulfate, total organic carbon, alkalinity, total suspended solids, and total dissolved solids; as well as the following in-lake sediment parameters: total mercury, dissolved methylmercury, total organic carbon, total solids and sulfate. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement. Additionally, in order to accurately calculate compliance with allocations expressed in yearly loads, monitoring should include flow estimation or monitoring as well as water quality concentration measurements.	Twice a year.
Fish Tissue Monitoring	Monitoring should include monitoring of largemouth bass (325-375mm in length) fish tissue (skin-off fillets) for mercury concentration.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes for at minimum: total mercury, methyl mercury, chloride, sulfate, total organic carbon, alkalinity, total suspended solids, and total dissolved solids.	Twice a year.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Puddingstone Reservoir PCBs and Organochlorine Pesticide TMDLs		
Compliance Monitoring	At a minimum, compliance monitoring should measure the following in-lake water quality parameters: total suspended sediments, total PCBs, total chlordane, dieldrin, and total DDTs; as well as the following in-lake sediment parameters: total organic carbon, total PCBs, total chlordane, dieldrin, and total DDTs. Environmentally relevant detection limits should be used (i.e., detection limits lower than applicable target), if available at a commercial laboratory.	Annually.

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	Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken throughout the water column with a water quality probe along with Secchi depth measurement.	
Fish Tissue Monitoring	Monitoring of fish tissue. For the OC pesticides and PCBs TMDLs a demonstration that fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350mm in length.	At least every three years.
Stormwater Monitoring	Stormwater sources should be measured near the point where they enter the lakes. Sampling should be designed to collect sufficient volumes of suspended solids to allow for the analysis of at minimum: total organic carbon, total suspended solids, total PCBs, total chlordane, dieldrin, and total DDTs. Measurements of the temperature, dissolved oxygen, pH and electrical conductivity should also be taken.	Once a year during a wet weather event.
Reporting	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.

F. Reporting Requirements for Los Cerritos Channel WMA TMDLs

Deliverable	Description	Due Date(s)
Los Cerritos Channel Metals TMDL		
Coordinated Monitoring Plan	<p>Permittees shall develop a Coordinated Monitoring Plan, to be approved by the Regional Water Board Executive Officer, which includes both TMDL effectiveness monitoring and ambient monitoring. The ambient monitoring program shall be developed to track trends in water quality improvements in Los Cerritos Channel; to provide background information on hardness values; and the partitioning of metals between the total recoverable and dissolved fraction.</p> <p>TMDL effectiveness monitoring shall demonstrate the effectiveness of the phased implementation schedule for reducing pollutant loads to achieve the water quality based effluent limitations. Monitoring stations specified for the ambient monitoring program may be used for the TMDL effectiveness monitoring. Permittees shall sample at least 4 wet-weather events where flow meets wet-weather conditions (>23 cfs in Los Cerritos Channel above the tidal prism) in a given storm season.</p>	<p>Submit an IMP or CIMP plan concurrently with the Permittee’s draft WMP, or</p> <p>If a WMP or IMP or CIMP will not be developed then submitted the Coordinated Monitoring Plan 12 months after the effective date of this Order.</p>
Annual Monitoring Report	Annual reporting of monitoring results to the Regional Water Board.	December 15, 2013, and annually thereafter.
Implementation Plan	Permittees shall submit an Implementation Plan outlining how to achieve compliance with the water quality based effluent limitations, for approval of the Regional Water Board Executive Officer. The Plan shall include implementation methods, an implementation schedule, and proposed milestones.	1 year after the effective date of this Order
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL		
Monitoring	Water column and sediment samples will be collected at the outlet of the storm drains discharging to the lagoon, while water column, sediment, and fish tissue samples will be collected in the West Arm, Central Arm, North Arm, at the outlet of the lagoon to Marine Stadium during an incoming tide, and at the outfall of Termino Avenue Drain to Marine Stadium as specified in the Colorado Lagoon TMDL Monitoring Plan (CLTMP).	February 1, 2013
Annual Monitoring Reports	Permittees shall submit annual monitoring reports to the Regional Water Board. All compliance monitoring must be conducted in conjunction with a Regional Water Board approved Quality Assurance Project Plan.	December 15, 2013, and annually thereafter.
Implementation Progress	Permittees shall submit annual progress reports on the status of implementation actions performed under the TMDL. The plan shall contain mechanisms for demonstration progress toward meeting the water quality based effluent limitations.	December 15, 2013, and annually thereafter.

G. Reporting Requirements for Middle Santa Ana River WMA TMDL

Deliverable	Description	Due Date(s)
Middle Santa Ana River Watershed Bacteria Indicator TMDL		
Bacterial Indicator Water Quality Monitoring Plan	Permittees shall develop and submit for approval by the Executive Officer of the Regional Water Board a Bacterial Indicator Water Quality Monitoring Plan in accordance with the TMDL.	Submit an IMP or CIMP plan concurrently with the Permittee's draft WMP, or If a WMP or IMP or CIMP will not be developed then submitted the Monitoring Plan 12 months after the effective date of this Order.
Bacterial Indicator Urban Source Evaluation Plan	Permittees shall develop and submit for approval by the Regional Water Board a Bacterial Indicator Urban Source Evaluation Plan. This plan shall include steps needed to identify specific activities, operations, and processes in urban areas that contribute bacterial indicators to San Antonio Channel. The plan shall also include a proposed schedule for completion of each of the steps identified.	1 year after the effective date of this Order
Progress Reports	Annual progress reports on implementation shall be submitted to the Regional Water Board.	December 15, 2013, and annually thereafter.

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I, Samuel Unger, Executive Officer, do hereby certify that this Monitoring and Reporting Program is a full, true, and correct copy of the MRP adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 8, 2012.



Samuel Unger, P.E.
Executive Officer

Date: Dec. 5, 2012

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGION

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ATTACHMENT F – FACT SHEET

FOR

**ORDER R4-2012-0175
NPDES PERMIT NO. CAS004001**

**WASTE DISCHARGE REQUIREMENTS FOR
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES
WITHIN THE COASTAL WATERSHEDS OF LOS ANGELES COUNTY, EXCEPT
THOSE DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH MS4**

November 8, 2012

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ATTACHMENT F – FACT SHEET

As described in Part II of this Order, this Fact Sheet sets forth the significant factual, legal, methodological, and policy rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility and the Dischargers.

Table F-1. Facility and Discharger Information

WDID	Various (See Table 4 of Order)
Dischargers	The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the coastal watersheds of Los Angeles County with the exception of the City of Long Beach (See Table 4 of Order)
Name of Facility	Municipal Separate Storm Sewer Systems (MS4s) within the Coastal Watersheds of Los Angeles County with the exception of the City of Long Beach MS4
Facility Address	Various
Facility Contact, Title and Phone	Various (See Table 4 of Order)
Mailing Address	Various (See Table 4 of Order)
Billing Address	Same as above
Type of Facility	Large Municipal Separate Storm Sewer System (MS4) ¹
Major or Minor Facility	Major
Watersheds	(1) Santa Clara River Watershed; (2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed; (3) Los Angeles River Watershed; (4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area; (5) Los Cerritos Channel and Alamitos Bay Watershed Management Area; (6) San Gabriel River Watershed; and (7) Santa Ana River Watershed

¹ According to 40 CFR § 122.26(b)(8), “[a] municipal separate storm sewer system (MS4) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying storm water;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.”

<p>Receiving Water</p>	<p>Surface waters identified in Tables 2-1, 2-1a, 2-3, and 2-4, and Appendix 1, Table 1 of the Water Quality Control Plan - Los Angeles Region (Basin Plan), and other unidentified tributaries to these surface waters within the following Watershed Management Areas:</p> <p>(1) Santa Clara River Watershed;</p> <p>(2) Santa Monica Bay Watershed Management Area, including Malibu Creek Watershed and Ballona Creek Watershed;</p> <p>(3) Los Angeles River Watershed;</p> <p>(4) Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area;</p> <p>(5) Los Cerritos Channel and Alamitos Bay Watershed Management Area;</p> <p>(6) San Gabriel River Watershed; and</p> <p>(7) Santa Ana River Watershed².</p>
<p>Receiving Water Type</p>	<p>Inland surface waters, estuarine waters, and marine waters, including wetlands, lakes, rivers, estuaries, lagoons, harbors, bays, and beaches</p>

The Los Angeles County Flood Control District, Los Angeles County, and the 84 municipalities listed in Table F-2 above are the owners and/or operators³ of Municipal Separate Storm Sewer Systems within the Coastal Watersheds of Los Angeles County (hereinafter Facility).

For the purposes of this Order, the entities listed in Table 4 of the Order are hereinafter referred to separately as “Permittees” and jointly as the “Dischargers.” References to “discharger” or “permittee” or “co-permittee” or “municipality” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Dischargers or Permittees herein.

II. FACILITY DESCRIPTION

A. Description of the Permittees’ MS4s

The Permittees’ MS4s, like many MS4s in the nation, are based on regional floodwater management systems that use both natural and altered water bodies to achieve flood management goals. The Permittees’ MS4s comprise a large interconnected system, controlled in large part by the Los Angeles County Flood Control District (LACFCD), among others, and used by multiple cities along with Los Angeles County. This extensive system conveys storm water and non-storm water across municipal boundaries where it is commingled within the MS4 and then discharged to receiving water bodies.

² Note that the Santa Ana River Watershed lies primarily within the boundaries of the Santa Ana Regional Water Quality Control Board. However, a portion of the Chino Basin subwatershed lies within the jurisdictions of Pomona and Claremont in Los Angeles County. The primary receiving water within the Los Angeles County portion of the Chino Basin subwatershed are San Antonio Creek and Chino Creek.

³ Owner or operator means the owner or operator of any facility or activity subject to regulation under the NPDES program (40 CFR § 122.2).

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

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

The total length of the Permittees' MS4s, and the locations of all storm drain connections, are not known exactly, as a comprehensive map for the MS4 does not exist. Rough estimates, based on information from the LACFCD and large municipalities (population > 100,000), indicate that the length exceeds 4,300 miles, as shown below. The LACFCD's system includes the majority of drainage infrastructure within incorporated and unincorporated areas in every watershed, including approximately 500 miles of open channel, 3,500 miles of underground drains, and an estimated 88,000 catch basins, and several dams. Portions of the LACFCD's current system were originally unmodified natural rivers and water courses.

Table F-2. Extent of Select Permittees' MS4s

Permittee	Area (Square Miles)	Catch Basins	Storm Drain Length	Open Channel Length
LACFCD/ LA County	3,100	88,000	3,500 miles	500 miles
City of LA	469	30,000	1,600 miles	31 miles
El Monte	10	316	11 miles	0.4 mile
Glendale	30.6	1,100	Unknown	Unknown
Inglewood	9	1,157	12 miles	Unknown
Pasadena	26	1,050	30	Unknown
Santa Monica	8.3	850	Unknown	Unknown
Torrance	20	2,000	20 miles	3 miles
TOTAL	approx. 3,672.9	approx. 109,473	approx. 4,323	approx. 484.4

Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways, and has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. Nonetheless, as an owner and operator of MS4s, the LACFCD is required by federal regulations to control pollutant discharges into and from its MS4, including the ability to control through interagency agreements among co-permittees and other owners of a MS4 the contribution of pollutants from one portion of the MS4 to another portion of the MS4. Additionally, the Los Angeles County Flood Control District does own the County of Los Angeles Department of Public Works headquarters building and Los Angeles County Flood Control District maintenance yards to support its field operations.

Storm water and non-storm water are conveyed through the MS4s and ultimately discharged into receiving waters of the Los Angeles Region. MS4s subject to this Order receive storm water and non-storm water flows from various sources. These flows come from MS4s owned by the Permittees covered by this Order and other public agencies, NPDES permitted discharges, discharges authorized by the USEPA (including discharges subject to a decision document approved pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)), groundwater, and natural flows.

The requirements contained in this Order apply to the Los Angeles County Flood Control District, 84 cities within the coastal watersheds of Los Angeles County, and the unincorporated areas of Los Angeles County under County jurisdiction, with the exception of the City of Long Beach. Under the previous Order, Order No. 01-182, the Los Angeles County Flood Control District was designated the Principal Permittee, and the County of Los Angeles and the 84 incorporated cities were designated co-Permittees. However, in this Order, the role of Principal Permittee has been eliminated. This Order divides Los Angeles County into seven Watershed Management Areas (WMAs).

B. The Need to Regulate Discharges from MS4s

The quality of storm water and non-storm water discharges from MS4s is fundamentally important to the health of the environment and the quality of life in Southern California. Polluted storm water and non-storm water discharges from MS4s are a leading cause of water quality impairment in the Los Angeles Region. Storm water and non-storm water discharges are often contaminated with pesticides, fertilizers, fecal indicator bacteria and associated pathogens, trash, automotive byproducts, and many other toxic substances generated by activities in the urban environment. Water that flows over streets, parking lots, construction sites, and industrial, commercial, residential, and municipal areas carries these untreated pollutants through the MS4 directly into the receiving waters of the Region. The water quality impacts, ecosystem impacts, and increased public health risks from MS4 discharges that affect receiving waters nationwide and throughout Los Angeles County, including its coastline, are well documented.

The National Urban Runoff Program (NURP) Study (USEPA 1983) showed that MS4 discharges draining from residential, commercial, and light industrial areas contain significant loadings of total suspended solids and other pollutants. Many studies continue to support the conclusions of the NURP Study. The NURP Study also found that pollutant levels from illicit discharges were high enough to significantly degrade receiving water quality, and threaten aquatic life, wildlife, and human health. The general findings and conclusions of the NURP Study are reiterated in the more recent 2008 National Research Council report "Urban Runoff Management in the United States" as well as in a regional study, "Sources, Patterns and Mechanisms of storm Water Pollutant Loading from Watersheds and Land Uses of the Greater Los Angeles Area, California," SCCWRP Technical Report 510 (2007), funded in large part by the Regional Water Board.

Some of the conclusions of the 2007 regional study were as follows.

Storm water runoff from watershed and land use based sources is a significant contributor of pollutant loading and often exceeds water quality standards. High pollutant concentrations were observed throughout the study at both mass emission (ME) and land use (LU) sites. Pollutant concentrations frequently exceeded water quality standards.

Storm water Event Mean Concentrations (EMCs), fluxes and loads were substantially lower from undeveloped open space areas when compared to developed urbanized watersheds. Storms sampled from less developed watersheds produced pollutant EMCs and fluxes that were one to two orders of magnitude lower than comparably sized storms in urbanized watersheds. Furthermore, the higher fluxes from developed watersheds were generated by substantially less rainfall than the lower fluxes from the undeveloped watersheds, presumably due to increased impervious surface area in developed watersheds.

The Los Angeles region contributed a similar range of storm water runoff pollutant loads as that of other regions of the United States. Comparison of constituent concentrations in storm water runoff from land use sites from this study reveal median EMCs that are comparable to U.S. averages reported in the National Storm water Quality Database (NSQD; Pitt et al., 2003). Comparison to the NSQD data set provides insight to spatial and temporal patterns in constituent concentrations in urban systems. Similarities between levels reported in the NSQD and this study suggest that land-based concentrations in southern California storm water are generally comparable to those in other parts of the country.

Peak concentrations for all constituents were observed during the early part of the storm. Constituent concentrations varied with time over the course of storm events. For all storms sampled, the highest constituent concentrations occurred during the early phases of storm water runoff with peak concentrations usually preceding peak flow. Although the pattern of an early peak in concentration was comparable in both large and small developed watersheds, the peak concentration tended to occur later in the storm and persist for a longer duration in the smaller developed watersheds. Therefore monitoring programs must capture the early portion of storms and account for intra-

storm variability in concentration in order to generate accurate estimates of EMC and contaminant loading. Programs that do not initiate sampling until a flow threshold has been surpassed may severely underestimate storm EMCs.

Highest constituent loading was observed early in the storm season with intra-annual variability driven more by antecedent dry period than amount of rainfall. Seasonal differences in constituent EMCs and loads were consistently observed at both ME and LU sites. In general, early season storms (October – December) produce significantly higher constituent EMCs and loads than late season storms (April-May), even when rainfall quantity was similar. This suggests that the magnitude of constituent load associated with storm water runoff depends, at least in part, on the amount of time available for pollutant build-up on land surfaces. The extended dry period that typically occurs in arid climates such as southern California maximizes the time for constituents to build-up on land surfaces, resulting in proportionally higher concentrations and loads during initial storms of the season.

The 1992, 1994, and 1996 National Water Quality Inventory Reports to Congress prepared by USEPA showed a trend of impairment in the Nation's waters from contaminated storm water and dry weather urban runoff. The 2004 National Water Quality Inventory (305(b) Report) showed that urban runoff/storm water discharges contribute to the impairment of 22,559 miles of streams, the impairment of 701,024 acres of lakes, and the impairment of 867 square miles of estuaries in the United States. The Natural Resources Defense Council (NRDC) 1999 Report, "Stormwater Strategies, Community Responses to Runoff Pollution" identifies two main causes of the storm water pollution problem in urban areas. Both causes are directly related to development in urban and urbanizing areas:

Increased volume and velocity of surface runoff. There are three types of human-made impervious covers that increase the volume and velocity of runoff: (i) rooftop, (ii) transportation imperviousness, and (iii) non-porous (impervious) surfaces. As these impervious surfaces increase, infiltration will decrease, forcing more water to run off the surface, picking up speed and pollutants.

The concentration of pollutants in the runoff. Certain activities, such as those from industrial sites, are large contributors of pollutant concentrations to the MS4.

The report also identified several activities causing storm water pollution from urban areas, including practices of homeowners, businesses, and government agencies.

Studies conducted by the United States Geological Survey (USGS) confirm the link between urbanization and water quality impairments in urban watersheds due to contaminated storm water runoff.

Furthermore, the water quality impacts of urbanization and urban storm water discharges have been summarized by several other recent USEPA reports. Urbanization causes changes in hydrology and increases pollutant loads which adversely impact water quality and impair the beneficial uses of receiving waters.

Increases in population density and imperviousness result in changes to stream hydrology including:

- increased peak discharges compared to predevelopment levels;
- increased volume of storm water runoff with each storm compared to pre-development levels;
- decreased travel time to reach receiving water;
- increased frequency and severity of floods;
- reduced stream flow during prolonged periods of dry weather due to reduced levels of infiltration;
- increased runoff velocity during storms due to a combination of effects of higher discharge peaks, rapid time of concentration, and smoother hydraulic surfaces from channelization; and
- decreased infiltration and diminished groundwater recharge.

The Los Angeles County MS4 program has conducted monitoring to:

- quantify mass emissions for pollutants;
- identify critical sources for pollutants of concern in storm water;
- evaluate BMP effectiveness; and
- evaluate receiving water impacts, including impacts to tributaries.

The monitoring indicates that instream concentrations of pathogen indicators (fecal coliform and streptococcus), heavy metals (such as Pb, Cu, Zn) and pesticides (such as diazinon) exceed water quality standards. The mass emissions of pollutants to the ocean are significant from the urban WMAs such as the Los Angeles River WMA, Ballona Creek WMA, and Coyote Creek WMA, with the Los Angeles River WMA providing more than seventy percent of the loadings. Critical source data for facilities (such as auto-salvage yards, primary metal facilities, and automotive repair shops) show that total and dissolved heavy metals (Pb, Cu, Zn, and Cd), and total suspended solids (TSS) exceeded water quality standards by as much as two orders of magnitude. The results are consistent with a limited term study conducted by the Regional Water Board to characterize storm water runoff in the Los Angeles region in 1988 before the issuance of first MS4 permit. Storm water runoff data from predominant land uses in Los Angeles County showed similar patterns. Light industrial, commercial and transportation land uses showed the highest range of exceedances. A pesticide (diazinon) was detected in higher concentrations from residential land use. The data for polycyclic aromatic hydrocarbons (PAHs), a known pollutant of concern in urban storm water runoff, is inconclusive but improved analytical methods may yield more definitive results in the future. Receiving water impacts studies found that storm water discharges from urban watersheds exhibit toxicity attributable to heavy metals. Bioassessments of the benthic communities showed bioaccumulation of toxicants. Sediment analysis showed higher concentrations of pollutants, such as Pb and PAHs, in urban watersheds than in rural watersheds (2 to 4 times higher). In addition, toxicity of dry weather flows was observed with the cause of toxicity undetermined. Other studies have documented concentrations of pollutants that exceed water quality standards in storm drains flowing to the ocean during dry weather, and adverse health impacts from swimming near flowing storm drains.

Trash is also a serious and pervasive water quality problem in Los Angeles County. The Regional Water Board has determined that current levels of trash exceed the existing water quality objectives contained in the Basin Plan that are necessary to protect the beneficial uses of many surface waters. Regional Water Board staff regularly observes trash in surface waters throughout the Los Angeles region. Non-profit organizations such as Heal the Bay, Friends of the Los Angeles River (FoLAR) and others organize volunteer clean-ups periodically, and document the amount of trash collected. Trash in waterways causes significant water quality problems. Small and large floatables inhibit the growth of aquatic vegetation, decreasing habitat and spawning areas for fish and other living organisms. Wildlife living in rivers and in riparian areas can be harmed by ingesting or becoming entangled in floating trash. Except for large items, settleables are not always obvious to the eye. They include glass, cigarette butts, rubber, and construction debris, among other things. Settleables can be a problem for bottom feeders and can contribute to sediment contamination. Some debris (e.g. diapers, medical and household waste, and chemicals) are a source of bacteria and toxic substances. Floating debris that is not trapped and removed will eventually end up on the beaches or in the open ocean, keeping visitors away from our beaches and degrading coastal waters. Significant strides have been made by a number of Permittees in addressing this problem through the implementation of control measures to achieve wasteload allocations established in trash TMDLs.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

The Los Angeles County MS4 Permit was last reissued in 2001 as Order No.01-182. Order No. 01-182 expired in 2006, but has been administratively extended pursuant to federal regulations. Order No. 01-182 was reopened by the Regional Water Board in 2006, 2007 and 2009 to incorporate provisions to implement three TMDLs. It was further amended in 2010 and 2011 pursuant to a peremptory writ of mandate issued by the Los Angeles County Superior Court.

Order No. 01-182 is organized under the following seven parts and includes several attachments. The description below summarizes key permit parts and attachments in Order No. 01-182:

Part 1 – Discharge Prohibitions

As required by section 402(p)(3)(B)(ii) of the Clean Water Act, Part 1 requires permittees to “effectively prohibit non-storm water discharges into the MS4 and watercourses, except where such discharges” are covered by a separate NPDES permit or fall within one of thirteen categories of flows that are conditionally exempted from the discharge prohibition. These exempted flows fall under the general categories of natural flows, fire fighting flows, and flows incidental to urban activities (i.e. landscape irrigation, sidewalk rinsing). These non-storm water flows may be exempted so long as: (i) they are not a source of pollutants, (ii) their effective prohibition is not necessary to comply with TMDL provisions, and (iii) they do not violate antidegradation policies. Part 1 also authorizes the Regional Water Board Executive Officer to impose conditions on these types of discharges and to add or remove categories of conditionally exempted non-storm water discharges based on their potential to contribute pollutants to receiving waters.

Part 2 – Receiving Water Limitations

Part 2 prohibits discharges from the MS4 that cause or contribute to the violation of water quality standards. In addition, discharges from the MS4 of storm water or non-storm water, for which a Permittee is responsible, may not cause or contribute to a condition of nuisance. Part 2.3 states that permittees shall comply with these prohibitions “through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with [the Los Angeles Stormwater Quality Management Program (SQMP)] and its components and other requirements of [the LA County MS4 Permit].” Part 2.3 establishes an “iterative process” whereby certain actions are required when exceedances of water quality standards or objectives occur. This iterative process includes submitting a Receiving Water Limitations Compliance Report; revising the SQMP and its components to include modified BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised SQMP. These provisions are consistent with the receiving water limitations language required by State Water Board Order WQ 99-05.

Part 2 also includes provisions implementing the Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL (summer dry weather provisions only). During summer dry weather, Part 2.6 prohibits discharges of bacteria from MS4s into Marina del Rey Harbor Basins D, E, or F, including Mothers’ Beach that cause or contribute to exceedance of the applicable bacteria water quality objectives.

Part 2 also included similar TMDL provisions relating to the Santa Monica Bay summer dry weather bacteria TMDL. However, as a result of a legal challenge by Los Angeles County and the LACFCD, the Regional Water Board was required to void and set aside those provisions, which the Regional Water Board did in 2011.

Part 3 – Stormwater Quality Management Program (SQMP) Implementation

Under Part 3, each Permittee shall, at a minimum, implement the SQMP, which is an enforceable element of the Los Angeles County MS4 Permit. The SQMP, at a minimum, shall also comply with the applicable storm water program requirements of 40 CFR section 122.26(d)(2). The SQMP and its components shall be implemented so as to reduce the discharges of pollutants in storm water to the maximum extent practicable (MEP) and effectively prohibit non-storm water discharges to the MS4. Each Permittee shall also implement additional controls, where necessary, to reduce the discharge of pollutants from the MS4.

Part 3 also sets forth specific responsibilities of the Principal Permittee, which under Order No. 01-182 is the LACFCD, and co-permittees. In addition, Part 3 sets forth requirements for Watershed Management Committees (WMCs) which, among other tasks, prioritize pollution control efforts and evaluate the effectiveness of and recommend changes to the SQMP and its components. Each Permittee must also have the necessary legal authority to prohibit non-storm water discharges to the MS4, as well as possess adequate legal authority to develop and enforce storm water and non-storm water ordinances for its jurisdiction.

Part 4 – Special Provisions

Part 4 sets forth provisions for public information and participation, industrial/commercial facilities control program, development planning, development construction, public agency activities, and illicit connections and illicit discharges elimination. These programs are termed “minimum control measures” and have been in place since the inception of the MS4 NPDES permitting program, as required by federal regulations.

Part 5 – Definitions

Part 5 includes definitions for terms used within Order No. 01-182.

Part 6 – Standard Provisions

Part 6 includes standard provisions relating to implementation of the programs required by the permit. Such provisions include, but are not limited to, the duty to comply, the duty to mitigate, inspection and entry requirements, proper operation and maintenance requirements, monitoring and reporting requirements, and the duty to provide information. Most of these provisions are required by 40 CFR sections 122.41 or 122.42 and apply to all NPDES permits.

Part 7 – TMDL Provisions

In 2009, Order No. 01-182 was amended to include provisions that are consistent with the assumptions and requirements of waste load allocations from the Los Angeles River Trash TMDL. Appendix 7-1 identifies the permittees subject to the Los Angeles River Trash TMDL and sets forth the interim and final numeric effluent limitations for trash that the permittees must comply with. Part 7 also sets forth how permittees can demonstrate compliance with the numeric effluent limitations. Permittees have the option to employ three general compliance strategies to achieve the numeric effluent limitations. Depending on the strategy selected, the Permittee may demonstrate compliance either by documenting the percentage of its area addressed by full capture systems (“action-based” demonstration) or by calculating its annual trash discharge to the MS4 and comparing that to its effluent limitation. This approach allows the Permittee the flexibility to comply with the numeric effluent limitations using any lawful means, and establishes appropriate and enforceable compliance metrics depending on the method of compliance and level of assurance provided by the Permittee that the selected method will achieve the numeric effluent limitations derived from the TMDL WLAs.

Attachment U – Monitoring and Reporting Program

Order No. 01-182 has both self-monitoring and public reporting requirements, which include: (1) monitoring of “mass emissions” at seven mass emission monitoring stations; (2) Water Column Toxicity Monitoring; (3) Tributary Monitoring; (4) Shoreline Monitoring; (5) Trash Monitoring; (6) Estuary Sampling; (7) Bioassessment; and (8) Special Studies. The purpose of mass emissions monitoring is to: (1) estimate the mass emissions from the MS4; (2) assess trends in the mass emissions over time; and (3) determine if the MS4 is contributing to exceedances of water quality standards by comparing results to the applicable standards in the Basin Plan. Order No. 01-182 established that the Principal Permittee shall monitor the mass emissions stations. The permit required mass emission sampling five times per year.

III. APPLICABLE STATUTES, REGULATIONS, PLANS, AND POLICIES

The provisions contained in this Order are based on the requirements and authorities described below.

A. Legal Authorities – Federal Clean Water Act and California Water Code

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It serves as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

B. Federal and California Endangered Species Acts

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

C. California Environmental Quality Act (CEQA)

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

D. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans. The CWA requires the Regional Water Board to establish water quality standards for each water body in its region. Water quality standards include beneficial uses, water quality objectives and criteria that are established at levels sufficient to protect those beneficial uses, and an antidegradation policy to prevent degrading waters. On June 13, 1994, the Regional Water Board adopted a *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters in the Los Angeles Region. The Regional Water Board has amended the Basin Plan on multiple occasions since 1994. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Beneficial uses applicable to the surface water bodies that receive discharges from the Los Angeles County MS4 generally include those listed below:

Table F-3. Basin Plan Beneficial Uses

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

Pursuant to California Water Code sections 13263(a) and 13377, the requirements of this Order implement the Basin Plan.

a. Permit Structure: Watershed Management Approach and Total Maximum Daily Load (TMDL) Implementation

One of the fundamental issues for this Order was a reconsideration of the basic permit structure. The previous Order, Order No. 01-182, was structured as a single permit whereby all 86 Permittees were assigned uniform requirements, with additional requirements for the Principal Permittee. Through Order No. 01-182, the Regional Water Board began to implement a Watershed Management Approach to address water quality protection in the region. The Watershed Management Approach intended to provide a comprehensive and integrated strategy toward water resource protection, enhancement, and restoration while considering economic and environmental impacts within a hydrologically defined drainage basin or watershed.

On June 12, 2006, prior to the expiration date of Order No. 01-182, all of the Permittees filed Reports of Waste Discharge (ROWD) applying for renewal of their waste discharge requirements. Specifically, the Los Angeles County Flood Control District submitted an ROWD application on behalf of itself, the County of Los Angeles, and 78 other Permittees. Several Permittees under Order No. 01-182 elected to not be included as part of the Los Angeles County Flood Control District’s ROWD. On June 12, 2006, the cities of Downey and Signal Hill each submitted an individual ROWD application requesting an individual MS4 permit; and the Upper San Gabriel River Watershed Coalition (comprised of the cities of Azusa, Claremont, Glendora, Irwindale, and Whittier) also submitted an individual ROWD application requesting a separate MS4 permit for these cities. In 2010, the LACFCD withdrew from its 2006 ROWD and submitted a new ROWD also

requesting an individual MS4 permit. The LACFCD also requested that it no longer be designated as the Principal Permittee and that it is relieved of Principal Permittee responsibilities.

The Regional Water Board evaluated each of the 2006 ROWDs and notified all of the Permittees that their ROWDs did not satisfy federal storm water regulations contained in the USEPA Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems; Final Rule, August 9, 1996 (61 *Fed Reg.* 41697). The Regional Water Board also found that the information presented in the ROWDs did not reflect the current status of program elements for MS4 permits developed over the past decade or the new information specific to this MS4. Because each ROWD did not satisfy federal requirements, the Regional Water Board deemed all four 2006 ROWDs incomplete. The Regional Water Board also evaluated the LACFCD's 2010 ROWD and found that it too did not satisfy federal requirements nor reflect the current status for MS4s.

Though five separate ROWDs were submitted, the Regional Water Board retains the discretion as the permitting authority to determine whether to issue permits for discharges from MS4s on a system-wide or jurisdiction-wide basis. Clean Water Act section 402(p)(3)(B)(i) and implementing regulations at 40 CFR section 122.26, subdivisions (a)(1)(v), (a)(3)(ii), and (a)(3)(iv) allow the permitting authority to issue permits for MS4 discharges on a system-wide or jurisdiction-wide basis taking into consideration a variety of factors. Such factors include the location of the discharge with respect to waters of the United States, the size of the discharge, the quantity and nature of the pollutants discharged to waters of the United States, and other relevant factors. Federal regulations at 40 CFR section 122.26(a)(3)(ii) identify a variety of possible permitting structures, including one system-wide permit covering all MS4 discharges or distinct permits for appropriate categories of MS4 discharges including, but not limited to, all discharges owned or operated by the same municipality, located within the same jurisdiction, all discharges within a system that discharge to the same watershed, discharges within a MS4 that are similar in nature, or for individual discharges from MS4s.

In evaluating the five separate ROWDs and the structure for this Order, the Regional Water Board considered a number of factors:

- i. The nature of the Permittees' MS4s, which comprise a large interconnected system, controlled in large part by the Los Angeles County Flood Control District, among others, and used by multiple cities along with Los Angeles County. The discharges from these entities frequently commingle in the MS4 prior to discharge to receiving waters.
- ii. The requirement to implement 33 largely watershed-based TMDLs in this Order. A number of Permittees have already established jurisdictional groups on a watershed or subwatershed basis for TMDL implementation. (See Attachment K of this Order for a matrix of these TMDLs and Permittees by

Watershed Management Area (WMA)). Many of the TMDLs apply to multiple watersheds and the jurisdictional areas of multiple Permittees. Having separate permits would make implementation of the TMDLs more cumbersome.

- iii. The passage of Assembly Bill 2554 in 2010, which amended the Los Angeles County Flood Control Act. This statute allows the LACFCD to assess a property-related fee or charge for storm water and clean water programs. Funding is subject to voter approval in accordance with Proposition 218. Fifty percent of funding is allocated to nine “watershed authority groups” to implement collaborative water quality improvement plans. (See Attachments B and C of this Order for maps of WMAs.)
- iv. Results of the on-line survey administered to Permittees by Regional Water Board staff regarding permit structure. The results indicated that a majority of Permittees support a single MS4 permit for Los Angeles County. A significant minority support multiple watershed-based permits. Overall, 85 percent of the permittees that responded to the on-line survey support either a single MS4 permit or several individual watershed-based permits. A small number of permittees support alternative groupings of adjacent municipalities instead of watershed-based groupings. Only four permittees expressed a preference for individual MS4 permits.
- v. The 2006 and 2010 ROWDs. Eight Permittees submitted individual or small group ROWDs, including the cities of Signal Hill and Downey; five cities in the upper San Gabriel River watershed; and the Los Angeles County Flood Control District. The LACFCD has also requested that it is no longer designated as Principal Permittee and relieved of Principal Permittee responsibilities.

Based on an evaluation of these factors, the Regional Water Board again determined that, because of the complexity and networking of the MS4 within Los Angeles County, that one system-wide permit is appropriate. In order to provide individual Permittees with more specific requirements, this Order regulates the MS4 discharges of 86 Permittees with some sections devoted to universal requirements for all Permittees and others devoted to requirements specific to each Watershed Management Area (WMA), including TMDL implementation provisions. This structure is supported by section 402(p) of the Clean Water Act and 40 CFR sections 122.26, subdivisions (a)(1)(v), (a)(3)(ii), and (a)(3)(iv). A single permit will ensure consistency and equitability in regulatory requirements within Los Angeles County, while watershed-based sections within the single permit will provide flexibility to tailor permit provisions to address distinct watershed characteristics and water quality issues. Additionally, an internal watershed-based structure comports with the Regional Water Board’s Watershed Management Initiative, its watershed-based TMDL requirements, and the LACFCD’s funding initiative passed in Assembly Bill 2554. Watershed-based sections will help promote watershed-wide solutions to address water quality problems, which in many cases are the most efficient and cost-effective means to address storm water and urban runoff pollution. Further, watershed-based

sections may encourage collaboration among permittees to implement regional integrated water resources approaches such as storm water capture and re-use to achieve multiple benefits.

The Regional Water Board determined that the cities of Signal Hill and Downey, the five upper San Gabriel River cities, and the LACFCD are included as Permittees in this Order. Individually tailored permittee requirements are provided in this Order, where appropriate.

The Regional Water Board also determined that because the LACFCD owns and operates large portions of the MS4 infrastructure, including but not limited to catch basins, storm drains, outfalls and open channels, in each coastal watershed management area within Los Angeles County, the LACFCD should remain a Permittee in the single-system wide permit; however, this Order relieves LACFCD of its role and responsibilities as Principal Permittee. Additionally, given the LACFCD's limited land use authority, it is appropriate for the LACFCD to have a separate and uniquely-tailored storm water management program. Accordingly, the storm water management program minimum control measures imposed on the LACFCD in Part VI.D of this Order differ in some ways from the minimum control measures imposed on other Permittees. Namely, aside from its own properties and facilities, the LACFCD is not subject to the Industrial/Commercial Facilities Program, the Planning and Land Development Program, and the Development Construction Program. However, as a discharger of storm and non-storm water, the LACFCD remains subject to the Public Information and Participation Program and the Illicit Connections and Illicit Discharges Elimination Program. Further, as the owner and operator of certain properties, facilities and infrastructure, the LACFCD remains subject to requirements of a Public Agency Activities Program.

- 2. Ocean Plan.** In 1972, the State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (hereinafter Ocean Plan). The State Water Board adopted the most recent amended Ocean Plan on September 15, 2009. The Office of Administration Law approved it on March 10, 2010. On October 8, 2010, USEPA approved the 2009 Ocean Plan. The Ocean Plan is applicable, in its entirety, to ocean waters of the State. In order to protect beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Pursuant to California Water Code sections 13263(a) and 13377, the requirements of this Order implement the Ocean Plan. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

Table F-3B. Ocean Plan Beneficial Uses

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

3. Antidegradation Policy. 40 CFR section 131.12⁴ requires that the state water quality standards include an antidegradation policy consistent with the federal antidegradation policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16 (“Statement of Policy with Respect to Maintaining the Quality of the Waters of the State”). Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. The Regional Water Board’s Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Resolution No. 68-16 and 40 CFR section 131.12 require the Regional Water Board to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Water Board’s policies. Resolution 68-16 requires that discharges of waste be regulated to meet best practicable treatment or control to assure that pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the State be maintained.

The discharges permitted in this Order are consistent with the antidegradation provisions of 40 CFR section 131.12 and Resolution 68-16. Many of the water bodies within the area covered by this Order are of high quality. The Order requires the Permittees to meet best practicable treatment or control to meet water quality standards. As required by 40 CFR section 122.44(a), the Permittees must comply with the “maximum extent practicable” technology-based standard set forth in CWA section 402(p). Many of the waters within the area covered by this Order are impaired and listed on the State’s CWA Section 303(d) List and either the Regional Water Board or USEPA has established TMDLs to address the impairments. This Order requires the Permittees to comply with permit provisions to implement the WLAs set forth in the TMDLs in order to restore the beneficial uses of the impaired

⁴ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

water bodies consistent with the assumptions and requirements of the TMDLs. This Order includes requirements to develop and implement storm water management programs, achieve water quality-based effluent limitations, and effectively prohibit non-storm water discharges through the MS4.

The issuance of this Order does not authorize an increase in the amount of discharge of waste. The Order includes new requirements to implement WLAs assigned to Los Angeles County MS4 discharges that have been established in 33 TMDLs, most of which were not included in the previous Order.

- 4. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations and other conditions in this Order are at least as stringent as the effluent limitations in the previous permit.

E. Impaired Water Bodies on CWA section 303(d) List

Section 303(d)(1) of the CWA requires each state to identify specific water bodies within its boundaries where water quality standards are not being met or are not expected to be met after implementation of technology-based effluent limitations on point sources. Water bodies that do not meet water quality standards are considered impaired and are placed on the state's "303(d) List". Periodically, USEPA approves the State's 303(d) List. Most recently, USEPA approved the State's 2010 303(d) List of impaired water bodies on October 11, 2011, which includes certain receiving waters in the Los Angeles region. For each listed water body, the state or USEPA is required to establish a total maximum daily load (TMDL) of each pollutant impairing the water quality standards in that water body. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable pollutant loadings for a water body and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a water body to meet water quality standards. A TMDL is the sum of the allowable pollutant loads of a single pollutant from all contributing point sources (the waste load allocations or WLAs) and non-point sources (load allocations or LAs), plus the contribution from background sources and a margin of safety. (40 CFR section 130.2(i).) MS4 discharges are considered point source discharges. For 303(d)-listed water bodies and pollutants in the Los Angeles Region, the Regional Water Board or USEPA develops and adopts TMDLs that specify these requirements.

Over the last decade, the Regional Water Board and USEPA have established 33 TMDLs to remedy water quality impairments in various water bodies within Los Angeles County. (See Attachment K of this Order for a list of TMDLs by Watershed Management Area for Los Angeles County.) These TMDLs identify MS4 discharges as a source of pollutants to these water bodies and, as required, establish WLAs for MS4 discharges to reduce the amount of pollutants discharged to receiving waters. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose permit conditions, including: "management practices, control techniques and system,

design and engineering methods, and *such other provisions as the Administrator of the State determines appropriate for the control of such pollutants.*” (emphasis added.) Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. Federal regulations also require that NPDES permits contain effluent limits consistent with the assumptions and requirements of all available WLAs (40 CFR § 122.44(d)(1)(vii)(B)). California Water Code section 13377 also requires that NPDES permits include limitations necessary to implement water quality control plans. Therefore, this Order includes effluent limitations and other provisions to implement the TMDL WLAs assigned to permittees regulated by the LA County MS4 Permit.

The Regional Water Board has previously established numeric effluent limitations to implement TMDL WLAs when it reopened Order No. 01-182 in 2009 to incorporate permit provisions to implement the Los Angeles River Watershed Trash TMDL WLAs. In that case, Permittees have the option to employ three general compliance strategies to achieve the numeric effluent limitations. Depending on the strategy selected, the Permittee may demonstrate compliance either by documenting the percentage of its area addressed by full capture systems (“action-based” demonstration) or by calculating its annual trash discharge to the MS4 and comparing that to its effluent limitation. This approach allows the Permittee the flexibility to comply with the numeric effluent limitations using any lawful means, and establishes appropriate and enforceable compliance metrics depending on the method of compliance and level of assurance provided by the Permittee that the selected method will achieve the numeric effluent limitations derived from the TMDL WLAs. A similar approach is used for the 32 other TMDLs incorporated into this Order, where appropriate.

F. Other Plans, Policies and Regulations

This Order implements all other applicable federal regulations and State plans, policies and regulations, including the California Toxics Rule at 40 CFR section 131.38.

IV. RATIONALE FOR DISCHARGE SPECIFICATIONS

A. Discharge Prohibitions – Non-Storm Water Discharges

1. Regulatory Background

The CWA employs the strategy of prohibiting the discharge of any pollutant from a point source into waters of the United States unless the discharger of the pollutant(s) obtains an NPDES permit pursuant to CWA section 402. The 1987 amendment to the CWA included section 402(p) that specifically addresses NPDES permitting requirements for municipal discharges from MS4s. Section 402(p) prohibits the discharge of pollutants from specified MS4s to waters of the United States except as authorized by an NPDES permit and identifies the substantive standards for MS4 permits. MS4 permits (1) “shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers[]” and (2) “shall require [i] controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering

methods, and [ii] such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” (CWA § 402(p)(3)(B)(ii-iii).)

On November 16, 1990, USEPA published regulations to implement the 1987 amendments to the CWA. (55 Fed.Reg. 47990 et seq. (Nov. 16, 1990)). The regulations establish minimum requirements for MS4 permits. The regulations address both storm water and non-storm water discharges from MS4s; however, the minimum requirements for each are significantly different. This is evident from USEPA’s preamble to the storm water regulations, which states that “Section 402(p)(B)(3) [of the CWA] requires that permits for discharges from municipal separate storm sewers require the municipality to “effectively prohibit” non-storm water discharges from the municipal storm sewer ... Ultimately, such non-storm water discharges through a municipal separate storm sewer system must either be removed from the system or become subject to an NPDES permit.” (55 Fed.Reg. 47990, 47995 (Nov. 16, 1990)).⁵ USEPA states that MS4 Permittees are to begin to fulfill the “effective prohibition of non-storm water discharges” requirement by: (1) conducting a screening analysis of the MS4 to provide information to develop priorities for a program to detect and remove illicit discharges, (2) implementing a program to detect and remove illicit discharges, or ensure they are covered by a separate NPDES permit, and (3) to control improper disposal into the storm sewer. (40 CFR § 122.26(d)(2)(iv)(B).) These non-storm water discharges therefore are not subject to the MEP standard.

“Illicit discharges” defined in the regulations is the most closely applicable definition of “non-storm water” contained in federal law and the terms are often used interchangeably. In fact, “illicit discharge” is defined by USEPA in its 1990 rulemaking, as “any discharge through a municipal separate storm sewer that is not composed entirely of storm water and that is not covered by an NPDES permit [other than the permit for the discharge from the MS4].” (55 Fed.Reg. 47990, 47995).

2. Definition of Storm Water and Non-Storm Water

Federal regulations define “storm water” as “storm water runoff, snow melt runoff, and surface runoff and drainage.” (40 C.F.R. § 122.26(b)(13).) While “surface runoff and drainage” is not defined in federal law, USEPA’s preamble to the federal regulations demonstrates that the term is related to precipitation events such as rain and/or snowmelt. (55 Fed.Reg. 47990, 47995-96 (Nov. 16, 1990)). For example, USEPA states:

In response to the comments [on the proposed rule] which requested EPA to define the term ‘storm water’ broadly to include a number of classes of discharges which are not in any way related to precipitation events, EPA believes that this rulemaking is not an appropriate forum for addressing the appropriate regulation under the NPDES program of such non-storm water discharges Consequently, the final definition of storm water has not been expanded from what was proposed.

⁵ USEPA further states that, “[p]ermits for such [non-storm water] discharges must meet applicable technology-based and water-quality based requirements of Sections 402 and 301 of the CWA.” (55 Fed. Reg. 47990, 48037 (Nov. 16, 1990)).

(*Ibid.*) The storm water regulations themselves identify numerous categories of discharges including landscape irrigation, diverted stream flows, discharges from drinking water supplier sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, and street wash water as “non-storm water.” While these types of discharges may be regulated under storm water permits, they are not considered storm water discharges. (40 CFR § 122.26(d)(2)(iv)(B)). USEPA states that, “in general, municipalities will not be held responsible for prohibiting some specific components of discharges or flows ... through their municipal separate storm sewer system, *even though such components may be considered non-storm water discharges...*” (emphasis added). However, where certain categories of non-storm water discharges are identified by the Permittee (or the Regional Water Board) as needing to be addressed, they are no longer exempt and become subject to the effective prohibition requirement in CWA section 402(p)(3)(B)(ii). This review of the storm water regulations and USEPA’s discussion of the definition of storm water in its preamble to these regulations strongly supports the interpretation that storm water includes only precipitation-related discharges. Therefore, non-precipitation related discharges are not storm water discharges and, therefore, are not subject to the MEP standard in CWA section 402(p)(3)(B)(iii). Rather, non-storm water discharges shall be effectively prohibited pursuant to CWA section 402(p)(3)(B)(ii).

3. Non-Storm Water Regulation

Non-storm water discharges from the MS4 that are not authorized by separate NPDES permits, nor specifically exempted, are subject to requirements under the NPDES program, including discharge prohibitions, technology-based effluent limitations and water quality-based effluent limitations (40 CFR § 122.44). USEPA’s preamble to the storm water regulations also supports the interpretation that regulation of non-storm water discharges through an MS4 is not limited to the MEP standard in CWA section 402(p)(3)(B)(iii):

“Today’s rule defines the term “illicit discharge” to describe any discharge through a municipal separate storm sewer system that is not composed entirely of storm water and that is not covered by an NPDES permit. Such illicit discharges are not authorized under the Clean Water Act. Section 402(p)(3)(B) requires that permits for discharges from municipal separate storm sewers require the municipality to “effectively prohibit” non-storm water discharges from the municipal separate storm sewer...Ultimately, such non-storm water discharges through a municipal separate storm sewer must either be removed from the system or become subject to an NPDES permit.” (55 Fed.Reg. 47990, 47995.)

In its 1990 rulemaking, USEPA explained that the illicit discharge detection and elimination program requirement was intended to begin to implement the Clean Water Act’s provision requiring permits to “effectively prohibit non-storm water discharges.” (55 Fed.Reg. 47990, 47995.)

4. Authorized and Conditionally Exempt Non-Storm Water Discharges

The previous permit, Order No. 01-182, contained provisions exempting several categories of non-storm water discharges from the discharge prohibition, including discharges covered by a separate individual or general NPDES permit for non-storm water discharges, natural flows, flows from emergency fire fighting activity, and flows incidental to urban activities. This Order retains these same categories, but with several enhancements. Natural flows specified in this Order include natural springs and rising ground water; flows from riparian habitats and wetlands; diverted stream flows authorized by the State or Regional Water Board; and uncontaminated ground water infiltration. Flows incidental to urban activities specified in this Order include landscape irrigation; dechlorinated/debrominated swimming pool discharges; dewatering of lakes and decorative fountains; non-commercial car washing by residents or by non-profit organizations; and street/sidewalk washwater. This Order separately identifies flows from non-emergency fire fighting activities and discharges from drinking water supplier distribution systems as “essential” non-storm water discharges rather than combining them into the same category as the other non-storm water discharges incidental to urban activities. In doing so, the Regional Water Board recognizes that these discharges are essential public service discharge activities and are directly or indirectly required by other state or federal statute and/or regulation. This Order continues to unconditionally exempt emergency fire fighting discharges from the discharge prohibition.

Like Order No. 01-182, this Order contains a provision that the Regional Water Board Executive Officer may add or remove categories of exempt non-storm water discharges. In addition, in the event that any of the categories of non-storm water discharges are determined to be a source of pollutants by the Executive Officer then the discharges will no longer be exempt unless the Permittee implements conditions approved by the Executive Officer to ensure that the discharge is not a source of pollutants. Also the Executive Officer may impose additional prohibitions of non-storm water discharges in consideration of antidegradation policies and TMDLs.

5. BMPs for Non-Storm Water Discharges

In this Order, no changes have been made to the types of non-storm water discharges included in the non-storm water discharge prohibition exemptions, with one exception related to temporary discharges authorized by USEPA pursuant to sections 104(a) or 104(b) of CERCLA. However, the non-storm water discharge provisions in this Order have been reworded to clarify the requirements for addressing authorized and conditionally exempt non-storm water discharges that are not prohibited. In particular, language has been added to explicitly identify State and Regional Water Board permits that are applicable to some of the exempted non-storm water discharges. The State and Regional Water Board general permits referenced in this Order and their applicability to the different types of non-storm water discharges that are routinely discharged through the MS4 is contained in Table F-4 below.

Table F-4. State and Regional Water Board General Permits Referenced in this Permit

Order/NPDES Permit No.	Applicable Types of Discharges
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Order/NPDES Permit No.	Applicable Types of Discharges
NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Ground water seepage • Uncontaminated pumped ground water • Gravity flow from foundation drains, footing drains, and crawl space pumps • Air conditioning condensate • Discharges of cleaning wastewater and filter backwash
NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Uncontaminated pumped ground water • Discharges from activities that occur at wellheads, such as well construction, well development (e.g., aquifer pumping tests, well purging), or major well maintenance • Gravity flow from foundation drains, footing drains, and crawl space pumps • Discharges of ground water from construction and project dewatering⁶
NPDES Permit No. CAG990002 – Discharges from Utility Vaults and Underground Structures to Surface Waters	<ul style="list-style-type: none"> • Uncontaminated pumped ground water • Gravity flow from foundation drains, footing drains, and crawl space pumps
NPDES Permit No. CAG674001 – Discharges From Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> • Discharges of low threat hydrostatic test water⁷

⁶ Discharges of ground water from construction and project dewatering include treated or untreated wastewater from permanent or temporary construction dewatering operations; ground water pumped as an aid in the containment and/or cleanup of a contaminant plume; ground water extracted during short-term and long-term pumping/aquifer tests; ground water generated from well drilling, construction or development and purging of wells; equipment decontamination water; subterranean seepage dewatering; incidental collected storm water from basements; and other process and non-process wastewater discharges that meet the eligibility criteria and could not be covered under another specific general NPDES permit.

⁷ Low threat hydrostatic test water means discharges resulting from the hydrostatic testing or structural integrity testing of pipes, tanks, or any storage vessels using domestic water or from the repair and maintenance of pipes, tanks, or reservoirs.

Order/NPDES Permit No.	Applicable Types of Discharges
NPDES Permit No. CAG914001 – Discharges of Treated Groundwater from Investigation and/or Cleanup of Volatile Organic Compounds Contaminated-Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> Discharges of treated ground water from investigation and/or cleanup of volatile organic compound (VOC) contaminated sites
NPDES Permit No. CAG994005 – Discharges of Ground Water from Water Supply Wells to Surface Waters in Los Angeles and Ventura Counties	<ul style="list-style-type: none"> Discharges of ground water from potable water supply wells⁸
NPDES Permit No. CAG834001 – Waste Discharge Requirements for Treated Groundwater and Other Wastewaters from Investigation and/or Cleanup of Petroleum Fuel-Contaminated Sites to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	<ul style="list-style-type: none"> Discharges of treated ground water and other waste waters from investigation and/or cleanup of petroleum fuel contaminated sites

This Order explicitly adds another category of authorized non-storm water discharge for discharges authorized by USEPA pursuant to sections 104(a) or 104(b) of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). These discharges typically consist of short-term, high volume discharges resulting from the development or redevelopment of groundwater extraction wells, or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA. These discharges through the MS4 are only authorized if: (i) the discharge will comply with water quality standards identified as applicable or relevant and appropriate requirements (“ARARs”) under section 121(d)(2) of CERCLA; or (ii) the discharge is subject to either (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation, pursuant to 40 CFR section 300.415(j). Additionally, a decision to authorize a discharge through the MS4 to surface waters will not be made by USEPA without first conducting a comprehensive evaluation of containment, treatment, reinjection, or re-use options for the water generated from the subject wells. If a decision to discharge through the MS4 is made, USEPA’s authorization of the discharge under CERCLA will require that the discharger shall:

- (1) Implement BMPs to minimize the rate and duration of the discharge and remove excessive solids, and implement other on-site physical treatment where feasible.

⁸ Discharges covered by this permit include ground water from potable water supply wells generated during the following activities: ground water generated during well purging for data collection purposes; ground water extracted from major well rehabilitation and redevelopment activities; and ground water generated from well drilling, construction, and development.

- (2) Promote infiltration of discharged water in locations that will prevent or minimize degradation of groundwater quality.
- (3) Notify the affected MS4 Permittees, including the LACFCD and the MS4 Permittee with land use authority over the discharge location, and the Regional Water Board at least one week prior to a planned discharge (unless USEPA determines in writing that exigent circumstances require a shorter notice period) and as soon as possible (but no later than 24 hours after the discharge has occurred) for unplanned discharges;
- (4) Monitor any pollutants of concern in the discharge⁹; and
- (5) Maintain records for all discharges greater than 100,000 gallons.¹⁰

In addition to requiring NPDES permit coverage for applicable categories of non-storm water discharges, this Order contains language that specifies certain conditions, including implementation of BMPs, for each category of conditionally exempt non-storm water discharge that must be met in order for the non-storm water discharge to be exempted from the non-storm water prohibition and thus allowed through the MS4.

The California Recycled Water Policy, adopted by the State Water Board in Resolution No. 2009-0011, calls for an increase in the use of recycled water from municipal wastewater sources that meet the definition in California Water Code section 13050(n), in a manner that implements state and federal water quality laws. In support of the California Recycled Water Policy, a provision has been added requiring that alternative means of disposal or opportunities for capture, reclamation, and reuse must be evaluated prior to discharging any of the non-storm water discharge categories to the MS4. In addition, to ensure the protection of receiving water quality all non-storm water discharges must be segregated from potential sources of pollutants to prevent the introduction of pollutants to the discharge.

In establishing provisions specific to different non-storm water discharge types, the Regional Water Board reviewed non-storm water discharge provisions and BMPS included in other area MS4 permits. MS4 permits reviewed included the Ventura County MS4 permit (R4-2009-0057), the Orange County MS4 permit (Order No. R9-2009-0002), the Riverside County MS4 permit (R9-2010-0016), and the San Diego County MS4 permit (R9-2007-0001). Conditions established in this permit for each of

⁹ Pollutants of concern include, at a minimum, trash and debris, including organic matter, TSS, any pollutant being addressed by the groundwater remediation action under CERCLA, and any pollutant for which there is a Water Quality Based Effluent Limitation in Part VI.E applicable to discharges from the MS4 to the receiving water.

¹⁰ Records shall be maintained, as appropriate, on the: name of CERCLA authorized discharger, date and time of notification (for planned discharges), method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the discharge, duration of the discharge, flow rate or velocity, estimated total number of gallons discharged, type of pollutant removal equipment used, type of dechlorination equipment used if applicable, type of dechlorination chemicals used if applicable, concentration of residual chlorine if applicable, type(s) of sediment controls used, and field and laboratory monitoring data. Records shall be retained for three years, unless the Regional Water Board requests a longer record retention period and shall be made available upon request by the MS4 Permittee or the Regional Water Board.

the non-storm water discharge categories ensure the protection of receiving water quality and are considered common practices.

Dischargers permitted under NPDES Permit No. CAG990002 are required to contact the appropriate Permittee(s) with jurisdiction over the MS4, including but not limited to the Los Angeles County Flood Control District, within 24 hours, whenever there is a discharge of 50,000 gallons or more from utility vaults and underground structures to the MS4.

The conditions for landscape irrigation have been split into potable and reclaimed landscape irrigation categories. As identified in the Orange County MS4 permit incidental runoff from landscape irrigation projects including over irrigation and overspray have the potential to contribute landscape derived pollutants such as bacteria, nutrients, and pesticides to receiving waters. In addition, the California Recycled Water Policy identifies the need for control of incidental runoff from landscape irrigation projects, particularly as it relates to recycled water use. The BMPs incorporated into the permit for potable landscape irrigation ensure that water is conserved, overspray and over irrigation causing incidental runoff is minimized, and exposure to landscape related pollutants is minimized.

State Water Board Water Quality Order No. 2009-0006-DWQ, General Waste Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water, is a general permit for producers and distributors of recycled water for landscape irrigation uses. As part of this general permit, the producers and distributors of recycled water for landscape irrigation are required to develop an Operations and Maintenance Plan (O&M Plan) that includes an Operations Plan and an Irrigation Management Plan. Therefore, any reclaimed landscape irrigation discharges to the MS4 must comply with the relevant portion of the O&M Plan including the Irrigation Management Plan. By explicitly referencing the O&M requirement in this permit, it centralizes the requirements for reclaimed landscape irrigation and helps to ensure that procedures are in place for conserving water, minimizing incidental runoff, and minimizing exposure to landscape related pollutants.

Non-storm water discharge provisions have been added for the dewatering of lakes to the MS4. The provisions for the dewatering of lakes including removing and legally disposing of all visible trash on the shoreline or on the surface of the lake and the cleaning of the MS4 inlet and outlet where the water will be discharged to the receiving water have been consistently incorporated into Regional Water Board authorizations to discharge non-storm water from lakes, reservoirs, and ponds. In addition provisions for volumetrically and velocity controlling discharges as well as taking measurements to stabilize lake bottom sediments are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level. The permit provisions for the dewatering of lakes ensure the protection of receiving water quality.

Basin plan requirements for residual chlorine have been explicitly included in the conditions for drinking water supplier distribution system releases,

dechlorinated/debrominated swimming pool/spa discharges, and dewatering of decorative fountains. Related to swimming pool discharges, discharges of cleaning wastewater and filter backwash are specifically mentioned as being allowed only if authorized under a separate NPDES permit. The Regional Water Board has a general permit for discharges of nonprocess wastewater to surface waters in coastal watersheds of Los Angeles and Ventura counties (NPDES Permit No. CAG994003) that may address discharges of cleaning wastewater and filter backwash.

Specific BMPs for discharges of swimming pools/spas and the dewatering of decorative fountains have been added to this Order including prohibiting the dewatering of swimming pools/spas or decorative fountains containing copper-based algaecides and requiring the implementation of controls to prevent introduction of pollutants prior to discharge. Swimming pool/spa discharges and decorative fountain water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate and if necessary shall be pH adjusted to within the range of 6.5 and 8.5. The MS4 inlet and outlet must be inspected and cleaned out immediately prior to discharge to protect receiving water quality. In addition provisions for volumetrically and velocity controlling discharges are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level.

In addition to the specific inclusion of Basin Plan water quality objectives for residual chlorine, this Order allows discharges of drinking water supplier distribution system releases as long as specified BMPs are implemented. BMPs must be implemented to prevent introduction of pollutants to drinking water supplier distribution system releases prior to discharge to the receiving water. BMPs must be consistent with the American Water Works Association (California – Nevada Section) BMP Manual for Drinking Water System Releases and other applicable guidelines. Similar to discharges of swimming pools/spas and dewatering of decorative fountains, drinking water supplier distribution system releases must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate and if necessary shall be pH adjusted to within the range of 6.5 and 8.5. The MS4 inlet and outlet must be inspected and cleaned out immediately prior to discharge to protect receiving water quality. BMPs such as sand bags or gravel bags, or other appropriate means shall be utilized to prevent sediment transport and all sediment shall be collected and disposed of in a legal and appropriate manner. In addition provisions for volumetrically and velocity controlling discharges are incorporated into the provisions of this Order to ensure that turbidity in receiving waters are maintained at an acceptable level.

The permit provisions for drinking water supply and distribution system releases, dechlorinated/debrominated swimming pool/spa discharges, and dewatering of decorative fountains ensures the protection of receiving water quality.

The Regional Water Board evaluated and established a list of approved BMPs for various programs and activities through Regional Water Board Resolution 98-08 that serves as appropriate BMPs for inclusion in the Discharger and Permittees' regulatory programs. Requirements for street/sidewalk wash water contained in

Resolution 98-08 have also been explicitly incorporated into this Order. The inclusion of the requirements contained in Resolution 98-08 helps to ensure that Permittees are aware of the requirements and ensures the protection of receiving water quality.

Specific BMPs for discharges from non-commercial car washing have been incorporated into this Order to prevent the introduction of pollutants prior to discharge. BMPs that must be implemented for the discharge of non-commercial vehicle wash water include minimizing the amount of water used by turning off nozzles or kinking the hose when not spraying a vehicle and by using a pressure washer; using biodegradable, phosphate free detergents and non-toxic cleaning products; where possible, washing vehicles on permeable surfaces where wash water can percolate into the ground; creating a temporary berm or block off the storm drains; using pumps or vacuums to direct water to pervious areas; and emptying buckets of soapy water or rinse water into the sanitary sewer system. These BMPs are common practice and ensure the protection of receiving water quality.

The inclusion of conditions for flows related to non-emergency fire-fighting activities is new to this iteration of the permit. Conditions for discharges related to fire fighting activities have been incorporated into other MS4 permits including both Orange County and Riverside County. Flows resulting from emergency fire fighting activities necessary for the protection of life or property do not require implementation of specific BMPs.

The specific BMPs for discharges associated with non-emergency fire fighting activities that have been incorporated into this Order have been incorporated into other California MS4 permits. Both the Riverside County and Orange County MS4 permits require the development and implementation of a program to address pollutants from non-emergency fire fighting flows. Rather than develop a program to address non-emergency fire fighting flows, common BMPs used in association with non-emergency fire fighting discharges have been incorporated into this Order. Guidance on BMPs contained in this Order for non-emergency fire fighting activities is available in the Best Management Practices Plan for Urban Runoff Management for Participating Riverside County Fire Fighting Agencies.

The inclusion of specific conditions for exempted non-storm water discharges in this Order centralizes the requirements for non-storm water discharges. Conditions established in this permit for each of the conditionally exempt non-storm water discharge categories are common practice and have been incorporated into other area MS4 permits.

6. Permittee Requirements for Non-Storm Water Discharges

This Order includes specific requirements for Permittees related to more targeted screening of MS4 outfalls for non-storm water discharges, and monitoring and evaluation of significant non-storm water discharges. Permittees are required to develop and implement procedures to ensure that all conditions required for

conditionally exempt non-storm water discharges are being implemented. These requirements also help to clarify the responsibilities of the Permittees versus the responsibilities of the non-MS4 Permittee dischargers to the MS4. The development and implementation of these procedures helps to ensure compliance with the non-storm water discharge prohibition and ensure that the non-storm water discharges are not sources of pollutants.

B. Technology-Based Effluent Limitations

Section 301(b)(1)(A) of the CWA and 40 CFR section 122.44(a) require that NPDES permits include technology based effluent limitations.¹¹ In 1987, the CWA was amended to require that municipal storm water discharges “reduce the discharge of pollutants to the maximum extent practicable.” (CWA § 402(p)(3)(B)(iii).) The “maximum extent practicable” (MEP) standard is the applicable federal technology based standard that MS4 owners and operators must attain to comply with their NPDES permits.¹² The corresponding regulatory provisions that further detail the MEP standard can be found in 40 CFR sections 122.26(d)(2)(iv) and 122.44(k)(2).

Neither Congress nor the USEPA has specifically defined the term “maximum extent practicable.” Rather, the MEP standard is a flexible and evolving standard. Congress established this flexible MEP standard so that administrative bodies would have “the tools to meet the fundamental goals of the Clean Water Act in the context of storm water pollution.”¹³ This standard was designed to allow permit writers flexibility to tailor permits to the site-specific nature of MS4s and to use a combination of pollution controls that may be different in different permits.¹⁴ The MEP standard is also expected to evolve in light of programmatic improvements, new source control initiatives, and technological advances that serve to improve the overall effectiveness of storm water management programs in reducing pollutant loading to receiving waters. This is consistent with USEPA’s interpretation of storm water management programs. As explained by USEPA in its 1990 rulemaking, “EPA anticipates that storm water management programs will evolve and mature over time” (55 Fed.Reg. 47990, 48052 (Nov. 16, 1990)). There is ample evidence of this evolution in storm water management. Two local examples include the development of full capture trash control devices in response to the Los Angeles Region Trash TMDLs, and the development of innovative media filters for use in outfalls at the Boeing Santa Susana Field Laboratory that have potential municipal applications.

To provide clarification to the Regional Water Boards, the State Water Board’s Office of Chief Counsel issued a memorandum dated February 11, 1993 regarding the “Definition of ‘Maximum Extent Practicable’”. In the memorandum, the State Water Board interpreted the MEP standard to entail “a serious attempt to comply,” and that under the

¹¹ A technology based effluent limitation is based on the capability of a model treatment method to reduce a pollutant to a certain concentration (NPDES Permit Writer’s Manual, Appendix A). Technology based requirements represent the minimum level of control that must be imposed in a permit issued under CWA § 402.

¹² Note that the MEP standard only applies to storm water discharges from the MS4. Non-storm water discharges are subject to a different standard – specifically, non-storm water discharges through the MS4 must be effectively prohibited.

¹³ Building Industry Ass’n of San Diego County v. State Water Resources Control Board (2004) 124 Cal.App.4th 866, 884.

¹⁴ In re City of Irving, Texas, Municipal Storm Sewer System, (July 16, 2001), 10 E.A.D. 111 (E.P.A.), *6.

MEP standard, “practical solutions may not be lightly rejected.” The memorandum states, “[i]n selecting BMPs which will achieve MEP, it is important to remember that municipalities will be responsible to reduce the discharge of pollutants in storm water to *the maximum extent practicable*. This means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive.” The memorandum further states that, “[a]fter selecting a menu of BMPs, it is of course the responsibility of the discharger to insure that all BMPs are implemented.”

This Order includes programmatic requirements in six areas pursuant to 40 CFR section 122.26(d)(2)(iv) as well as numeric design standards for storm water runoff from new development and redevelopment consistent with the federal MEP standard (see State Water Board Order WQ 2000-11, the “LA SUSMP Order”). This Order also includes protocols for periodically evaluating and modifying or adding control measures, consistent with the concept that MEP is an evolving and flexible standard.

This Order also provides for the use of municipal action levels (“MALs”) derived from the National Stormwater Quality Database (NSQD), as a means of evaluating the overall effectiveness of a Permittee’s storm water management program in reducing pollutant loads from a particular drainage area and in order to assess compliance with the MEP standard. Finally, this Order includes BMP Performance Standards derived from the International BMP Database as a guide for BMP selection and design, and as a tool for evaluating the effectiveness of individual post-construction BMPs in reducing pollutant loads and assessing compliance with the MEP standard. USEPA recommends the use of numeric benchmarks for BMPs to estimate BMP effectiveness and as triggers for taking additional actions such as evaluating the effectiveness of individual BMPs, implementing and/or modifying BMPs, or providing additional measures to protect water quality.¹⁵

C. Water Quality-Based Effluent Limitations (WQBELs)

In addition to requiring that MS4 permits include technology based requirements consistent with the MEP standard, section 402(p)(3)(B)(iii) of the CWA authorizes the inclusion of “such other provisions as the Administrator or the State determines appropriate for the control of [] pollutants.”¹⁶ This requirement gives USEPA or the State permitting authority discretion to determine what permit conditions are necessary to control pollutants. Generally, permit requirements designed to achieve water quality standards are referred to as water quality based effluent limitations (WQBELs). A WQBEL is a restriction on the quantity or concentration of a pollutant that may be discharged from a point source into a receiving water that is necessary to achieve an

¹⁵ See USEPA November 22, 2002 memorandum, “Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs.”

¹⁶ The first and second iterations of the Los Angeles County MS4 Permit relied solely upon requirements consistent with the MEP standard to work toward achieving water quality standards. Note that the MEP standard is distinct from a water quality based standard; each has a different basis. Therefore, while from a practical point of view, the goal of all MS4 permit conditions is to control pollutants in discharges to ultimately achieve certain water quality outcomes, water quality based standards are directly derived from this desired outcome, while the MEP standard is anticipated to be a way of working toward the desired outcome, but is not directly derived from it.

applicable water quality standard in the receiving water.¹⁷ WQBELs may be expressed narratively or numerically.

In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, “permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls” (see 55 Fed.Reg. 47990, 47994 (Nov. 16, 1990)). In December 1999, USEPA reiterated in its Phase II Stormwater Regulations, Final Rule that MS4 “permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL.”¹⁸ The State Water Board has affirmed that MS4 permits must include requirements necessary to achieve compliance with the applicable technology based standard of MEP and to achieve water quality standards.¹⁹

WQBELs are required for point source discharges that have the reasonable potential to cause or contribute to an excursion of water quality standards and technology based effluent limitations or standards are not sufficient to achieve water quality standards.²⁰

The State Water Board has previously concluded that sole reliance in MS4 permits on BMP based requirements is not sufficient to ensure attainment of water quality standards. (See State Water Board Order 2001-015). The Regional Water Board concurs with this conclusion. This conclusion is amply supported by Regional Water Board and USEPA established TMDLs for impaired waters in the Los Angeles Region, indicating that MS4 discharges are a continuing source of pollutants to the impaired receiving waters notwithstanding the implementation of storm water management programs that have been driven by the MEP standard by Permittees for the last two decades.

In this Order, WQBELs are included where the Regional Water Board has determined that discharges from the MS4 have the reasonable potential to cause or contribute to an excursion above water quality standards.²¹ Reasonable potential can be demonstrated in several ways, one of which is through the TMDL development process. Where a point source is assigned a WLA in a TMDL, the analysis conducted in the development of the TMDL provides the basis for the Regional Water Board’s determination that the discharge has the reasonable potential to cause or contribute to an exceedance of water quality standards in the receiving water. This approach is affirmed in USEPA’s Permit Writer’s Manual, which states, “[w]here there is a pollutant with a WLA from a TMDL, a permit writer must develop WQBELs.” Therefore, WQBELs are included in this Order for all pollutants for which a WLA is assigned to MS4 discharges.

¹⁷ See 40 CFR § 122.2; NPDES Permit Writer’s Manual, Appendix A. A WQBEL is distinguished from a technology based effluent limitation (TBEL) in that the basis for the WQBEL is the applicable water quality standard for the receiving water, while the basis for the TBEL is generally the performance of the best available technology.

¹⁸ See, e.g., Phase II Stormwater Regulations, Final Rule, 64 Fed. Reg. 68722, 68737.

¹⁹ See, e.g., State Water Board Orders WQ 99-05 and 2001-15.

²⁰ 40 CFR §§ 122.44(d)(1)(i); 122.44(d)(1)(iii)

²¹ 40 CFR §§ 122.44(d)(1)(i)-(iii); 122.44(d)(1)(vii)(B)

Federal regulations further require that, “when developing water quality-based effluent limits...the permitting authority shall ensure that effluent limits ... are consistent with the assumptions and requirements of any available wasteload allocation for the discharge...” (40 CFR § 122.44(d)(1)(vii)(B)).

The Regional Water Board interprets this to mean that the final WQBEL must be expressed in similar terms as the underlying WLA; for example, where a TMDL includes WLAs for MS4 discharges that provide numeric pollutant load objectives, the WLA should be translated into numeric WQBELs in the permit, and at a level to achieve the same expected water quality outcome. USEPA also recommends the use of numeric WQBELs to meet water quality standards where MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion. Numeric WQBELs will help clarify MS4 permit requirements and improve accountability in this permit term.

While BMPs²² are central to MS4 permits, permit requirements may only rely upon BMP based limitations in lieu of water quality based effluent limitations if: (1) the BMPs are adequate to achieve water quality standards, and (2) numeric effluent limitations are infeasible.²³ As discussed earlier, the State and Regional Water Boards have concluded that sole reliance on MEP based permit requirements is not sufficient to ensure the achievement of water quality standards. Further, there is insufficient data and information available at this time on the prospective implementation of BMPs throughout Los Angeles County to provide the Regional Water Board reasonable assurance that the BMPs would be sufficient to achieve the WQBELs.²⁴

Regarding the feasibility of numeric effluent limitations, the Regional Water Board concludes that numeric WQBELs are feasible. While a lack of data may have hampered the development of numeric effluent limitations for MS4 discharges in earlier permit cycles, in the last decade, 33 TMDLs have been developed for water bodies in Los Angeles County in which WLAs are assigned to MS4 discharges. In each case, part of the development process entailed analyzing pollutant sources and allocating loads using empirical relationships or modeling approaches. As a result, it is possible to use these numeric WLAs to derive numeric WQBELs for MS4 discharges. USEPA has also acknowledged that its expectations regarding the application of numeric WQBELs to municipal storm water discharges have changed as the storm water permit program has continued to mature over the last decade.²⁵

²² Note that best management practices and effluent limitations are two different types of permit requirements (see 40 CFR §§ 122.2; 122.44(k), which distinguish the two terms and describe their relationship to each other).

²³ 40 CFR §§ 122.44(d)(1); 122.44(k)(3); see also State Water Board Order 91-03; Memorandum from Elizabeth Miller Jennings, Office of Chief Counsel to Bruce Fujimoto, Division of Water Quality, “Municipal Storm Water Permits: Compliance with Water Quality Objectives,” October 3, 1995.

²⁴ USEPA states in its 2002 memorandum, “Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs” that, “[w]hen a non-numeric water quality-based effluent limit is imposed, the permit’s administrative record, including the fact sheet when one is required, needs to support that the BMPs are expected to be sufficient to implement the WLA in the TMDL,” citing 40 CFR §§ 124.8, 124.9, and 124.18. See also USEPA’s 2010 memorandum revising the 2002 memorandum.

²⁵ See USEPA 2010 memorandum, “Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs’” in which USEPA states, “where the NPDES permitting authority determines that MS4 discharges...have the reasonable potential to cause or contribute to water quality standards excursions, permit for MS4s...should contain numeric effluent limitations where feasible to do so.” USEPA further states, “[w]here the TMDL includes WLAs for

The inclusion of numeric WQBELs is also consistent with the Ninth Circuit Court of Appeal's ruling in *Defenders of Wildlife v. Browner* (191 F.3d 1159, 1166 (1999)) that the permitting authority has discretion regarding the nature and timing of requirements that it includes as MS4 permit conditions to attain water quality standards, and that these requirements may include numeric effluent limitations.

Further, given the variability in implementation of storm water management programs across Permittees, numeric WQBELs create an objective, equitable and accountable means of controlling MS4 discharges, while providing the flexibility for Permittees to comply with the WQBELs in any lawful manner.

D. Final Effluent Limitations

Final WQBELs are included in this Order based on the final WLAs assigned to discharges from the Los Angeles County MS4 in all available TMDLs.

MS4 permits can include compliance schedules for achieving final WQBELs derived from TMDL WLAs, so long as the compliance schedule is consistent with a TMDL implementation plan adopted by the Regional Water Board and approved through the State's basin plan amendment process. If a compliance schedule exceeds one year, it must include interim requirements pursuant to 40 CFR section 122.47.

Section 402(o) of the CWA and 40 CFR section 122.44(l) require that effluent limitations in reissued orders be at least as stringent as those in the existing order. This Order carries over the final receiving water limitations and WQBELs that were included to implement the Marina del Rey Harbor Back Basins and Mothers' Beach Bacteria TMDL and the Los Angeles River Trash TMDL, respectively, in the 2007 and 2009 amendments to Order No. 01-182.

E. Interim Effluent Limitations

Where there is a TMDL implementation plan adopted by the Regional Water Board and approved through the State's basin plan amendment process, interim WQBELs are included in this Order based on interim WLAs established for MS4 discharges.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Receiving Water Limitations

Receiving water limitations are included in all NPDES permits issued pursuant to CWA section 402. Section 402(p)(3)(B)(iii) of the CWA authorizes the inclusion of "such other provisions as the Administrator or the State determines appropriate for the control of [] pollutants." This requirement gives USEPA or the State permitting authority discretion to determine what permit conditions are necessary to control pollutants. In its Phase I Stormwater Regulations, Final Rule, USEPA elaborated on these requirements, stating that, "permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent practicable, and

stormwater sources that provide numeric pollutant load...objectives, the WLA should, where feasible, be translated into numeric WQBELs in the applicable stormwater permits."

where necessary water quality-based controls” (see 55 Fed. Reg. 47990, 47994 (Nov. 16, 1990)). USEPA reiterated in its Phase II Stormwater Regulations, Final Rule, that MS4 “permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL.”²⁶ USEPA Region IX has also affirmed the agency’s position that MS4 discharges must meet water quality standards in a series of comment letters on MS4 permits issued by various California regional water boards.²⁷ California Water Code section 13377 also requires that NPDES permits include limitations necessary to implement water quality control plans. Both the State Water Board and Regional Water Board have previously concluded that discharges from the MS4 contain pollutants that have the reasonable potential to cause or contribute to excursion above water quality standards. As such, inclusion of receiving water limitations is appropriate to control MS4 discharges.

The inclusion of receiving water limitations is also consistent with the Ninth Circuit Court of Appeal’s ruling in *Defenders of Wildlife v. Browner* (191 F.3d 1159, 1166 (1999)) that the permitting authority has discretion regarding the nature and timing of requirements that it includes as MS4 permit conditions to attain water quality standards.

The Ninth Circuit Court of Appeals recently explained that, “[w]ater quality standards are used as a supplementary basis for effluent limitations [guidelines] so that numerous dischargers, despite their individual compliance with technology based effluent limitations, can be regulated to prevent water quality from falling below acceptable levels” (*NRDC v. County of Los Angeles* (2011) 673 F.3d 880, 886). Receiving water limitations are included in this Order to ensure that individual and collective discharges from the MS4 do not cause or contribute to exceedances of water quality standards necessary to protect the beneficial uses of the receiving waters.

The receiving water limitations in this Order consist of all applicable numeric or narrative water quality objectives or criteria, or limitations to implement the applicable water quality objectives or criteria, for receiving waters as contained in Chapters 3 and 7 of the Basin Plan, or in water quality control plans or policies adopted by the State Water Resources Control Board, including Resolution No. 68-16, or in federal regulations, including but not limited to, 40 CFR sections 131.12 and 131.38. The water quality objectives in the Basin Plan and other State Water Board plans and policies have been approved by USEPA and combined with the designated beneficial uses constitute the water quality standards required under federal law.

The receiving water limitations provisions in this Order are the same as those included in the previous Los Angeles County MS4 Permit provisions, and are based on precedential State Water Board Orders WQ 98-01 and WQ 99-05. This Order includes three main provisions related to receiving water limitations. First, consistent with CWA section 402(p)(B)(3)(iii) and 40 CFR section 122.44(d)(1), it includes a provision stating that discharges from the MS4 that cause or contribute to an exceedance of receiving water limitations are prohibited. This is also in accord with the State Water Board’s

²⁶ See, e.g., Phase II Stormwater Regulations, Final Rule, 64 Fed. Reg. 68722, 68737.

²⁷ See, e.g., letter from Alexis Strauss, Acting Director, Water Division, USEPA Region IX, to Walt Pettit, Executive Director, State Water Board, re: SWRCB/OCC File A-1041 for Orange County, dated January 21, 1998.

finding in Order WQ 98-01 (“The [State Water Board] agrees that the NPDES permit must prohibit discharges that “cause” or “contribute” to violations of water quality standards.”). Second, it includes a provision stating that discharges from the MS4 of stormwater or non-stormwater, for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance.²⁸

Third, it includes a provision that states that Permittees shall achieve these two prohibitions “through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the storm water management program and its components and other requirements of this Order including any modifications.” This third provision elucidates the process by which Permittees are expected to achieve the first two provisions and then outlines the so-called “iterative process” whereby certain actions are required when exceedances of receiving water limitations occur and discharges from the MS4 are implicated. This iterative process includes submitting a Receiving Water Limitations Compliance Report; revising the storm water management program and its components to include additional BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised storm water management program. The inclusion of this protocol for estimating BMP effectiveness and taking additional actions such as implementing additional BMPs and/or modifying BMPs to improve their effectiveness when monitoring demonstrates that they are necessary to protect water quality is consistent with USEPA’s expectations for MS4 permits.²⁹

The State and Regional Water Boards have stated that each of the three provisions are independently applicable, meaning that compliance with one provision does not provide a “safe harbor” where there is non-compliance with another provision (i.e., compliance with the third provision does not shield a Permittee who may have violated the first or second provision from an enforcement action). Rather, the third provision is intended to ensure that the necessary storm water management programs and controls are in place, and that they are modified by Permittees in a timely fashion when necessary, so that the first two provisions are achieved as soon as possible. USEPA expressed the importance of this independent applicability in a series of comment letters on MS4 permits proposed by various regional water boards. At that time, USEPA expressly objected to certain MS4 permits that included language stating, “permittees will not be in violation of this [receiving water limitation] provision ...” (if certain steps are taken to evaluate and improve the effectiveness of the Drainage Area Management Plan (DAMP)), concluding that this phrase would not comply with the CWA.³⁰

The Receiving Water Limitations provisions of Order No. 01-182 have been litigated twice, and in both cases the courts have upheld the language and the State and Regional Water Board’s interpretation of it. Both courts ruled that the first two provisions

²⁸ Wat. Code, § 13377 (“the state board or the regional boards shall . . . issue waste discharge requirements and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the [CWA], thereto, together with any more stringent effluent standards or limitations necessary to implement waste quality control plans, or for the protection of beneficial uses, or to prevent nuisance”).

²⁹ See, e.g., USEPA 2002 memorandum, “Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs.”

³⁰ See note 20.

are independently applicable from the third provision that establishes the “iterative process” requirements and no “safe harbor” exists.

The provisions were first litigated in 2005 where the Los Angeles County Superior Court stated, “In sum, the Regional [Water] Board acted within its authority when it included Parts 2.1 and 2.2 in the Permit without a ‘safe harbor,’ whether or not compliance therewith requires efforts that exceed the ‘MEP’ standard.” (*In re L.A. Cnty. Mun. Storm Water Permit Litig.* (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005) Statement of Decision from Phase I Trial on Petitions for Writ of Mandate, pp. 4-5, 7.).

The provisions were again litigated in 2011. In that case, the Ninth Circuit Court of Appeal in *NRDC v. County of Los Angeles* (673 F.3d 880, 886) affirmed that the iterative process (in Part 2.3 of the 2001 Order) does not “forgive” violations of the discharge prohibitions (in Parts 2.1 and 2.2 of the 2001 Order). The court acknowledged that Part 2.3 clarifies that Parts 2 and 3 interact, but the court concluded that Part 2.3 “offers no textual support for the proposition that compliance with certain provisions shall forgive non-compliance with the discharge prohibitions.” The Ninth Circuit further concluded that, “[a]s opposed to absolving noncompliance or exclusively adopting the MEP standard, the iterative process ensures that if water quality standards ‘persist,’ despite prior abatement efforts, a process will commence whereby a responsible Permittee amends its SQMP. Given that Part 3 of the [2001] Permit states that SQMP implementation is the ‘minimum’ required of each Permittee, the discharge prohibitions serve as additional requirements that operate as enforceable water-quality-based performance standards required by the Regional Board.”

Nonetheless, the Regional Water Board is in a unique position to be able to offer multiple paths to compliance with receiving water limitations in this MS4 permit. The Regional Board has worked closely with the US EPA in implementing the requirements of the 1999 consent decree between EPA and the environmental groups. The requirements of the consent decree are nearly complete and 33 of these TMDLs addressing hundreds of waterbody-pollutant combinations covering every coastal watershed in Los Angeles County will be implemented in this Order. The number of TMDLs, and hundreds of water quality issues that the TMDLs address, is unprecedented anywhere else in California. These extensive and enforceable implementation programs for addressing myriad water quality issues throughout the County, coupled with more robust core provision requirements, and commitments to implement watershed solutions to address all impairments in regional waters, allows this Board to consider the compliance mechanisms described below. These compliance mechanisms provide an incentive and robust framework for Permittees to craft comprehensive pathways to achieve compliance with receiving water limitations – both those addressed by TMDLs and those not addressed by TMDLs. This compliance mechanism is contingent upon participating Permittees being in full compliance with all requirements articulated in the permit and approved Watershed Management Program or EWMP in order to take advantage of these provisions.

This Order includes requirements in Part VI.E of this Order to implement WLAs assigned to MS4 discharges from 33 TMDLs. Those TMDLs adopted through the State’s basin planning process include programs of implementation pursuant to

California Water Code section 13242, including implementation schedules, for attaining water quality standards. The TMDL provisions in Part VI.E and attachments include compliance schedules for TMDLs adopted by the Regional Water Board consistent with the TMDL implementation schedule to achieve the final receiving water limitations. The Regional Water Board recognizes that, in the case of impaired waters subject to a TMDL, the permit's receiving water limitations for the pollutants addressed by the TMDL may be exceeded during the period of TMDL implementation. Therefore, this Order provides, in Part VI.E.2.c, that a Permittee's full compliance with the applicable TMDL requirements pursuant to the compliance schedules in this Order constitutes a Permittee's compliance with the receiving water limitations provisions in Part V.A. of this Order for the particular pollutant addressed by the TMDL.

For water body-pollutant combinations not addressed by a TMDL, the Regional Water Board has included provisions in Part VI.C. to allow Permittees to develop a Watershed Management Program or EWMP to address receiving water limitations not otherwise addressed by a TMDL. The Watershed Management Program must include a Reasonable Assurance Analysis (RAA) that is quantitative and performed using a peer-reviewed model in the public domain. Models to be considered for the RAA, without exclusion, are the Watershed Management Modeling System (WMMS), Hydrologic Simulation Program-FORTRAN (HSPF), and the Structural BMP Prioritization and Analysis Tool (SBPAT). The RAA shall commence with assembly of all available, relevant subwatershed data collected within the last 10 years, including land use and pollutant loading data, establishment of quality assurance/quality control (QA/QC) criteria, QA/QC checks of the data, and identification of the data set meeting the criteria for use in the analysis. Data on performance of watershed control measures needed as model input shall be drawn only from peer-reviewed sources. These data shall be statistically analyzed to determine the best estimate of performance and the confidence limits on that estimate for the pollutants to be evaluated. The objective of the RAA shall be to demonstrate the ability of Watershed Management Programs and enhanced Watershed Management Programs (where retention of the 85th percentile, 24-hour event is not technically feasible) to ensure that Permittees' MS4 discharges achieve applicable water quality based effluent limitations and do not cause or contribute to exceedances of receiving water limitations.

A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or enhanced Watershed Management Program constitutes compliance with the receiving water limitations provisions in Part V.A. of the Order for the specific water body-pollutant combinations addressed by an approved Watershed Management Program or enhanced Watershed Management Program. However, if a Permittee fails to meet any requirement or date for its achievement beginning with notification of a Permittee's intent to develop a Watershed Management Program or EWMP, and continuing with implementation of an approved Watershed Management Program or enhanced Watershed Management Program, the Permittee is subject to the provisions of Part V.A. for the waterbody-pollutant combination(s) that were to be addressed by the requirement. Permittees that do not elect to develop a Watershed Management Program or EWMP are required to demonstrate compliance with receiving water limitations pursuant to Part V.A.

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42.

B. Watershed Management Programs

The purpose of the Watershed Management Programs is to provide a framework for Permittees to implement the requirements of this Order in an integrated and collaborative fashion to address water quality priorities on a watershed scale, including complying with the requirements of Part V.A. (Receiving Water Limitations), Part VI.E (Total Maximum Daily Load Provisions) and Attachments L through R, by customizing the control measures in Parts III.A.4 (Prohibitions – Non-Storm Water Discharges) and VI.D (Minimum Control Measures). This watershed management paradigm is consistent with federal regulations that support the development of permit conditions, as well as the implementation of storm water management programs, at a watershed scale (40 CFR §§ 122.26(a)(3)(ii), 122.26(a)(3)(v), and 122.26(d)(2)(iv)). USEPA later issued a Watershed-Based NPDES Permitting Policy Statement (USEPA, 2003) that defines watershed-based permitting as an approach that produces NPDES permits that are issued to point sources on a geographic or watershed basis. In this policy statement, USEPA explains that, “[t]he utility of this tool relies heavily on a detailed, integrated, and inclusive watershed planning process.” USEPA identifies a number of important benefits of watershed permitting, including more environmentally effective results; the ability to emphasize measuring the effectiveness of targeted actions on improvements in water quality; reduced cost of improving the quality of the nation’s waters; and more effective implementation of watershed plans, including TMDLs, among others.

There are several reasons for this shift in emphasis from Order No. 01-182. A watershed based structure for permit implementation is consistent with TMDLs developed by the Los Angeles Water Board and USEPA, which are established at a watershed or subwatershed scale and are a prominent new part of this Order. Many of the Permittees regulated by this Order have already begun collaborating on a watershed scale to develop monitoring and implementation plans required by TMDLs. Additionally, a watershed based structure comports with the recent amendment to the Los Angeles County Flood Control Act (Assembly Bill 2554 in 2010), which allows the LACFCD to assess a parcel tax for storm water and clean water programs. Funding is subject to voter approval in accordance with Proposition 218. Fifty percent of funding is allocated to nine “watershed authority groups” to implement collaborative water quality improvement plans.

An emphasis on watersheds is appropriate at this stage in the region’s MS4 program to shift the focus of the Permittees from rote program development and implementation to more targeted, water quality driven planning and implementation. Addressing MS4

discharges on a watershed scale focuses on water quality results by emphasizing the receiving waters within the watershed. The conditions of the receiving waters drive management actions, which in turn focus on the measures to address pollutant contributions from MS4 discharges.

The ultimate goal of the Watershed Management Programs is to ensure that discharges from the Los Angeles County MS4: (i) achieve applicable WQBELs that implement TMDLs, (ii) do not cause or contribute to exceedances of receiving water limitations, and (iii) for non-storm water discharges from the MS4, are not a source of pollutants to receiving waters.

After more than 20 years of program implementation, it is critical that the Permittees design and implement their programs based on their improved knowledge of storm water and its impacts on local receiving waters and by employing BMPs and other control measures that have been developed and refined over the past two decades. The Watershed Management Programs are driven by strategic planning and implementation, which will ultimately result in more cost effective implementation. The Watershed Management Programs will provide permittees with the flexibility to prioritize and customize control measures to address the water quality issues specific to the watershed management area (WMA), consistent with federal regulations (40 CFR § 122.26(d)(2)(iv)).

Focusing on watershed implementation does not mean that the Permittees must expend funds outside of their jurisdictions. Rather, the Permittees within each watershed are expected to collaborate to develop a watershed strategy to address the high priority water quality problems within each watershed. They have the option of implementing the strategy in the manner they find to be most effective. Each Permittee can implement the strategy individually within its jurisdiction, or the Permittees can group together to implement the strategy throughout the watershed.

While this Order includes a new emphasis on addressing MS4 discharges on a watershed basis, this Order includes recognition of the importance of continued program implementation on jurisdictional levels. This Order also acknowledges that jurisdictional and watershed efforts may be integrated to achieve water quality outcomes.

In this Order, the watershed requirements serve as the mechanism for this program integration. Since jurisdictional activities also serve watershed purposes, such activities can be integrated into the Permittees' watershed management programs. Such opportunities for program integration inherently provide flexibility to the Permittees in implementing their programs. Program integration can be expanded or minimized as the Permittees see fit. Some Permittees may opt to continue jurisdiction-specific implementation for certain programs, while for other program areas more collaborative watershed scale implementation may be more effective. Permittees identify individual roles and responsibilities as part of the Watershed Management Program Plan.

Permittees can customize the BMPs to be implemented, or required to be implemented, for development, construction, and existing development areas. Flexibility to determine

which industrial or commercial sites are to be inspected is also provided to the Permittees. Educational approaches are also to be determined by the Permittees under this Order. Significant leeway is also provided to the Permittees in using methods to assess the effectiveness of their various runoff management programs. This flexibility is further extended to the monitoring program requirements, which allow the Permittees to develop monitoring approaches to several aspects of the monitoring program.

The challenge in drafting this Order is to provide the flexibility described above, while ensuring that this Order provides baseline requirements and is still enforceable. To achieve this, this Order frequently prescribes baseline or default requirements, such as for each of the six “minimum control measures” within a Permittee’s baseline storm water management program, while providing the Permittees with flexibility to propose customized actions as part of their watershed management program.

Permittees that elect to develop a Watershed Management Program must submit a “Notice of Intent” to the Regional Water Board no later than six months after the effective date of this Order. The Notice of Intent must be signed by all Permittees electing to participate in the Watershed Management Program for the Watershed Management Area. Permittees that do not elect to develop a Watershed Management Program are subject to the baseline storm water management program requirements in this Order and must demonstrate compliance with applicable WQBELs through monitoring data collected from the Permittee’s outfall(s).

Permittees electing to develop a Watershed Management Program must submit a draft plan for approval by the Regional Water Board or by the Executive Officer on behalf of the Regional Water Board no later than one year after the effective date of the Order, or if certain conditions are met, no later than 18 months or 30 months after the effective date of the Order. To encourage stakeholder involvement in the development of the Watershed Management Programs, the Order requires that the Permittees form a permit-wide technical advisory committee (TAC) that will advise and participate in the development of the Watershed Management Programs. The TAC must include at least one public representative from a non-governmental organization with public membership. Additionally, the Order requires that the draft Watershed Management Programs are made available for public review prior to approval by the Regional Water Board or Executive Officer on behalf of the Regional Water Board.

Each Watershed Management Program must:

1. Prioritize water quality issues resulting from storm water and non-storm water discharges to the MS4 and from the MS4 to receiving waters within each Watershed Management Area,
2. Identify and implement strategies, control measures, and BMPs to achieve applicable water quality based effluent limitations and/or receiving water limitations, consistent with applicable compliance schedules in this Order,
3. Execute an integrated monitoring and assessment program to determine progress towards achieving applicable limitations, and
4. Modify strategies, control measures, and BMPs as necessary based on analysis of monitoring data collected pursuant to the MRP to ensure that applicable water

quality-based effluent limitations and receiving water limitations and other milestones set forth in the Watershed Management Program will be achieved.

Watershed Management Programs must be developed using the Regional Water Board's Watershed Management Areas (see Attachments B and C of this Order). Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water, or to align Permittee groups with "watershed authority groups" designated in the Los Angeles County Flood Control Act, so long as the Permittees implement all TMDL provisions for which they are identified as a responsible Permittee.

Permittees must identify the water quality priorities within each Watershed Management Area that will be addressed by the Watershed Management Program consistent with 40 CFR section 122.26(d)(2)(iv). At a minimum, these priorities must include achieving applicable water quality based effluent limitations and/or receiving water limitations established pursuant to TMDLs and included in this Order.

Each plan must include an evaluation of existing water quality conditions, including characterization of storm water and non-storm water discharges from the MS4 and receiving water quality, consistent with 40 CFR §§ 122.26(d)(1)(iv) and 122.26(d)(2)(iii), to support identification and prioritization/sequencing of management actions.

On the basis of the evaluation of existing water quality conditions, water body-pollutant combinations must be classified into one of the following three categories:

- Category 1 (Highest Priority): Water body-pollutant combinations for which water quality based effluent limitations and/or receiving water limitations are included in this Order to implement TMDLs.
- Category 2 (High Priority): Pollutants for which data indicate water quality impairment in the receiving water according to the State's Listing Policy and for which MS4 discharges may be causing or contributing to the impairment.
- Category 3 (Medium Priority): Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable receiving water limitations contained in this Order and for which MS4 discharges may be causing or contributing to the exceedance.

Utilizing existing information, potential sources within the watershed for the pollutants in Categories 1 and 2 must be identified, consistent with 40 CFR sections 122.26(d)(1)(iii) and 122.26(d)(2)(ii). Permittees must identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the highest water quality priorities (Categories 1 and 2).

Based on the findings of the source assessment, the issues within each watershed must be prioritized and sequenced. Factors that must be considered in establishing watershed priorities include:

1. Pollutants for which there are water quality based effluent limitations and/or receiving water limitations with interim or final compliance deadlines within the permit term.
2. Pollutants for which there are water quality based effluent limitations and/or receiving water limitations with interim or final compliance deadlines between October 26, 2012 and October 25, 2017.
3. Pollutants for which data indicate impairment in the receiving water and the findings from the source assessment implicates discharges from the MS4, but no TMDL has been developed.

Permittees must identify strategies, control measures, and BMPs to implement through their jurisdictional storm water management programs, or collectively on a watershed scale, with the goal of creating an efficient program to focus individual and collective resources on watershed priorities.

The following provisions of this Order may be part of the Watershed Control Measures within a Watershed Management Program:

1. **Minimum Control Measures.** Permittees may assess the minimum control measures (MCMs) as defined in this Order to identify opportunities for focusing resources on the high priority issues in each watershed. For each of the following minimum control measures, Permittees may propose modifications that will achieve equivalent pollutant control given watershed priorities:
 - a. Development Construction Program
 - b. Industrial/Commercial Program
 - c. Illicit Connection/Illicit Discharge Detection and Elimination Program
 - d. Public Agency Activities Program
 - e. Public Information and Participation Program
2. **Non-Storm Water Discharge Measures.** Where Permittees identify non-storm water discharges from the MS4 as a source of pollutants in the source assessment, the Watershed Control Measures must include strategies, control measures, and/or BMPs that will be implemented to effectively eliminate the source of pollutants. These may include measures to prohibit the non-storm water discharge to the MS4, additional BMPs to reduce pollutants in the non-storm water discharge or conveyed by the non-storm water discharge, or strategies to require the non-storm water discharge to be separately regulated under a general NPDES permit.
3. **TMDL Control Measures.** Permittees must compile control measures that have been identified in TMDLs and corresponding implementation plans. If not sufficiently identified in previous documents, or if implementation plans have not yet been developed (e.g., EPA promulgated TMDLs), the Permittees must evaluate and identify control measures to achieve water quality based effluent limitations and/or receiving water limitations established in this Order pursuant to these TMDLs.
 - a. TMDL control measures must include, where necessary, control measures to address both storm water and non-storm water discharges from the MS4.

- b.** TMDL control measures may include activities covered under the MCMs as well as BMPs and other control measures covered under the non-stormwater discharge provisions of this Order.
- c.** TMDL control measures must include, at a minimum, those actions that will be implemented during the permit term to achieve interim and/or final water quality based effluent limitations and/or receiving water limitations with compliance deadlines within the permit term.

Pursuant to 40 CFR sections 124.8, 124.9, and 124.18, as part of the Watershed Management Program plan, Permittees must conduct a Reasonable Assurance Analysis for each TMDL that consists of an assessment (through quantitative analysis or modeling) to demonstrate that the activities and control measures (i.e. BMPs) identified in the Watershed Control Measures will achieve applicable water quality based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term.

Permittees must incorporate and, where necessary develop, numeric milestones and compliance schedules into the plan consistent with 40 CFR section 122.47(a). Numeric milestones and schedules shall be used to measure progress towards addressing the highest water quality priorities and achieving applicable water quality based effluent limitations and/or receiving water limitations. Where the TMDL Provisions do not include interim or final water quality based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term, Permittees must identify interim numeric milestones and compliance schedules to ensure significant progress toward achieving interim and final water quality based effluent limitations and/or receiving water limitations with deadlines beyond the permit term (40 CFR § 122.47(a)(3)).

Schedules must be developed for both the strategies, control measures and BMPs to be implemented by each individual Permittee within its jurisdiction and for those that will be implemented by multiple Permittees on a watershed scale. Schedules must be adequate for measuring progress at least twice during the permit term. Schedules must incorporate the following:

- 1.** Compliance deadlines occurring within the permit term for all applicable interim and/or final water quality based effluent limitations and/or receiving water limitations to implement TMDLs,
- 2.** Interim deadlines and numeric milestones within the permit term for any applicable final water quality based effluent limitation and/or receiving water limitation to implement TMDLs, where deadlines within the permit term are not otherwise specified,
- 3.** For watershed priorities related to addressing exceedances of receiving water limitations in Part V.A and not otherwise addressed by Part VI.E:
 - a.** Numeric milestones based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges,

- b.** A schedule with interim and final dates for achieving the numeric milestones, and
- c.** Final dates for achieving the receiving water limitations as soon as possible.

Each Permittee must implement the Watershed Management Program immediately after determination by the Regional Water Board Executive Officer that the Watershed Management Program meets the requirements of this Order.

Clean Water Act section 402(a)(2) requires the permitting authority to prescribe conditions for MS4 permits to assure compliance, including conditions on data and information collection, reporting, and such other requirements as appropriate. Consistent with this requirement, Permittees in each Watershed Management Area must develop an integrated program to assess the progress toward achieving the water quality based effluent limitations and/or receiving water limitations per the compliance schedules, and the progress toward addressing the highest water quality priorities for each Watershed Management Area. The integrated watershed monitoring and assessment program may be customized, but must contain the basic elements (receiving water monitoring, storm water outfall monitoring, non-storm water outfall monitoring, new development/re-development effectiveness tracking and regional studies), and achieve the objectives of, the Monitoring and Reporting Program (MRP) (Attachment E of this Order).

Permittees in each Watershed Management Area must implement an adaptive management process, at least twice during the permit term, adapting the Watershed Management Program to become more effective, based on, but not limited to the following:

1. Progress toward achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the watershed control measures;
2. Progress toward achieving interim and/or final water quality based effluent limitations and/or receiving water limitations, or other numeric milestones where specified, according to established compliance schedules;
3. Re-evaluation of the highest water quality priorities identified for the Watershed Management Area based on more recent water quality data for discharges from the MS4 and the receiving water(s) and a reassessment of sources of pollutants in MS4 discharges;
4. Availability of new information and data from sources other than the Permittees' monitoring program(s) within the Watershed Management Area that informs the effectiveness of the actions implemented by the Permittees;
5. Regional Water Board recommendations; and
6. Recommendations for modifications to the Watershed Management Program solicited through a public participation process, consistent with 40 CFR section 122.26(d)(2)(iv).

Based on the results of the iterative process, Permittees are required to report any modifications necessary to improve the effectiveness of the Watershed Management Program in the Annual Report, and as part of the Report of Waste Discharge (ROWD). Permittees must implement any modifications to the Watershed Management Program upon acceptance by the Regional Water Board Executive Officer.

C. Storm Water Management Program Minimum Control Measures (MCMs)

1. General Requirements

a. **Basis for MCMs.** 40 CFR section 122.26(d)(2)(iv) establishes required elements of the Permittees' storm water management program. The previous permit, Order No. 01-182, included six categories of minimum control measures that are considered to be baseline or default requirements for meeting the requirements of 40 CFR section 122.26(d)(2)(iv). These requirements were determined appropriate within Order No. 01-182 and again appropriate for this Order. The minimum control measures require Permittees to implement BMPs that are considered necessary to reduce pollutants in storm water to the MEP and to effectively prohibit non-storm water discharges. In lieu of implementing the MCMs as described in Part VI of this Order, this Order allows for Permittees to develop alternative BMPs to comply with 40 CFR section 122.26(d)(2)(iv), when implemented through a Watershed Management Program approved by the Executive Officer of the Regional Water Board.

b. Timelines for Implementation

The timelines for implementation of most MCMs contained in Part VI.D of this Order is provided in Table F-5 below. Where implementation dates for minimum control measures are not provided in the Table, Part VI.D.1.b requires implementation within 6 months of the effective date this Order. Unless otherwise noted in Part VI.D of the Order, each Permittee that does not elect to develop a Watershed Management Program or enhanced Watershed Management Program per Part VI.C must implement the requirements contained in Part VI.D within 6 months after the effective date of this Order. In the interim, a Permittee shall continue to implement its existing storm water management program, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv).

Permittees that elect to develop a Watershed Management Program or enhanced Watershed Management Program shall continue to implement their existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with 40 CFR section 122.26(d)(2)(iv) until the Watershed Management Program or enhanced Watershed Management Program is approved by the Regional Water Board Executive Officer. The Table below denotes the timeframe for requirements as well as the basis of those timeframes. The majority of the timeframes are consistent with Order No. 01-182 as well as other area permits including the Ventura County MS4 Permit and the State Water Board's Construction General

NPDES Permit. The timeframe for notifications, submittals, and attaining compliance with permit requirements are determined to be the earliest practicable periods and ensure timely measures for protection of water quality.

Table F-5. Timeline for the Implementation of Permit Requirements

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
Discharge Prohibitions			
III.A.2.a.ii	Drinking water suppliers must notify MS4 Permittee if intend to discharge to the Permittee’s MS4.	At least 72 hours prior to a planned discharge and as soon as possible after an unplanned discharge.	Allows for advanced notice and sampling, if warranted.
III.A.4.e	If the Permittee determines that any of the authorized or conditionally exempt essential non-storm water discharges identified in Parts III.A.1.a through III.A.1.c, III.A.2.a or III.A.3 is a source of pollutants, notify the Regional Water Board if the non-storm water discharge has coverage under a separate NPDES permit or subject to a Record of Decision (ROD) approved under section 121 of CERCLA, or a conditionally exempt essential non-storm water discharge or emergency non-storm water discharge.	Within 30 days of determination.	The language in the previous LA MS4 permit, Order No. 01-182, states “promptly.” The specification of a 30 day deadline is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
Table III.A	<u>Dewatering of Lakes</u> – Ensure procedures for advanced notification by the lake owner/operator to the Permittee(s).	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.
Table III.A	<u>Dechlorinated/debrominated swimming pool/spa discharges</u> – Ensure procedures for advanced notification by the pool owner to the Permittee(s) prior to planned discharges of 100,000 gallons or more.	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.
Table III.A	<u>Dewatering of decorative fountains</u> – Ensure procedures for advanced notification by the fountain owner to the Permittee(s) prior to planned discharges of 100,000 gallons or more.	At least 72 hours in advance of discharge.	Allows for advanced notice and sampling, if warranted.
Receiving Water Limitations			
V.A.3.a	Upon determination by either the Permittee or the Regional Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable Receiving Water Limitation, the Permittee shall notify the Regional Water Board within 30 days of analytical results and thereafter submit an Integrated Monitoring Compliance Report within the next	Within 30 days of receipt of analytical results from the sampling event.	The language in the current LA MS4 permit reads “promptly.” The specification of a 30 day deadline is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	Annual Report.		
V.A.3.b	Submit any modifications to the Integrated Monitoring Compliance Report required by the Regional Water Board	Within 30 days notification from the Regional Water Board.	This is consistent with Order No. 01-182
V.A.3.c	Permittee shall revise its control measures and monitoring program to incorporate the improved modified BMPs that will be implemented, an implementation schedule, and any additional monitoring required.	Within 30 days following Regional Water Board Executive Officer's approval of the Integrated Monitoring Report.	Allows for adequate time to make modifications.
Provisions			
VI.A.2.j	Discharger shall file with the Regional Water Board a report of waste discharge before making any material change or proposed change in the character, location, or volume of the discharge.	At least 120 days prior to any change.	Standard language.
Special Provisions: Watershed Management Programs			
VI.C.2.b	Permittees that elect to develop a Watershed Management Program must notify the Regional Water Board.	No later than 6 months after the date this Order is adopted.	This provides a reasonable amount of time to determine participation in a WMP, but also ensure adequate time for implementation of watershed scale control measures during the term of this Order.
VI.C.2.c	Permittees that elect to develop a Watershed Management Program shall submit a draft plan to the Regional Water Board Executive Officer.	No later than 18 months after the date this Order is adopted.	This provides a reasonable amount of time to complete the plan but also ensure effective monitoring during the term of this Order.
VI.C.6.a.i	Permittees in each Watershed Management Area shall implement an adaptive management process adapting the Watershed Management Program to become more effective.	At least twice during the permit term.	This encourages application of the iterative approach.
VI.C.6.b.i	Permittees in the Watershed Management Area shall implement the adaptive management process with regard to its jurisdictional storm water management program to improve its effectiveness.	At least annually.	This encourages application of the iterative approach.
Special Provisions: Minimum Control Measures			
VI.D.2.a.i	<u>Progressive Enforcement and Interagency Coordination</u> – In the event that a Permittee determines that a facility or site operator has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement which shall include a follow-up	Follow-up inspection within 4 weeks from the date of the initial inspection and/or investigation.	This is consistent with the current LA MS4 permit.

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	inspection.		
VI.D.2.b	<u>Progressive Enforcement and Interagency Coordination</u> – Each Permittee shall initiate investigation of complaints from facilities within its jurisdiction.	Initiate investigation within one business day of complaint.	This is consistent with Order No. 01-182.
VI.D.5.b.ii	<u>Public Information and Participation Program</u> – If participating in a County-wide or Watershed Group PIPP, provide contact information for their appropriate staff responsible for storm water public education activities to the designated PIPP coordinator and contact information changes.	No later than 30 days after a change occurs.	This is consistent with Order No. 01-182 for contact changes, which directs contact changes be sent to Los Angeles County by May 1, 2002. However, with the elimination of the Principal Permittee in this Order, it is more appropriate to direct any contact information changes directly to the PIPP coordinator.
VI.D.6.b.iii	<u>Industrial/Commercial Business Program</u> – Each Permittee shall update its inventory of critical sources.	Update at least annually.	Business turn-over can be significant thus an active inventory is required.
VI.D.6.c.i	<u>Industrial/Commercial Business Program</u> – Each Permittee shall notify the owner/operator of each of its inventoried commercial and industrial sites identified in Part VI.D.5.b of this Order of the BMP requirements applicable.	Notify at least once during the five-year period of this Order.	This is required so that the owner/operator remains informed and vigilant about BMP implementation.
VI.D.6.d.i	<u>Industrial/Commercial Business Program</u> – Each Permittee shall inspect all commercial facilities identified in Part VI.D.5.b of this Order twice during the 5-year term of this Order with a minimum interval of 6 months between the first and second mandatory compliance inspection required.	Provided that the first mandatory compliance inspection occurs no later than 2 years after the date this Order is adopted.	Order No. 01-182 required initial implementation by August 2004 (or a little over 2.5 years), however the 2 year requirement contained in this Order is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
VI.D.6.e.i.(1)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall perform an initial compliance inspection of all industrial facilities identified in Part VI.D.5.b. of this Order	No later than 2 years after the date this Order is adopted.	Order No. 01-182 required initial implementation by August 2004 (or a little over 2.5 years). However, the 2 year requirement contained in this Order is considered reasonable and the earliest practicable deadline to ensure the protection of water quality.
VI.D.6.e.i.(2)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall review the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) database at defined	The first interval shall occur approximately 2 years after the date this Order is adopted. The second interval shall occur approximately 4	This specific requirement for inspecting facilities within certain intervals is a new requirement, but is considered consistent with Order No. 01-182.

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	intervals to determine if an industrial facility has been recently inspected by the Regional Water Board. The Permittee does not need to inspect the facility if it is determined that the Regional Water Board conducted an inspection of the facility within the prior 24 month period.	years after the date this Order is adopted.	
VI.D.6.e.i.(3)	<u>Industrial/Commercial Business Program</u> – Each Permittee shall evaluate its inventory of industrial facilities and perform a second mandatory compliance inspection at a minimum of 25% of the facilities identified to have filed a No Exposure Certification.	Approximately 3 to 4 years after the date this Order is adopted.	This is consistent Order No. 01-182.
VI.D.7.c.iii.(5).(f)	<u>Planning and Land Development Program</u> – Each Permittee shall develop a schedule for the completion of offsite projects, including milestone dates to identify, fund, design, and construct the projects.	Offsite projects shall be completed as soon as possible, and at the latest within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the offsite project.	This requirement is consistent with the provisions contained in the Ventura County Redevelopment Project Area Master Plan (RPAMP).
VI.D.7.d.iv.(1).(c)	<u>Planning and Land Development Program</u> – Each Permittee shall maintain a database providing key information for each new development/re-development subject to the requirements of Part VI.D.6 of this Order.	Each Permittee shall implement a tracking system and an inspection and enforcement program for new development and redevelopment post-construction storm water no later than 60 days after Order adoption date.	Effectiveness tracking of the treatment system is warranted and will also help to ensure adequate maintenance.
VI.D.7.d.i	<u>Planning and Land Development Program</u> – A local LID ordinance that fully incorporated the applicable requirements of this Order shall be submitted to the Executive Officer of the Regional Water Board for approval.	Within 180 days after the date this Order is adopted.	The requirement is deemed acceptable due to the large number of existing LID ordinances within the Permittees and the varied number of templates available nationally.
VI.D.7.d.iii.(1).(a) .ii)	<u>Planning and Land Development Program</u> – Written conditions in the sales or lease agreement, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection.	At least once a year.	This is consistent with the current Ventura County MS4 permit.
VI.D.7.d.iv	<u>Planning and Land Development Program</u> – Each Permittee shall implement a tracking system and an inspection and enforcement program from new development and redevelopment post-construction storm water BMPs.	No later than 60 days after the date this Order is adopted.	A tracking system is deemed critical to the success of this MCM. Additionally, a tracking system need not be complex and can, and has, been developed using

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
			spreadsheets or equivalent.
VI.D.7.d.iv.(1).(c) .ii)	<u>Planning and Land Development Program</u> – Inspection of post-construction BMPs to assess operation conditions with particular attention to criteria and procedures for post-construction treatment control and hydromodification control BMP repair, replacement, or re-vegetation.	Inspection at least once every 2 years after project completion.	This is consistent with the current Ventura County MS4 permit.
VI.D.8.j.ii.(1)	<u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger that discharge to a tributary listed by the state as an impaired water for sediment or turbidity under CWA § 303(d).	When two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA, within 48 hours of a ½-inch rain event, and at least once every two weeks.	This requirement is consistent with the current State Water Board's General NPDES Construction Permit Requirements.
VI.D.8.j.ii.(1)	<u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger determined to be a significant threat to water quality.	When two or more consecutive days with greater than 50% chance of rainfall are predicted by NOAA, within 48 hours of a ½-inch rain event, and at least once every two weeks.	This requirement is consistent with the current State Water Board's General NPDES Construction Permit Requirements.
VI.D.8.j.ii.(1)	<u>Development Construction Program</u> – Inspect public and private construction sites 1 acre or larger that do not meet other criteria in Part VI.D.7.j.ii.(1) of this Order.	At least monthly.	This requirement is consistent with the current General Construction Permit Requirements.
VI.D.9.c.iii	<u>Public Agency Activities Program</u> – Each Permittee shall update its facility inventory.	At least once during the term of this Order.	This requirement is deemed reasonable because site conditions can change at existing facilities.
VI.D.9.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority A catch basins.	A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.	This is consistent with Order No. 01-182.
VI.D.9.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority B catch basins.	A minimum of once during the wet season and once during the dry season every year.	This is consistent with Order No. 01-182.
VI.D.9.h.iii.(2)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall inspect Priority C catch basins.	A minimum of once per year.	This is consistent with Order No. 01-182.
VI.D.9.h.iv.(1).(c)	<u>Public Agency Activities Program</u> – Provide clean out of catch basins, trash receptacles, and grounds in the event area.	Within one business day subsequent to the event.	This is consistent with the current Ventura County MS4 permit.
VI.D.8.h.vi.(2)	<u>Public Agency Activities Program</u> – Each Permittee shall inspect the	Prior to the wet season every year.	This is consistent with Order No. 01-182.

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	legibility of the stencil or label nearest each inlet.		
VI.D.9.h.vi.(3)	<u>Public Agency Activities Program</u> – Each Permittee shall record all catch basins with illegible stencils and re-stencil or re-label.	Within 180 days of inspection.	This is consistent with Order No. 01-182.
VI.D.9.h.vii.(1)	<u>Public Agency Activities Program</u> – In areas that are not subject to a trash TMDL, each Permittee shall install trash excluders, or equivalent devices, on or in catch basins or outfalls, except at sites where the application of such BMPs alone will cause flooding.	No later than 4 years after the date this Order is adopted in areas specified as Priority A.	This is based on the current Ventura County MS4 permit, but due to the significant number of catch basins in Los Angeles County compared to Ventura County the time frame was lengthened.
VI.D.9.h.viii.(1)	<u>Public Agency Activities Program</u> – Visual monitoring of Permittee-owned open channels and other drainage structures, including debris basins, for debris.	At least annually.	This is consistent with Order No. 01-182.
VI.D.9.h.viii.(2)	<u>Public Agency Activities Program</u> – Removal of trash and debris from open channels.	A minimum of once per year before the wet season.	This is consistent with Order No. 01-182.
VI.D.9.i.ii	<u>Public Agency Activities Program</u> – Each Permittee shall perform street sweeping of curbed streets for Priority A areas.	Swept at least two times per month.	This is consistent with Order No. 01-182.
VI.D.9.i.ii	<u>Public Agency Activities Program</u> – Each Permittee shall perform street sweeping of curbed streets for Priority B areas.	Swept at least once per month.	This is consistent with Order No. 01-182.
VI.D.9.i.ii	<u>Public Agency Activities Program</u> – Each Permittee shall perform street sweeping of curbed streets for Priority C areas.	Swept as necessary but in no case less than once per year.	This is consistent with Order No. 01-182.
VI.D.9.i.iv.(1)	<u>Public Agency Activities Program</u> – Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned.	No less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a Permittee-owned parking lot be cleaned less than once a month.	This is consistent with Order No. 01-182.
VI.D.9.j.i.(2)	<u>Public Agency Activities Program</u> – Where the self-waiver has been invoked, the Permittee shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality.	No later than 30 business days after the situation of emergency has passed.	This is consistent with the current Ventura County MS4 permit.
VI.D.9.k.i	<u>Public Agency Activities Program</u> – Each Permittee shall train or ensure training of all of their employees	No later than 1 year after the date this Order is adopted and annually	Order No. 01-182 allowed for this to be initially completed by August

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	and contractors in targeted positions on the requirements of the overall storm water management program.	thereafter before June 30.	2002. However, since this implementation of this requirement is continuing from the previous LA MS4 permit, implementation within a year is considered reasonable and the earliest practicable period for implementation. This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.9.k.ii	<u>Public Agency Activities Program</u> – Each Permittee shall train all of their employees and contractors or ensure training for all who use or have the potential to use pesticides or fertilizers.	No later than 1 year after the date this Order is adopted and annually thereafter before June 30.	This is consistent with the current Ventura County MS4 permit.
VI.D.10.b.ii	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee shall initiate investigation(s) to identify and locate the source of an illicit discharge.	Within 72 hours of becoming aware of the illicit discharge.	Order No. 01-182 and the current Ventura County MS4 permit require illicit discharge investigations be initiated within 1 business day. However, the 72 hour requirement takes into account the possibility of weekend spills.
VI.D.10.b.iv.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – If the source of the illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall notify the upstream jurisdiction and the Regional Water Board.	Within 30 days of such determination.	This ensures the ID is addressed in a reasonable period of time by the upstream jurisdiction.
VI.D.10.b.v	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – In the event the Permittee is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and in accordance with its Progressive Enforcement Policy, or other circumstances prevent the full elimination of an ongoing illicit discharge, the Permittee shall work with the Regional Water Board to provide a diversion of the entire flow to the sanitary sewer or provide treatment.	Notify the Regional Water Board within 30 days of such determination and provide a written plan for review and comment.	This ensures the Regional Water Board is effectively engaged in the ultimate disposition of ongoing illicit discharges.
VI.D.10.c.ii	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall	Initiate investigation within 21 days of discovery.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.

Part Number	Requirement Summary	Timeframe	Basis for Timeframe
	initiate an investigation.		
VI.D.10.c.iii.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee, upon confirmation of an illicit MS4 connection, shall ensure that the connection is eliminated.	Within 180 days of completion of the investigation.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.10.e.i.(2)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Initiate investigation of all public and employee illicit discharge and spill complaints.	Within 1 business day of receiving the complaint.	This is consistent with Order No. 01-182 and the current Ventura County MS4 permit.
VI.D.10.e.i.(3)	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Response to spills for containment.	Within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case should be within 2 hours of gaining legal access to the property.	The requirement that spills be responded to within 4 hours of becoming aware of the spill, except where such spills occur on private property, in which case should be within 2 hours of gaining legal access to the property is the earliest practicable period for implementation and ensures the protection of water quality.
VI.D.10.f.iv	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – Each Permittee must create a list of applicable staff and contractors which require IC/ID training and ensure that training is provided.	At least twice during the term of this Order.	This requirement is new and twice during the term of this Order is considered reasonable and the earliest practicable period for implementation.
VI.D.10.f.v	<u>Illicit Connections and Illicit Discharges Elimination Program</u> – New Permittee staff members must be provided with IC/ID training.	Within 180 days of starting employment.	The current Ventura MS4 permit specifies that within 1 year all employees must be trained. However, the requirement that employees be trained within 180 days of starting employment is the earliest practicable period for implementation and ensures the protection of water quality.

2. Progressive Enforcement

Progressive enforcement is a series of defined and reproducible enforcement actions whereby consequences of non-compliance increase with each incremental enforcement steps. Progressive enforcement includes procedures to coordinate enforcement between the Regional Water Board and Permittees. As the Regional Water Board is the agency responsible for implementing the NPDES program, it has the authority to step in when enforcement actions of Permittee are unsuccessful in bringing dischargers into compliance with the permit. As such, progressive enforcement is an effective strategy to achieve timely compliance with permit

requirements. Order No. 01-182 included requirements for a progressive enforcement strategy that are carried over to this Order, with some modifications. This Order includes supplemental documentation requirements for site acreage and Risk Factor rating, when making a referral to the Regional Water Board for MS4 permit non-compliance of a discharger under the construction general permit. This requirement is necessary information for the Regional Water Board consideration. Moreover, this Order eliminates the provision within Order No. 01-182 that allows the Regional Water Board and Permittees to form a storm water task force. This provision was removed because the ability for coordinated enforcement between the Regional Water Board and Permittees is adequately established through remaining provisions within Part VI.D.2 of this Order.

3. Modifications/Revisions

This Order requires each Permittee to modify its storm water management programs, protocols, practices, and municipal codes to be consistent with this Order. This provision is necessary to ensure that each Permittee takes all the steps necessary to update the core and ancillary programs that are required to ensure compliance with this Order. A significant change from Order No. 01-182 is that this obligation now rests with each individual Permittee rather than the Principal Permittee.

4. Public Information and Participation Program

a. Legal Authority

NPDES regulation 40 CFR section 122.26(d)(2)(iv)(A)(6) provides that the proposed management program include "A description of a program to reduce to the maximum extent practicable, pollutants in discharges from MS4s associated with the application of pesticides, herbicides, and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications, and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities."

NPDES regulation 40 CFR section 122.26(d)(2)(iv)(B)(6) provides that the proposed management program include " A description of education activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials."

To satisfy the Public Education and Outreach minimum control measure, the Permittees need to implement a Public Information and Participation Program (PIPP) that has the following objectives: (1) measurably increase the knowledge of the target audiences about the MS4, the adverse impacts of storm water pollution of receiving waters and potential solutions to mitigate the impacts, (2) measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging implementation of appropriate activities, and (3) involve and engage a diversity of socio-economic

groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.

b. Background

Implementation of a PIPP is a critical BMP and a necessary component of a storm water management program. The State Water Board Technical Advisory Committee "recognizes that education with an emphasis on pollution prevention is the fundamental basis for solving nonpoint source pollution problems." The USEPA Phase II Fact Sheet 2.3 (Fact Sheet 2.3) finds that "An informed and knowledgeable community is critical to the success of a storm water management program since it helps insure the following: (i) greater support for the program as the public gains a greater understanding of the reasons why it is necessary and important, and (ii) greater compliance with the program as the public becomes aware of the personal responsibilities expected of them and others in the community, including the individual actions they can take to protect or improve the quality of area waters."³¹

Furthermore, the public can provide valuable input and assistance to a municipal storm water management program and, therefore, should play an active role in the development and implementation of the program. An active and involved community is essential to the success of a storm water management program because it allows for:

- Broader public support since residents who participate in the development and decision making process are partially responsible for the program and, therefore, are more likely to take an active role in its implementation;
- Shorter implementation schedules due to fewer obstacles in the form of public and legal challenges and increased sources in the form of residents volunteers;
- A broader base of expertise and economic benefits since the community can be a valuable, and free, intellectual resource; and
- A conduit to other programs as residents involved in the storm water program development process make important cross-connections and relationships with other community and government programs. This benefit is particularly valuable when trying to implement a storm water program on a watershed basis.

c. PIPP Implementation

It is generally more cost-effective to have numerous operators coordinate to use an existing program than each developing its own local programs. Therefore, Permittees are encouraged to participate in a County-wide PIPP or in one or more Watershed Group sponsored PIPPs supplemented with additional information specific to local needs.

³¹ Storm Water Phase II Final Rule - Public Education and Outreach Minimum Control Measure. USEPA Fact Sheet 2.3, January 2000.

Permittees are required to: (a) conduct storm water pollution prevention public service announcements and advertising campaigns; (b) provide public education materials on the proper handling or potential storm water pollutants; (c) distribute activity specific storm water pollution prevention public education materials to points of purchase; (d) maintain storm water websites or provide links to storm water websites via the Permittees website, which contain educational material and opportunities for the public to participate in storm water pollution prevention and clean-up activities; and (e) provide independent, parochial, and public schools within each Permittee's jurisdiction with materials, including, but not limited to videos, live presentations, and other information. Permittees are required to use effective strategies to educate and involve ethnic communities using culturally effective methods.

The intent of these changes is to provide an increase in public knowledge of storm water pollution prevention practices in an effective and cost efficient manner, while still providing flexibility for the Permittees to implement the requirements on a watershed group basis.

The Order requires outreach to ethnically diverse communities using culturally effective strategies. The USEPA, Tailoring Outreach Programs to Minority and Disadvantaged Communities and Children Fact Sheet finds that, "many residents of ethnically and culturally diverse communities don't speak English. English messages contained in public education outreach materials may not be effectively reaching a significant portion of some communities. The intent of this provision is to encourage behavior changes that reduce pollutants in storm water to a portion of the population who might otherwise be overlooked.

5. Industrial/Commercial Business Program

a. Legal Authority

The Phase I regulations require, in part, that the applicant: (i) develop adequate legal authority, (ii) perform a source identification, and (iii) develop a management program to reduce the discharge of pollutants to the MEP using management practices, control techniques and system design and engineering methods, and such other provisions which are appropriate. Specifically, with regards to industrial controls, the management plan shall include the following.

"A description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:

- i. Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges.
- ii. Describe a monitoring program for storm water discharges associated with industrial facilities [...]"

(40 CFR section 122.26(d)(2)(iv)(C))

The provisions contained in this Order pertaining to the inspection and facility control program requirements for industrial and commercial facilities, as well as construction sites (as discussed below in Part VI.7.b.) are also based on the requirements found in the previous permit, Order No. 01-182. Those requirements, among others, were the subject of litigation between several permittees and the Regional Water Board. In that case, the Los Angeles County Superior Court upheld the inspection and facility control program requirements for industrial/commercial facilities and construction sites in Order No. 01-182. The Court determined that “[t]he Permit contains reasonable inspection requirements for these types of facilities. [Citation.] The Permit requires each permittees to confirm that operators of these facilities have a current waste discharge identification number and is effectively implementing Best Management Practices (BMPs) in compliance with County and municipal ordinances, Regional Board Resolution 90-08 and the Stormwater Quality Management Plans (SQMPs). [Citation.] Addressing pollution after it has entered the storm sewer system is not working to meet legislative goals. More work is required at the source of pollution, and that is partially the basis on which this Court finds that the Permit’s inspection requirements are reasonable, and not onerous and burdensome.” (*In re L.A. Cnty. Mun. Storm Water Permit Litig.* ((L.A. Super. Ct., No. BS 080548, Mar. 24, 2005), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 17.)

The Court also addressed the permittees’ claims that the requirements in Order No. 01-182 shifted the Regional Water Board’s inspection responsibility under State Water Board issued general NPDES permits for these types of facilities onto the local agencies. The Court disagreed, stating: “The Court agrees with [the Regional Water Board] and Intervenors that the United States EPA considered obligations under state-issued general permits to be separate and distinct. Despite the similarity between the general permits and the local storm water ordinances, both must be enforced. [Citations.] EPA requires permittees to conduct inspections of commercial and industrial facilities, as well as of construction sites. [Citation.]....This Court finds that the state-issued general permits do not preempt local enforcement of local storm water ordinances. (See State Board Order No. 99-08, [citation].) [¶] Therefore, this Court finds that requiring permittees to inspect commercial and industrial facilities and construction sites is authorized under the Clean Water Act, and both the Regional Board and the municipal permittees or the local government entities have concurrent roles in enforcing the industrial, construction and municipal permits. The Court finds that the Regional Board did not shift its inspection responsibilities to Petitioners. [¶] ... The Court further notes that the Permit issued to local entities, who are Petitioners here, does not refer to any inspection

obligations related to state-issued permits. [Citation.] There is no duplication of efforts and no shifting of inspection responsibility in derogation of the Regional Board's responsibility here. The Regional Board is not giving up its won responsibilities, and there is nothing arbitrary or capricious about the Permit's inspection provisions." (*Id.* at 17-18.)

It is also important to note that similar controls for industrial/commercial facilities and constriction sites, including inspection activities, required by this Order were also required in the 2002 San Bernardino County MS4 permit issued by the Santa Ana Regional Water Quality Control Board (Santa Ana Regional Water Board). Like Order No. 01-182, that permit was also subject to litigation. In that case, the City of Rancho Cucamonga claimed that the Santa Ana Regional Water Board improperly delegated to it and other permittees the inspection duties of the State and Regional Water Boards and that it was being required to conduct inspections for facilities covered by other state-issued general NPDES permits. (*City of Rancho Cucamonga v. Regional Water Quality Control Board- Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389.) Like the Los Angeles County Superior Court, the California Court of Appeal rejected this argument. The Court of Appeal upheld the Santa Ana Regional Water Board's requirements, finding that "Rancho Cucamonga and the other permittees are responsible for inspecting construction and industrial sites and commercial facilities within their jurisdiction for compliance with and enforcement of local municipal ordinances and permits. But the Regional Board continues to be responsible under the 2002 NPDES permit for inspections under the general permits. The Regional Board may conduct its own inspections but permittees must still enforce their own laws at these sites. (40 C.F.R. § 122.26, subd. (d)(2) (2005).)" (*Id.* at 1390.)

b. Background

Municipalities are required to control the storm water discharges associated with industrial activities and other commercial facilities identified as significant contributors of pollutants through the implementation of a mandatory baseline minimum set of source control BMPs; performance of an inspection program to verify the adequacy of BMPs implementation in the field and compliance with the municipal ordinances; and assist the Regional Water Board in ensuring that industrial activities subject to regulations are covered by the general industrial stormwater permit. Regional Water Board will also assist the municipalities in case of instances of egregious non-compliance with the municipal ordinances and state and federal laws and regulations.

The municipality is ultimately responsible for discharges from the MS4. Because industrial awareness of the program may not be complete, there may be facilities within the MS4 area that should be permitted under an industrial storm water permit but are not (non-filers). In addition, the Phase I regulations that require industries to obtain permit coverage for storm water discharges is largely based on Standard Industry Classification (SIC) Code. This has been shown to be incomplete in identifying industries that may be significant sources of storm water pollution ("industries" includes commercial businesses). The word "industries" is

used in a broad sense. Another concern is that the permitting authority may not have adequate resources to provide the necessary oversight of permitted facilities. Therefore, it is in the municipality's best interest to assess the specific situation and implement an industrial/commercial inspection/site visit and enforcement program to control the contribution of pollutants to the MS4 from all high risk sources.

In the preamble to the 1990 regulations, USEPA clearly states the intended strategy for discharges of storm water associated with industrial activity:

"...Municipal operators of large and medium municipal separate storm sewer systems are responsible for obtaining system-wide or area permits for their system's discharges. These permits are expected to require that controls be placed on storm water discharges associated with industrial activity which discharge through the municipal system." The USEPA also notes in the preamble that "... municipalities will be required to meet the terms of their permits related to industrial dischargers."

Similarly, in the USEPA's Guidance Manual (Chapter 3.0), USEPA specified that MS4 applicants must demonstrate that they possess adequate legal authority to:

- i. Control construction site and other industrial discharges to MS4s;
- ii. Prohibit illicit discharges and control spills and dumping;
- iii. Carry out inspection, surveillance, and monitoring procedures.

The document goes on to explain that "control," in this context means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4. Further, to satisfy its permit conditions, a municipality may need to impose additional requirements on discharges from permitted industrial facilities, as well as discharges from industrial facilities and construction sites not required to obtain permits.

In the same Guidance Manual (Chapter 6.3.3), USEPA states that the municipality is ultimately responsible for discharges from their MS4. Consequently, the MS4 applicant must describe how the municipality will help the USEPA and authorized NPDES States to:

- i. Identify priority industries discharging to their systems;
- ii. Review and evaluate storm water pollution prevention plans (SWPPPs) and other procedures that industrial facilities must develop under general or individual permits;
- iii. Establish and implement BMPs to reduce pollutants from these industrial facilities (or require industry to implement them); and
- iv. Inspect and monitor industrial facilities discharging storm water to the municipal systems to ensure these facilities are in compliance with their NPDES storm water permit, if required.

c. Industrial/Commercial Business Program Implementation

The requirements in this Order clarify the scope and frequency of inspections. For commercial facilities, in general, frequencies have been modified to require inspections of a facility twice during the five year permit term provided that the first mandatory compliance inspection takes place no later than two years after the date this Order is adopted with a minimum interval of six months between the first and second inspection. The scope of the inspections for each of the facility types was clarified by specifying in tables what BMPs should be implemented at that facility to ensure that pollutant generating activity does not occur. The tables include a range of BMPs that are anticipated to be needed at select industrial and commercial facilities. The BMP categories are based on BMPs identified in the 2003 California Stormwater BMP Handbook, Industrial and Commercial as well as BMPs identified in Regional Water Board Resolution No. 98-08.

For industrial facilities, an initial mandatory compliance inspection must be completed at all industrial facilities no later than 2 years after the date this Order is adopted. If after the initial inspection, the facility was determined to as having exposure of industrial activities to storm water then the permit requires a second mandatory compliance inspection with a minimum interval of 6 months between the first and second mandatory compliance inspection. For facilities determined not to have exposure of industrial activities to storm water during the initial inspection, Permittees must conduct second compliance inspections yearly at a minimum of 20% of the facilities.

A provision was added to the Order relieving Permittees of the responsibility to inspect industrial facilities that the Regional Water Board has inspected within the previous 24 months.

In regards to the level of inspection, this Order clarifies that the Permittees are expected to check during inspections for a current Waste Discharge Identification (WDID) number for facilities discharging storm water associated with industrial activity, and that a SWPPP is available on site or that the owner/operator of the facility has applied for and has a current No Exposure Certification (and WDID number). In addition Permittees are expected to check during inspections for compliance with the implementation of minimum BMPs, as previously approved by Board Order 98-08, and compliance with the local storm water ordinances.

The inspection requirements in this Order provide greater clarification concerning the scope of enforcement. A progressive enforcement procedure was outlined including minimum steps that Permittees must take in their program to enforce their municipalities' storm water requirements. In recognition of some of the Permittees concerns regarding the resource intensive efforts needed to elevate enforcement actions, a mechanism was provided through which Permittees can refer cases to the Regional Water Board, and for violations of the State Water Board's General Industrial Activities Storm Water NPDES permit, the referral can be expedited, referral can occur after a single inspection and one written notice rather than referral after two inspections and two written notices.

6. Planning and Land Development Program

a. Legal Authority

The permit application requirements described in 40 CFR section 122.26(d) have formed the basis for MS4 permits and remain applicable as elements in a storm water management program. Section 122.26(d)(2)(iv) requires in part, that the large and medium MS4 applicant develop a management program. Specifically, with regards to planning and land development and post-construction controls, the management program shall include the following:

“(A) A description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with an estimate of the expected reduction of pollutant loads and a proposed schedule for implementing such controls. At a minimum, the description shall include:

(1) A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers;

(2) A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed.

(3) A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems

(4) A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible.”

b. Background

Land development and urbanization have been linked to the impairment of aquatic life beneficial uses in numerous studies. Poorly planned new developments and re-development have the potential to impact the hydrology of the watershed and the water quality of the surface waters. Development without proper controls, often result in increased soil compaction, changes in vegetation and increased impervious surfaces. These conditions may lead to a reduction in groundwater recharge and changes in the flow regime of the surface water

drainages. Historically, urban development has resulted in increased peak stream flows and flow duration, reduced base flows, and increased water temperatures. Pollutant loading in storm water runoff often increases due to post-construction use and because the storm water runoff is directly connected to the storm drain system or to the surface water body, without the benefit of filtration through soil and vegetation.

In a natural water body (i.e., a water body that has not been armored for flood control or channel stability), increased peak flows and flow duration can cause stream bank erosion, changes in channel geomorphology and bed sediment composition and stability.

When development infringes upon natural riparian buffers, the additional impacts may include further stream bank instability, increased nitrogen loadings to the water body—which would have been intercepted by native riparian vegetation, loss of shading resulting in further increase in water temperature, and a loss of woody debris and leaf litter, which provide food and habitat for some aquatic species.

Low Impact Development (LID) strategies are designed to retain storm water runoff on-site by minimizing soil compaction and impervious surfaces, and by disconnecting storm water runoff from conveyances to the storm drain system. This Order establishes criteria for the volume of storm water to be retained on-site as required to meet water quality goals and to preserve pre-development hydrology in natural drainage systems.

Monitoring studies conducted by the California Department of Public Health (CDPH) have documented that mosquitoes opportunistically breed in structural storm water Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. Certain Low Impact Development (LID) site design measures that hold standing water such as rainwater capture systems may similarly produce mosquitoes. BMPs and LID design features should incorporate design, construction, and maintenance principles to promote drainage within 96 hours to minimize standing water available to mosquitoes. This Order requires regulated MS4 Permittees to coordinate with other agencies necessary to successfully implement the provisions of this Order. These agencies may include CDPH and local mosquito and vector control agencies on vector-related issues surrounding implementation of post-construction BMPs.

This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. and Water Quality Order No. 2012-0003-DWQ.

In California, hydromodification studies have focused on the erosive effects of storm water runoff flows and the resulting changes in geomorphology and bed sediment. As described in Hawley (2011), southern California streams may be especially susceptible to geomorphic changes due to steep topography, flashy flow regimes, high sediment loads and largely non-resistant stream bed

material.³² This recent study assessed the impact of urbanization on peak flow and the duration of lower flows capable of moving bed sediment. The results of the study showed that, urbanization resulted in proportionally-longer durations of all geomorphically-effective flows, with a more pronounced effect on the durations of low to moderate flows.

A study performed by United States Geological Survey (USGS) researchers at nine different metropolitan areas within the United States, found that adverse impacts to macroinvertebrate benthic communities were observed in drainages with 5 percent impervious area.³³ The authors concluded that there appears to be no percent impervious area threshold below which benthic communities are not adversely impacted

The Grand River (lower) Surrogate Flow Regime Total Maximum Daily Load (TMDL), prepared for the Ohio Environmental Protection Agency (OEPA), examined the impacts of impervious cover and flow regime changes on aquatic life beneficial uses.³⁴ The TMDL was approved by USEPA on April 12, 2012. The TMDL analysis showed that aquatic community health (as measured by biological indices) decreased as impervious cover increased. Flow alteration and impervious cover were determined to be the stressors impairing aquatic life. Riparian buffers were identified as a mitigating factor. Peak flow, runoff volume, and flashiness were considered as surrogates. However, for this watershed, flow regime was selected because it addresses the full spectrum of flow conditions (i.e., peak flow and flow duration and base flow). In this watershed, low flow and increased water temperature presented a threat to cold-water fish species. Increased peak flow and flow duration were linked to impairment of aquatic life beneficial uses due to increased pollutant loading and the impact of channel scouring. A flow duration curve was developed for a reference watershed, based on unit area to allow for comparison of varying-sized streams. The criteria for selecting the reference watershed were: (1) the water body was fully supporting aquatic life beneficial uses, (2) location (ecoregion), (3) size (4) land cover (5) riparian buffer and (6) soils. The flow regime TMDL compares flow duration curves for the impaired stream and the reference stream. The TMDL is expressed as the difference between the impaired stream's flow and the reference stream's flow during all flow conditions. The TMDL report recommends protection strategy numeric targets of no more than 6 percent EIA with a forested (70 percent coverage) riparian buffer of 100 feet from the top of each stream bank (200 feet total).

In Los Angeles County, development has infringed upon or eliminated natural riparian buffers and existing development exceeds recommended percent impervious area in many watersheds. In addition, many water bodies have been armored or converted to engineered channels to manage flood hazards. Because of the hydrologic differences between engineered channels and natural water

³² Hawley, Robert J. 2011. The effects of urbanization on the hydrologic stability of small streams in southern California.

³³ Cuffney, T.F., Brightbill, R.A., May, J.T., and Waite, I.R. 2010. Responses of benthic macroinvertebrates to environmental changes associated with urbanization in nine metropolitan areas. *Ecological Applications* 20(5):1384-1401.

³⁴ Ohio Environmental Protection Agency. Total Maximum Daily Loads for the Grand River (lower) Watershed. Draft Report. October 12, 2011.

bodies, the Regional Water Board approaches each situation differently. Where development occurs in drainages to water bodies that have been converted to engineered channels, the Regional Water Board's regulatory approach is designed to reduce storm water runoff -- the most effective method for reducing pollutant loading. Alternatively, where development occurs in drainages to natural water bodies, the Regional Water Board regulatory approach aims to reduce pollutant loading conveyed by storm water runoff and to preserve or restore the pre-development hydrology. As a result of past development, it is likely that retrofitting of existing development will be necessary to restore watershed hydrology to pre-development conditions.

c. Applicability

New development and re-development projects subject to these requirements are described in Part VI.D.7.b. of this Order. Although not defined for large and medium MS4s, 40 CFR section 122.34 requires programs for small MS4s to include all projects that disturb an area equal to or greater than 1 acre of land and add more than 10,000 square feet of impervious surface area. The list of new development projects subject to requirements, specified in this Order in Parts VI.D.1.c.i(1)(a) through (k) were either carried over from Order No. 01-182 or were developed for the Ventura County MS4 and are appropriate for defining new developments and redevelopments in this Order. Clarification is provided for developments in progress during formulation of this Order (Part VI.D.c.i(1)(4)).

New development/re-development projects are subject to either the Water Quality/Flow Reduction Resource Management Criteria in Part VI.D.7.c.i or potentially more stringent Hydromodification (Flow/ Volume/ Duration) Control Criteria. Note that hydromodification controls apply only to projects that drain to a natural water body that is a stream, creek or a river. Hydromodification controls do not apply to discharges to lakes, estuaries, or to the ocean, which are not susceptible to channel erosion.

i. Integrated Water Quality/ Flow Reduction /Resources Management Criteria (Part VI.D.7.c.i). Projects located in drainages to water bodies that are now engineered channels are subject to Integrated Water Quality/Flow Reduction/Resources Management Criteria. These projects must be designed to minimize the footprint of the impervious area and to use low impact development (LID) strategies to disconnect the runoff from impervious area. The project must be designed to retain on-site the storm water runoff equal to the storm water quality design volume (SWQDv), unless it is determined that it is technically infeasible or there is an opportunity to contribute to an off-site regional ground water replenishment project.

The SWQDv is defined as the storm water runoff resulting from either:

- the 0.75 inch per 24 hour storm or
- the 85th percentile storm as defined in the Los Angeles County 85th percentile, 24-hour storm isohyetal map, whichever is greater.

This Order establishes a minimum design volume based on the 0.75 inch, 24-hour storm event as defined in the previous Los Angeles County MS4 permit (Order No. 01-182). This requirement is to prevent backsliding from the previous Order. The 85th percentile storm is the design storm used throughout most of the State of California for storm water treatment and LID BMPs designed for water quality protection.

Using detailed local rainfall data, the County of Los Angeles Hydrologist has developed the 85th percentile storm event isohyetal map, which exhibits the size of the 85th percentile storm event throughout Los Angeles County. Since this map uses detailed local rainfall data, it is more accurate for calculating the 85th percentile storm event than other methods which were included in Order No. 01-182. The other methods found in Order No. 01-182 were included as options to be used in the event that detailed accurate rainfall data did not exist for various locations within Los Angeles County. Therefore, they have not been carried over into this Order.

Storm water runoff may be retained on-site by methods designed to intercept rain water via infiltration, bioretention, and harvest and use. Examples of LID Best Management Practices (BMPs) that may be employed to meet the storm water retention requirements include rain gardens, bioswales, pervious pavement, green roofs, and rainwater harvesting for use in landscape irrigation.

ii. Alternative Compliance for Technical Infeasibility or Opportunity for Regional Ground Water Replenishment (Part VI.D.7.c.ii). This Order defines conditions that may make on-site retention of the SWQDv technically infeasible. These conditions include measures to:

- Ensure that on-site soils (*in-situ* or amended) have adequate infiltration rates for successful operation of infiltration BMPs,
- Protect groundwater and drinking water wells from contamination,
- Prevent infiltration that might exacerbate potential geotechnical hazards,
- Accommodate smart growth and infill or redevelopment.

A determination that compliance with the Integrated Water Quality/Flow Reduction/Resources Management Criteria is technically infeasible at the New Development/Re-development project site must be based on a site-specific hydrologic assessment or design analysis conducted and endorsed by a registered professional engineer, geologist, architect or landscape architect. This requirement is the same as contained in the Ventura County MS4 permit, and is necessary to ensure that a competent determination is conducted.

The criteria for technical infeasibility contained in Part VI.D.7.c.ii(2)(a) is necessary to ensure that the *in-situ* soil has adequate permeability to accommodate infiltration, and to ensure against premature failure of

infiltration BMPs. A minimum infiltration rate of 0.3 inches per hour under saturated conditions is specified for infiltration BMPs (e.g., dry well, pervious pavement). Infiltration BMPs are restricted to Hydrologic Soil Groups A and B, by other California storm water regulatory agencies. For example, the Contra Costa County Program's Stormwater LID Design Guidebook prohibits routing storm water runoff to a dry (infiltration) well, developed in Hydrologic Soil Groups C and D³⁵. Infiltration rates for the lower permeability B soil group ranges between 0.30 and 0.15 inches per hour (USEPA, 2009, Appendix A)³⁶. This criterion is specified to ensure the viability of infiltration systems, which may be depended upon to meet the storm water design volume criteria.

Infiltration BMPs are distinguished from bioretention BMPs, which may be implemented in all soils types. Bioretention BMPs are constructed using a manufactured/imported media that must meet strict specifications. The media specification for bioretention facilities is the same as specified for biofiltration systems. The difference between bioretention and biofiltration is that biofiltration systems are designed with an underdrain, which may allow for the discharge of a significant portion of the design storm volume, as described below under Alternative Compliance Measures. Bioretention BMPs may not include an underdrain.

The criteria for determining Technical Infeasibility described in Part VI.D.7.c.ii.(2)(b)-(f) are the same as contained in the Ventura County MS4 permit , except that (2)(b) "locations where seasonal high ground water is *within 5 feet of the surface*", was expanded to "5 to 10 feet" of the surface, to be consistent with local LID Manuals developed by the City of Santa Monica and the City of Los Angeles.

iii. Alternative Compliance Measures (Part VI.D.7.c.iii.). This Order provides equally weighted alternatives to on-site retention of the SWQDv. One alternative is to employ infiltration at off-site locations, including regional groundwater replenishment projects. The Regional Water Board has included the alternative for regional ground water replenishment in recognition of the multiple benefits it can provide. In addition to providing similar water quality benefits as compared to on-site retention, analysis by NRDC and UCSB found that implementing low impact development practices that emphasize retention at new and redeveloped residential and commercial properties in the urbanized areas of southern California and limited portions of the San Francisco Bay area has the potential to increase local water supplies by up to 405,000 acre-feet of water per year by 2030. This volume represents roughly two-thirds of the volume of water

³⁵ Contra Costa County Clean Water Program. 2010. Stormwater C.3 Guidebook, Stormwater Quality Requirements for Development Applications. Fifth Ed. October 20, 2010. p. 18. < www.cccleanwater.org >.

³⁶ USEPA. 2009. (United States Environmental Protection Agency). Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy and Independence and Security Act. Office of Water. December 2009.

used by the entire City of Los Angeles each year. In addition, the same study notes potential energy savings and reductions in CO₂ emissions.³⁷

In an effort to promote retrofitting of existing development, alternative compliance measures may include the use of infiltration, bioretention, rainfall harvest and/or biofiltration at an existing development with similar land uses and where storm water runoff is expected to exhibit pollutant event mean concentrations (EMCs) that are comparable to or higher than the proposed new development re-development project. As another alternative the project proponent may comply with the Integrated Water Quality/Flow Reduction/Resources Management Criteria using biofiltration on the project site. The volume of storm water to be treated with biofiltration is 1.5 times the difference between the SWQDv and the volume of storm water runoff that can be reliably retained on the project site. The 1.5 multiplier is based on the finding in the *Ventura County Technical Guidance Manual* that biofiltration of 1.5 times the design volume will provide approximately the same pollutant removal as retention of the design volume on an annual basis.³⁸

The volume of storm water runoff to be intercepted at an off-site mitigation project is equal to the difference between the SWQDv and the volume of storm water runoff that can be *reliably retained* on the project site. The estimate of the volume that can be reliably retained on-site shall be based on conservative assumptions including permeability of soils under saturated conditions. When rainfall harvest and use is linked to irrigation demand, the demand shall be estimated based on conditions that exist during the wet weather, winter season.

Mitigation at off-site projects shall be designed to provide equal or greater water quality protection to the surface waters within the same subwatershed as the proposed project. Preferably, the mitigation site will be located within the same Hydrologic Unit Code (HUC)-12 drainage area as the proposed new development or re-development. However, the mitigation project may be located within the expanded HUC-10 drainage area, if approved by the Executive Officer of the Regional Water Board.

As described in the *Ventura County Technical Guidance Manual*, a biofiltration system as defined in this Order, including Attachment H, allows for incidental interception of approximately 40 percent of the treatment volume and treatment of the remaining volume through filtration, and aerobic and anaerobic degradation. The effectiveness of the biofiltration system is greatly impacted by the volume of storm water runoff that is intercepted through incidental infiltration. For this reason, biofiltration as defined in this Order, does not include flow-through planter

³⁷ NRDC Technical Report. A Clear Blue Future: How Greening California Cities Can Address Water Resources and Climate Change in the 21st Century. August 2009.

³⁸ Ventura Countywide Stormwater Management Program. 2011. Ventura Technical Guidance Manual, Manual Update, 2011. Appendix D. July 13, 2011.

box or vault type systems with impervious bottom layers, unless Executive Officer approval is obtained. In addition, biofiltration systems as defined in this Order, must meet the specifications for drain placement and planting media provided in Attachment L if they are to be credited as meeting the water quality/flow reduction requirements of the Alternative Compliance Measures of this Order, unless Executive Officer approval is obtained. Attachment H provides a compilation of recent information contained in the Contra Costa County C3 Guidebook and Order R2-2011-083, adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 28, 2011. These specifications are based on experiences in the San Francisco Bay Region and are designed to ensure optimum pollutant removal and to prevent premature failure of infiltration components of the biofiltration system.

iv. Water Quality Mitigation Criteria (Part VI.D.7.c.iii.(7).) When off-site mitigation is performed, the storm water runoff from the project site must be treated prior to discharge. Volume-based treatment BMPs are to be sized to treat the runoff from the 85th percentile, 24-hour storm event, as described above for storm water retention BMPs. Flow through treatment BMPs are to be sized based on a rainfall intensity of 0.2 inches per hour or the one year, one-hour rainfall intensity as determined from the Los Angeles County isohyetal map, whichever is greater. A minimum flow design of 0.2 inches per hour is consistent with Order No. 01-182 and is included to prevent back sliding. The one year, one-hour rainfall intensity is the flow requirement specified in the Los Angeles River Trash Total Maximum Daily Loads (TMDL) and other Trash TMDLs established in the Region. The Los Angeles County isohyetal map of the one-year, one-hour storm intensity provides an accurate measure of variable storm intensity throughout the County. The one-year, one-hour rain intensity within the County ranges from approximately 0.2 inch/hour to 1.1 inches per hour.

v. Hydromodification (Flow/ Volume/ Duration Control Criteria (Part VI.D.7.iv).) New development/re-development projects located in a drainage to a natural stream/creek/river water body shall be required to meet the water quality/flow reduction criteria and/or hydromodification control criteria, whichever are more stringent. (Hydromodification controls do not apply to discharges to lakes, estuaries or to the Pacific Ocean as these types of water bodies are not susceptible to hydromodification impacts.) This Order provides Hydromodification Control Criteria to be employed. The purpose of the hydromodification controls is to preserve or restore pre-development hydrology.

Part VI.D.7.iv.(b) of this Order describes New Development/Re-development projects that are exempted from hydromodification controls. These projects include maintenance and replacement activities and other projects that do not increase EIA within the subwatershed and therefore

are not expected to add to the hydromodification effects. Also exempted are projects located within drainages to waterbodies that are not susceptible to channel erosion or other hydromodification effects.

This Order offers four options for meeting the hydromodification controls for projects that will disturb greater than 1 acre but less than 50 acres:

- The project is designed to retain the storm water runoff from the 95th percentile, 24-hour storm. This criterion is based on the recommendations from the USEPA's *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (USEPA, 2009).
- The runoff flow rate, volume, velocity and duration does not exceed the pre-development condition for the 2-year, 24-hour rainfall event. Research has determined that the maximum point of the effective work curve occurs in the 1 to 2-year frequency (Leopold, 1964, as cited in the South Orange County Hydromodification Plan, 2011)³⁹. Furthermore, the effects of development are greatest during smaller storm events. Under natural conditions, the storm water runoff from smaller storms would have been largely intercepted by vegetation, canopy, infiltration and/or evapotranspiration. During large storms, the soils become saturated and runoff occurs even under natural conditions.
- The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by the Hydromodification Analysis Study and the Equation presented in Attachment J. This provision is the same as the requirement in the Ventura County MS4 permit (Order No. R4-2010-0108). By maintaining an Ep of approximately 1, the bed sediment of the channel is in an equilibrium state. Alternatively, Permittees can opt to use other work equations to calculate Erosion Potential with Executive Officer approval.
 - Permittees may also satisfy the requirement for Hydromodification Controls by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than 1 acre within natural drainage systems.

For projects disturbing more than 50 acres, compliance with the controls may be achieved by similar means. However, the plans must be supported by more comprehensive hydrologic modeling. The final

³⁹ South Orange County. 2011. South Orange County Hydromodification Management Plan. <
http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/oc_permit/updates_031212/South_Orange_County%20HMP.pdf > Accessed April 25, 2012.

Subwatershed Hydromodification Plan must be completed within one year after the effective date of the Order.

The elements of the Subwatershed Hydromodification Plan are:

- Screening to assess which subwatersheds exhibit changes in geomorphology.
- Identify natural drainage systems within the subwatershed that are susceptible to hydromodification impacts,
- Identify areas critical to the hydrology (e.g., groundwater recharge areas, riparian buffers and wetlands) of the subwatershed and identify potential protection strategies for such areas,
- Conduct or access bioassessment monitoring data to assess whether aquatic life uses are being fully supported,
- Prepare preliminary protection strategies for subwatersheds that are fully supporting aquatic life beneficial uses,
- Prepare preliminary retrofit strategies for subwatersheds that exhibit the effects of hydromodification and are not fully supporting aquatic life beneficial uses,
- Identify candidate reference sub-watersheds that are supporting aquatic life beneficial uses and develop a flow duration curve that may serve as a standard for flow duration controls in water bodies that have aquatic life impairments linked to changes in the flow regime. This approach is as described in the recently approved OEPA, Grand River (lower) Flow Regime TMDL.

7. Development and Construction Program

a. Introduction

Soil disturbing activities during construction and demolition exacerbate sediment losses. Sediment is a primary pollutant impacting beneficial uses of watercourses. Sediments, and other construction activity pollutants must be properly controlled to reduce or eliminate adverse impacts.

b. Legal Authority

40 CFR section 122.34(b)(4) states that with respect to construction site storm water runoff control for small MS4s, which is analogous to that for large MS4s:

“(i) [the permittee] must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives

requirements for storm water discharges associated with small construction activity in accordance with § 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites. (ii) Your program must include the development and implementation of, at a minimum: (A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law; (B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices; (C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; (D) Procedures for site plan review which incorporate consideration of potential water quality impacts; (E) Procedures for receipt and consideration of information submitted by the public, and (F) Procedures for site inspection and enforcement of control measures.”

The inspection requirements for construction sites contained in this Order are also based on the requirements found in Order No. 01-182. As noted above in Part VI.C.5.a, the inspection requirements contained in Order No. 01-182 for construction sites were the subject of litigation between several permittees and the Regional Water Board. As provided in more detail above, the Los Angeles County Superior Court upheld the inspection requirements for industrial/commercial facilities and construction sites in Order No. 01-182, finding that the “[t]he Permit contains reasonable inspection requirements for these types of facilities.” (*In re L.A. Cnty. Mun. Storm Water Permit Litig.* (L.A. Super. Ct., No. BS 080548, Mar. 24, 2005), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 17.) As also noted above, the Superior Court also rejected the permittees’ claims that the requirements in Order No. 01-182 shifted the Regional Water Board’s inspection responsibility under State Water Board issued general NPDES permits for these types of facilities onto the local agencies, finding that “[r]equiring permittees to inspect commercial and industrial facilities and construction sites is authorized under the Clean Water Act, and both the Regional Board and the municipal permittees or the local government entities have concurrent roles in enforcing the industrial, construction and municipal permits. The Court finds that the Regional Board did not shift its inspection responsibilities to Petitioners.” (*Id.* at 17-18.)

As previously noted for inspections of commercial/industrial facilities, the California Court of Appeal also rejected arguments pertaining to similar inspection requirements for construction sites prescribed by the Santa Ana Regional Water Board. (*City of Rancho Cucamonga v. Regional Water Quality Control Board- Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389.) In that case, the City of Rancho Cucamonga claimed that the Santa Ana Regional Water Board improperly delegated to it and other permittees the inspection duties

of the State and Regional Water Boards and that it was being required to conduct inspections for facilities covered by other state-issued general NPDES permits. The Court of Appeal upheld the Santa Ana Regional Water Board's requirements, finding that "Rancho Cucamonga and the other permittees are responsible for inspecting construction and industrial sites and commercial facilities within their jurisdiction for compliance with and enforcement of local municipal ordinances and permits. But the Regional Board continues to be responsible under the 2002 NPDES permit for inspections under the general permits. The Regional Board may conduct its own inspections but permittees must still enforce their own laws at these sites. (40 C.F.R. § 122.26, subd. (d)(2) (2005).)" (*Id.* at 1390.)

c. Construction Activity Applicability

Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre.

Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale of one or more acres of disturbed land surface.

Construction activity related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.

Construction activity associated with linear underground/overhead project (LUPs) including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

Storm water discharges from dredge spoil placement that occur outside of U.S. Army Corps of Engineers jurisdiction⁴⁰ (upland sites) and that disturb one or more acres of land surface from construction activity are covered by this General

⁴⁰ A construction site that includes a dredge and/or fill discharge to any water of the United States (e.g., wetland, channel, pond, or marine water) requires a permit from the U.S. Army Corps of Engineers pursuant to CWA section 404 and a Water Quality Certification from the Regional Water Board or State Water Board pursuant to CWA section 401.

Permit. Construction projects that intend to disturb one or more acres of land within the jurisdictional boundaries of a CWA section 404 permit should contact the appropriate Regional Water Board to determine whether this permit applies to the project.

d. Development Construction Program Implementation

Permittees must implement a construction program that applies to all activities involving soil disturbance with the exception of agricultural activities. Minimum requirements have been established for construction activity less than one acre and for those activities equal or greater than one acre. Activities covered by the permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving, and LUPs. The construction program should be designed to: (1) prevent illicit construction-related discharges of pollutants into the MS4 and receiving waters; (2) implement and maintain structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites; (3) reduce construction site discharges of pollutants to the MS4 to the MEP; and (4) prevent construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.

Each permittee shall use an site system to track grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by each permittee. To satisfy this requirement, the use of a database or GIS system is recommended.

For construction activity equal or greater than one acre, the Permittee must establish review procedures for construction site plans to determine potential water quality impacts and ensure the proposed controls are adequate. These procedures should include the preparation and submission of an Erosion and Sediment Control Plan (ESCP) containing elements of a Storm Water Pollution Prevention Plan (SWPPP) prior to issuance of a grading or building permit as well as a review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. The requirement that ESCP/SWPPPs must be developed by a Qualified SWPPP Developer (QSD) is new for this iteration of the permit. This requirement ensures the development of high quality ESCP/SWPPPs that protect water quality to the MEP.

A ESCP/SWPPP must be appropriate for the type and complexity of a project and will be developed and implemented to address project specific conditions. Some projects may have similarities or complexities, yet each project is unique in its progressive state that requires specific description and selection of BMPs needed to address all possible generated pollutants. The Permittee must ensure that construction site operators select and implement appropriate erosion and sediment control measures to reduce or eliminate the impacts to receiving waters. To help guide their Construction Program and ensure consistency regarding BMP selection, the Permit requires the Permittee to develop or adopt BMP standards for a range of construction related activities. The list of activities is based on California Stormwater Quality Association's (CASQA) Construction

BMP handbook. The ESCP/SWPPP must include the rationale used for selecting or rejecting BMPs. The project architect, or engineer of record, or authorized qualified designee, must sign a statement on the ESCP/SWPPP to the effect:

"As the architect/ engineer of record, I have selected, appropriate BMPs to effectively minimize the negative impact of the project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activity."

The Permittee is responsible for conducting inspection and enforcement of erosion and sediment control measures at specified times and frequencies during construction including prior to land disturbance, during grading and land development, during streets and utilities activities, during vertical construction, and during final landscaping and site stabilization. The Permittees' Municipal Inspectors must be adequately trained and Permittees are encouraged to offer opportunities for inspectors to enroll in the State Water Board sponsored Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) certification program. A progressive enforcement policy has been integrated into this iteration of the permit to ensure that adequate penalties are in place and to ensure the protection of receiving water quality.

Prior to approving and/ or signing off for occupancy and issuing the Certificate of Occupancy for all construction projects subject to post-construction controls, each permittee shall inspect the constructed site design, source control and treatment control BMPs to verify that they have been constructed in compliance with all specifications, plans, permits, ordinances, and this Order. The initial/ acceptance BMP verification inspection does not constitute a maintenance and operation inspection.

The Permittee must ensure that staff has proper training. In addition, the Permittee must develop and distribute training and educational material and conduct outreach to the development community. To ensure that the construction program is followed, construction operators must be educated about site requirements for control measures, local storm water requirements, enforcement activities, and penalties for non-compliance.

8. Public Agency Activities Program

a. Background

Publically-owned or operated facilities serve as hubs of activity for a variety of municipal staff from many different departments. Some municipalities will have one property at which all activities take place (e.g., the municipal maintenance yard), whereas others will have several specialized facilities such as animal control facilities, chemical storage facilities, composting facilities, equipment storage and maintenance facilities, fueling facilities, hazardous waste disposal facilities, incinerators, landfills, materials storage yards, pesticide storage

facilities, public buildings, public parking lots, public golf courses, public swimming pools, public parks, public marinas, recycling facilities, solid waste handling and transfer facilities, and flood control facilities.

b. Program Implementation

i. Public Construction Activities Management

The Permittee is required to implement BMPs and comply with the Planning and Land Development Program requirements in Part VI.D.6 of this Order and the Development Construction Program requirements in Part VI.D.7 of this Order at applicable Permittee-owned or operated (i.e., public or Permittee sponsored) construction projects. These requirements ensure that Permittee-owned or operated construction and development occurs in an equally protective manner as private development. The Permittee is also required to implement an effective combination of erosion and sediment control BMPs from Table 13 (see Construction Development Program, minimum BMPs) at those public sites that disturb less than one acre of soil. Last, the Permittee is required to obtain separate coverage under the State Water Board's Construction General NPDES Permit for all Permittee-owned or operated construction sites that require coverage.

ii. Public Facility Inventory

A comprehensive list of publically-owned or operated facilities will help staff responsible for storm water compliance build a better awareness of their locations within the MS4 service area and their potential to contribute storm water pollutants. The inventory should include information on the location, contact person at the facility, activities performed at the facility, and whether the facility is covered under an industrial general storm water permit or other individual or general NPDES permit, or any applicable waivers issued by the Regional or State Water Board pertaining to storm water discharges. Incorporation of GIS into the inventory is encouraged. The facility inventory should be updated at least twice during the permit term and will serve as a basis for setting up periodic facility assessments and developing, where necessary, facility storm water pollution prevention plans. By developing an inventory of Permittee-owned facilities that are potential sources of storm water pollution helps to ensure that these facilities are monitored and receiving water quality is protected.

iii. Inventory of Existing Development for Retrofitting Opportunities

Each Permittee is required to maintain an updated inventory of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of storm water pollution. This requirement is similar to the requirement of Order No. 01-182. In this Order, the incorporation of facility information into a GIS is recommended as this has been proven effective for effectively inventory and management of facilities and associated BMPs. Given that facility operation, condition, and practices can

change over a five year period, the Permittees are required to update its inventory at least twice during the term of this Order.

In addition to developing an inventory of publically-owned or operated facilities, in this Order, Permittees are required to develop an inventory of existing development for retrofitting opportunities. The intention of adding this requirement to the permit is to encourage the use of retrofit projects that reduce storm water pollutants into the MS4 that are a result of impacts from existing development. Permittees are also required to evaluate and rank these retrofitting opportunities.

iv. Public Agency Facility and Activity Management

Each Permittee is required to manage its facilities in accordance with the State Water Board's Industrial General NPDES Permit, where applicable, and shall ensure the implementation and maintenance of appropriate BMPs at all facilities with a potential to pollute stormwater. Therefore, Permittees shall obtain separate coverage under the State Water Board's Industrial General NPDES Permit for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the Industrial General NPDES Permit and shall implement and maintain activity specific BMPs listed in Table 19 (BMPs for Public Agency Facilities and Activities).

Many municipalities use third-party contractors to conduct municipal maintenance activities in lieu of using municipal employees. Contractors performing activities that can affect storm water quality must be held to the same standards as the Permittee. Not only must these expectations be defined in contracts between the Permittee and its contractors, but the Permittee is responsible for ensuring, through contractually-required documentation or periodic site visits, that contractors are using storm water controls and following standard operating procedures. Therefore, the Permittee shall ensure all contractors hired by the Permittee to conduct Public Agency Activities including, but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair shall be contractually required to implement and maintain the activity specific BMPs listed in Table 18.

v. Vehicle and Equipment Washing

Specific BMPs for all fixed vehicle and equipment washing; including fire fighting and emergency response vehicles have been incorporated into this Order and must be implemented. In addition, specific BMPs for wash waters from vehicle and equipment washing. These requirements effectively prohibit the occurrence of illicit discharges resulting from unauthorized washing activities.

vi. Landscape, Park, and Recreational Facilities Management

Specific BMPs for public right-of-ways, flood control facilities and open channels, lakes and reservoirs, and landscape, park, and recreation facilities and activities have been included this Order, similar to those in Order No. 01-182 and the more recently adopted Ventura County MS4 Permit, and must be implemented. These requirements are reflective of current environmentally responsible practices.

vii. Storm Drain Operation and Maintenance

Specific BMPs for storm drain operations and maintenance have been carried over from Order No. 01-182 into this Order.

Permittees must prioritize catch basins for cleaning activities based on the volume of trash or debris.

The materials removed from catch basins may not reenter the MS4. The material must be dewatered in a contained area and the water treated with an appropriate and approved control measure or discharged to the sanitary sewer. The solid material will need to be stored and disposed of properly to avoid discharge during a storm event. Some materials removed from storm drains and open channels may require special handling and disposal, and may not be authorized to be disposed of in a landfill.

viii. Streets, Roads, and Parking Facilities Maintenance

Permittees must prioritize streets and/or street segments for sweeping activities based on the volume of trash generated on the street or street segments. Based on these established priorities, Permittees must conduct street sweeping twice per month on the highest priority streets (Priority A), once per month on the medium priority streets (Priority B), and as needed but not less than once per year on the lowest priority streets (Priority C). In addition parking facilities must be cleaned using street sweeping equipment no less than two times per month and inspect no less than two times per month to determine if cleaning is necessary.

Specific BMPs for road reconstruction have been incorporated into this Order and must be followed during road repaving activities.

ix. Emergency Procedures

Permittees are required to conduct repairs of essential public service systems and infrastructure in emergency situations. These requirements ensure the protection of water quality. BMPs must be implemented to reduce the threat to water quality and the Regional Water Board must be notified of the occurrence, an explanation of the circumstances and measures taken to reduce the threat to water quality within 30 business days after the emergency has passed.

x. Municipal Employee and Contractor Training

Permittees are required to ensure that training is provided for employees and contractors that have job duties or participate in activities that have the potential to affect storm water quality. The training should promote a general understanding of the potential for activities to pollute storm water and include information on the identification of opportunities to require, implement, and maintain BMPs associated with the activities they perform. In addition training specific to employees or contractors that use or have the potential to use pesticides or fertilizers should be provided. This training should instruct employees and contractors on the potential for pesticide-related surface water toxicity, the proper use, handling and disposal of pesticides, the least toxic methods of pest prevention and control, and the overall reduction of pesticide use.

Many municipalities use third-party contractors to conduct municipal maintenance activities in lieu of using municipal employees. Contractors performing activities that can affect storm water quality must be held to the same standards as the Permittee. Not only must these expectations be defined in contracts between the Permittee and its contractors, but the Permittee is responsible for ensuring, through contractually-required documentation or periodic site visits, that contractors are using storm water controls and following standard operating procedures.

9. Illicit Connection and Illicit Discharge Elimination Program**a. Legal Authority**

A proposed management program “shall be based on a description of a program, including a schedule, to detect and remove (or require the discharger to the municipal storm sewer to obtain a separate NPDES permit for) illicit discharges and improper disposal into the storm sewer,” per 40 CFR section 122.26(d)(2)(iv)(B). A Permittee must include in its proposed management program “a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal storm sewer system,” per subsection (1) of the above federal regulation.

USEPA stormwater regulations define "illicit discharge" as "any discharge to a municipal separate storm sewer that is not composed entirely of stormwater" except discharges resulting from fire fighting activities and discharges from NPDES permitted sources (see 40 CFR section 122.26(b)(2)). The applicable regulations state that the following non-stormwater discharges may be allowed if they are not determined to be a significant source of pollutants to the MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR section 35.2005(20)), uncontaminated pumped ground water, discharges from drinking water supplier distribution systems, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian

habitats and wetlands, dechlorinated swimming pool discharges, and street wash water. If, however, these discharges are determined to be a significant source of pollution then they must be prohibited.

Examples of common sources of illicit discharges in urban areas include apartments and homes, car washes, restaurants, airports, landfills, and gas stations. These so called "generating sites" discharge sanitary wastewater, septic system effluent, vehicle wash water, washdown from grease traps, motor oil, antifreeze, gasoline and fuel spills, among other substances. Although these illicit discharges can enter the storm drain system in various ways, they generally result from either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the storm drain system, spills, or "midnight dumping"). Illicit discharges can be further divided into those discharging continuously and those discharging intermittently.

b. Illicit Discharge Source Investigation and Elimination

Section 402(p)(3)(B)(ii) of the CWA requires MS4 permits to "effectively prohibit non-stormwater discharges into the storm sewers." The permit implements this requirement, in part by requiring the development of procedures to investigate and eliminate illicit discharges. The permittee must develop a clear, step-by-step procedure for conducting the investigation of illicit discharges. The procedure must include an investigation protocol that clearly defines what constitutes an illicit discharge and what steps shall be taken to identify and eliminate its source. In many circumstances, sources of intermittent, illicit discharges are very difficult to locate, and these cases may remain unresolved. The permit requires that each case be conducted in accordance with the procedures developed to locate the source and conclude the investigation, after which the case may be considered closed. These procedures should be completed per the Progressive Enforcement Policy identified in Part VI.D.2 of this Order and should include enforcement as necessary to ensure the elimination of the illicit discharge/connection.

Illicit discharges may also originate in upstream jurisdictions and therefore this Order establishes procedures for communicating with upstream entities and providing information that may prove helpful in their investigation of its source(s).

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

goal of these requirements is to provide a permanent solution for ongoing illicit discharges.

c. Identification and Response to Illicit Connections

Illicit connections to the MS4 can lead to the direct discharge or infiltration of sewage or other prohibited discharges into the MS4. Permittees have been conducting illicit connection screening throughout the term of Order No. 01-182 and this Order requires a continuation of response efforts once an illicit connection is identified. This Order establishes unique obligations for the LACFCD and for the individual Permittees. The requirements for LACFCD are based on the unique obligations and infrastructure of a regional flood control district. Requirements for the individual Permittees require the investigation and follow-up of all illicit connections within 21 days of identification and elimination within 180 days.

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

Each Permittee needs to promote a program to help in the identification and termination of illicit discharges. This Order establishes requirements for the Permittees, individually or as a group, to develop public education campaigns and reporting numbers which are intended to promote public reporting of illicit discharges. Specifically, a stormwater hotline can be used to help permittees become aware of and mitigate spills or dumping incidents. Spills can include everything from an overturned gasoline tanker to sediment leaving a construction site to a sanitary sewer overflow entering into a storm drain. Permittees must set up a hotline consisting of any of the following (or combination thereof): a dedicated or non-dedicated phone line, E-mail address, or website.

This Order also requires development of written procedures for receiving and responding to calls from the public and for maintaining documentation about reported illicit discharges and spills and their investigation and remedy. These requirements are intended to ensure that reliable and consistent practices are deployed to address this persistent problem.

e. Spill Response Plan

Spills, leaks, sanitary sewer overflows, and illicit dumping or discharges can introduce a range of stormwater pollutants into the storm system. Prompt response to these occurrences is the best way to prevent or reduce negative impacts to waterbodies. The permittee must develop a spill response plan that includes an investigation procedure similar to or in conjunction with the investigation procedures developed for illicit discharges in general. Often, a different entity might be responsible for spill response in a community (i.e. fire department), therefore, it is imperative that adequate communication exists between stormwater and spill response staff to ensure that spills are documented and investigated in a timely manner.

f. Illicit Connection and Illicit Discharge Education and Training

The permit requires each Permittee to train field staff, who may come into contact or observe illicit discharges, on the identification and proper procedures for reporting illicit discharges. Field staff to be trained may include, but are not limited to, municipal maintenance staff, inspectors, and other staff whose job responsibilities regularly take them out of the office and into areas within the MS4 area. Permittee field staff are out in the community every day and are in the best position to locate and report spills, illicit discharges, and potentially polluting activities. With proper training and information on reporting illicit discharges easily accessible, these field staff can greatly expand the reach of the IDDE program.

10. Los Angeles County Flood Control District Section

Due to the unique characteristics of the Los Angeles County Flood Control District, a Minimum Control Measure Section unique to the Los Angeles County Flood Control District was included in the Order. Unlike other Permittees, the LACFCD does not own or operate any municipal sanitary sewer systems, public streets, roads, or highways. Additionally, The LACFCD has no planning, zoning, development permitting or other land use authority over industrial or commercial facilities, new developments or re-development projects, or development construction sites located in any incorporated or unincorporated areas within its service area. The Permittees that have such land use authority are responsible for implementing a storm water management program to inspect and control pollutants from industrial and commercial facilities, new development and re-development projects, and development construction sites within their jurisdictional boundaries. The requirements included in the Section are the same as those for other Permittees, but requirements that are not applicable due to the unique characteristic of the Los Angeles County Flood Control District were eliminated.

D. Total Maximum Daily Load Provisions

Clean Water Act section 303(d)(1)(A) requires each State to conduct a biennial assessment of its waters, and identify those waters that are not achieving water quality standards. These waters are identified as impaired on the State's Clean Water Act section "303(d) List" of water quality limited segments. The Clean Water Act also requires States to establish a priority ranking for waters on the 303(d) List and to develop and implement Total Maximum Daily Loads (TMDLs) for these waters. A TMDL specifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and allocates the acceptable pollutant load to point and nonpoint sources. The elements of a TMDL are described in 40 CFR sections 130.2 and 130.7. A TMDL is defined as "the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background" (40 CFR § 130.2). Regulations further require that TMDLs must be set at "levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and

water quality” (40 CFR section 130.7(c)(1)). The regulations at 40 CFR section 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters. Essentially, TMDLs serve as a backstop provision of the CWA designed to implement water quality standards when other provisions have failed to achieve water quality standards.

Upon establishment of TMDLs by the State or the USEPA, the State is required to incorporate, or reference, the TMDLs in the State Water Quality Management Plan (40 CFR sections 130.6(c)(1) and 130.7). The Regional Water Board’s Basin Plan, and applicable statewide plans, serves as the State Water Quality Management Plan governing the watersheds under the jurisdiction of the Regional Water Board. When adopting TMDLs as part of its Basin Plan, the Regional Water Board includes, as part of the TMDL, a program for implementation of the WLAs for point sources and load allocations (LAs) for nonpoint sources.

TMDLs are not self-executing, but instead rely upon further Board orders to impose pollutant restrictions on discharges to achieve the TMDL’s WLAs. Section 402(p)(3)(B)(iii) of the Clean Water Act requires the Regional Water Board to impose permit conditions, including: “management practices, control techniques and system, design and engineering methods, and *such other provisions as the Administrator of the State determines appropriate for the control of such pollutants.*” (emphasis added.) Section 402(a)(1) of the Clean Water Act also requires states to issue permits with conditions necessary to carry out the provisions of the Clean Water Act. Federal regulations also require that NPDES permits must include conditions consistent with the assumptions and requirements of any available waste load allocation (40 CFR section 122.44(d)(1)(vii)(B)). Similarly, state law requires both that the Regional Water Board implement its Basin Plan when adopting waste discharge requirements (WDRs) and that NPDES permits apply “any more stringent effluent standards or limitations necessary to implement water quality control plans...” (Cal. Wat. Code §§ 13263, 13377).

An NPDES permit should incorporate the WLAs as numeric WQBELs, where feasible. Where a non-numeric permit limitation is selected, such as BMPs, the permit’s administrative record must support the expectation that the BMPs are sufficient to achieve the WLAs. (40 CFR §§ 124.8, 124.9, and 124.18.) The USEPA has published guidance for establishing WLAs for storm water discharges in TMDLs and their incorporation as numeric WQBELs in MS4 permits.⁴¹

As required, permit conditions are included in this Order consistent with the assumptions and requirements of the available WLAs assigned to MS4 discharges, which have been established in thirty-three TMDLs. The Regional Water Board adopted twenty-five (25) TMDLs and USEPA established seven (7) TMDLs that assign WLAs to MS4 Permittees within the County of Los Angeles. In addition, the Santa Ana Regional Water Board adopted a TMDL that assigns WLAs to the Cities of Pomona and

⁴¹ USEPA (2010) “Revisions to the November 22, 2002 Memorandum ‘Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those TMDLs.’” Issued by James A. Hanlon, Director, Office of Wastewater Management and Denise Keehner, Director, Office of Wetlands, Oceans and Watersheds. November 12, 2010.

Claremont. The TMDLs included in this Order along with the adoption and approval dates are listed in the table below. Permit conditions for two of these TMDLs – the Marina del Rey Harbor Bacteria TMDL and the Los Angeles River Watershed Trash TMDL – were previously incorporated into Order No. 01-182 during re-openers in 2007 and 2009, respectively (Orders R4-2007-0042 and R4-2009-0130). TMDLs are typically developed on a watershed or subwatershed basis, which facilitates a more accurate assessment of cumulative impacts of pollutants from all sources. An overview of each Watershed Management Area, including the TMDLs applicable to it, is provided below.

TMDLs with Resolution Numbers, Adoption Dates and Effective Dates

MS4 Discharges within the
Coastal Watersheds of Los Angeles County

ORDER NO. R4-2012-0175
NPDES NO. CAS004001

TOTAL MAXIMUM DAILY LOAD	RESOLUTION NUMBER	ADOPTION DATE	STATE BOARD RESOLUTION NUMBER	STATE BOARD APPROVAL DATE	OAL APPROVAL DATE	EPA APPROVAL DATE	EFFECTIVE DATE
Santa Clara River Watershed Management Area							
Santa Clara River Nitrogen Compounds TMDL	2003-011	8/7/2003	2003-0073	11/19/2003	2/27/2004	3/18/2004	3/23/2004
Upper Santa Clara River Chloride TMDL	2008-012	12/11/2008	2009-0077	10/20/2009	1/26/2010	4/6/2010	4/6/2010
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)	2007-009	6/7/2007	2007-0073	12/4/2007	2/8/2008	2/27/2008	3/6/2008
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL	R10-006	7/8/2010	2011-0048	10/4/2011	12/19/2011	1/13/2012	3/21/2012
Santa Monica Bay Watershed Management Area							
Santa Monica Bay Beaches Bacteria TMDL (Dry Weather)	2002-004	1/24/2002	2002-0149	9/19/2002	12/9/2002	6/19/2003	7/15/2003
Santa Monica Bay Beaches Bacteria TMDL (Wet Weather)	2002-022	12/12/2002	2003-0022	3/19/2003	5/20/2003	6/19/2003	7/15/2003
Santa Monica Bay Nearshore and Offshore Debris TMDL	R10-010	11/4/2010	2011-0064	12/6/2011	3/15/2012	3/20/2012	3/20/2012
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Malibu Creek Subwatershed							
Malibu Creek and Lagoon Bacteria TMDL	2004-019R	12/13/2004	2005-0072	9/22/2005	12/1/2005	1/10/2006	1/24/2006
Malibu Creek Watershed Trash TMDL	2008-007	5/1/2008	2009-0029	3/17/2009	6/16/2009	6/26/2009	7/7/2009
Malibu Creek Watershed Nutrients TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/21/2003	N/A
Ballona Creek Subwatershed							
Ballona Creek Trash TMDL	2004-023	3/4/2004	2004-0059	9/30/2004	2/8/2005	N/A	8/11/2005
Ballona Creek Estuary Toxic Pollutants TMDL	2005-008	7/7/2005	2005-0076	10/20/2005	12/15/2005	12/22/2005	1/11/2006
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL	2006-011	6/8/2006	2006-0092	11/15/2006	2/20/2007	3/26/2007	4/27/2007
Ballona Creek Metals TMDL	2007-015	9/6/2007	2008-0045	6/17/2008	10/6/2008	10/29/2008	10/29/2008

MS4 Discharges within the
Coastal Watersheds of Los Angeles County

ORDER NO. R4-2012-0175
NPDES NO. CAS004001

TOTAL MAXIMUM DAILY LOAD	RESOLUTION NUMBER	ADOPTION DATE	STATE BOARD RESOLUTION NUMBER	STATE BOARD APPROVAL DATE	OAL APPROVAL DATE	EPA APPROVAL DATE	EFFECTIVE DATE
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Marina del Rey Subwatershed							
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	2003-012	8/7/2003	2003-0072	11/19/2003	1/30/2004	3/18/2004	3/18/2004
Marina del Rey Harbor Toxic Pollutants TMDL	2005-012	10/6/2005	2006-0006	1/13/2006	3/13/2006	3/16/2006	3/22/2006
Dominguez Channel and Greater Harbors Waters Watershed Management Area							
Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)	2004-011	7/1/2004	2004-0071	10/21/2004	1/5/2005	3/1/2005	3/10/2005
Machado Lake Trash TMDL	2007-006	6/7/2007	2007-0075	12/4/2007	2/8/2008	2/27/2008	3/6/2008
Machado Lake Nutrient TMDL	2008-006	5/1/2008	2008-0089	12/2/2008	2/19/2009	3/11/2009	3/11/2009
Machado Lake Pesticides and PCBs TMDL	R10-008	9/2/2010	2011-0065	12/6/2011	2/29/2012	3/20/2012	3/20/2012
Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL	R11-008	5/5/2011	2012-0008	2/7/2012	3/21/2012	3/23/2012	3/23/2012
Los Angeles River Watershed Management Area							
Los Angeles River Watershed Trash TMDL	2007-012	8/9/2007	2008-0024	4/15/2008	7/1/2008	7/24/2008	9/23/2008
Los Angeles River Nitrogen Compounds and Related Effects TMDL	2003-016	12/4/2003	2004-0014	3/24/2004	9/27/2004	N/A	9/27/2004
Los Angeles River and Tributaries Metals TMDL	R10-003	5/6/2010	2011-0021	4/19/2011	7/28/2011	11/3/2011	11/3/2011
Los Angeles River Bacteria TMDL	R10-007	7/9/2010	2011-0056	11/1/2011	3/21/2012	3/23/2012	3/23/2012
Legg Lake Trash TMDL	2007-010	6/7/2007	2007-0074	12/4/2007	2/5/2008	2/27/2008	3/6/2008
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A

MS4 Discharges within the
Coastal Watersheds of Los Angeles County

ORDER NO. R4-2012-0175
NPDES NO. CAS004001

TOTAL MAXIMUM DAILY LOAD	RESOLUTION NUMBER	ADOPTION DATE	STATE BOARD RESOLUTION NUMBER	STATE BOARD APPROVAL DATE	OAL APPROVAL DATE	EPA APPROVAL DATE	EFFECTIVE DATE
Los Angeles Area Lakes TMDLs (USEPA established for Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
San Gabriel River Watershed Management Area							
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/26/2007	N/A
Los Angeles Area Lakes TMDLs (USEPA established for Puddingstone Reservoir)	N/A	N/A	N/A	N/A	N/A	3/26/2012	N/A
Los Cerritos Channel and Alamitos Bay Watershed Management Area							
Los Cerritos Channel Metals TMDL (USEPA established)	N/A	N/A	N/A	N/A	N/A	3/17/2010	N/A
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	R09-005	10/1/2009	2010-0056	11/16/2010	5/6/2011	6/14/2011	7/28/2011
Middle Santa Ana River Watershed Management Area (Santa Ana Region TMDL)							
Middle Santa Ana River Watershed Bacterial Indicator TMDLs	R8-2005-0001	8/26/2005	2006-0030	5/15/2006	9/1/2006	5/16/2007	5/16/2007

Santa Clara River Watershed Management Area. The Santa Clara River and its tributaries drain a watershed area of 1,634 square miles (sq. miles) (Figure B-1). Santa Clara River Reaches 1, 2, 3, 4A, 4B and major tributaries Santa Paula, Sespe and Piru Creeks are in Ventura County. Santa Clara River Reaches 5, 6, 7, 8 and major tributaries Castaic, San Francisquito, and Bouquet Canyon Creeks are in Los Angeles County. About 40% of the watershed, the Upper Santa Clara River, is located in County of Los Angeles. Approximately, 75% of the Upper Santa Clara River watershed is open space used for recreation in the Angeles National Forest. The remainder of the upper portion of the watershed is characterized by a mixture of residential, mixed urban, and industrial land uses with low density residential more common in the uppermost areas of the watershed, while high density residential is more prevalent in the City of Santa Clarita.

Various reaches of the Santa Clara River are on the 2010 CWA Section 303(d) List of impaired water bodies for nitrogen, bacteria, chloride, and trash (in lakes), among other pollutants. The excess nitrogen compounds are causing impairments to the WARM, WILD, and GWR designated beneficial uses of the Santa Clara River in Reaches 3, 7 and 8. The elevated bacterial indicator densities are causing impairment of the REC-1 and REC-2 designated beneficial uses for the Santa Clara River Estuary and Reaches 3, 5, 6, and 7. The excessive levels of chloride are impairing the AGR and GWR designated beneficial uses of the Upper Santa Clara River Reaches 4A, 4B, 5 and 6. The trash in Lake Elizabeth is causing impairments to the WARM, WILD, RARE, REC-1 and REC-2 designated beneficial uses.

TMDLs have been adopted by the Regional Water Board to address the impairments due to nitrogen, bacteria and chloride in the Upper Santa Clara River Watershed and for trash in Lake Elizabeth. Each of these TMDLs identifies MS4 discharges as a source of pollutants and assigns allocations to MS4 discharges. In the nitrogen compounds TMDL, storm water discharges were identified as potentially contributing nitrogen loads. Data from land use monitoring conducted under the LA County MS4 Permit from 1994-1999 indicate some concentrations of ammonia from commercial land uses in excess of the 30-day average concentration based WLA of 1.75 mg/l, and potential concentrations of nitrate-N and nitrite-N from residential land uses in excess of the WLA of 6.8 mg/l. Recent data from the 2010-11 annual monitoring report indicate low levels of ammonia and nitrite at the mass emissions station (S29) in the Santa Clara River, and concentrations of nitrate-N ranging from 1.38-1.66 mg/l in dry weather and 0.015-1.86 mg/l in wet weather. In the chloride TMDL, major point sources are assigned a WLA of 100 mg/l. Data from land use monitoring conducted under the LA County MS4 Permit from 1994-99 indicate chloride concentrations ranging from 3.2-48 mg/l, while more recent data from the mass emissions station (S29) indicate concentrations ranging from 116-126 mg/l in dry weather, and 25.1-96.3 mg/l in wet weather. For the bacteria TMDL, the Regional Water Board found that the significant contributors of bacteria loading to the Santa Clara River are discharges of storm water and non-storm water from the MS4. For the trash TMDL, discharges from the MS4 are sources of trash discharged to Lake Elizabeth.

Santa Monica Bay Watershed Management Area. The Santa Monica Bay Watershed Management Area (WMA) encompasses an area of 414 sq. miles (Figure B-2). Its

borders reach from the crest of the Santa Monica Mountains on the north and from the Ventura-Los Angeles County line to downtown Los Angeles. From there it extends south and west across the Los Angeles plain to include the area east of Ballona Creek and north of the Baldwin Hills. A narrow strip of land between Playa del Rey and Palos Verdes drains to the Bay south of Ballona Creek. The WMA includes several subwatersheds, the two largest being Malibu Creek to the north (west) and Ballona Creek to the south. SCAG land use data from 2005 shows 62% of the area is open space, high density residential is 17% of the area, and low density residential is 2.3% of the area. Commercial and industrial land uses total 6% of the area and are found in all but a handful of the subwatersheds.

Many of the Santa Monica Bay beaches were identified on the 1998 CWA Section 303(d) List of impaired water bodies for high coliform counts and beach closures. Santa Monica Bay offshore and nearshore is on the 2010 CWA Section 303(d) List of impaired water bodies for debris, DDTs, PCBs and sediment toxicity. The elevated bacterial indicator densities during both dry and wet weather are causing impairments of the REC-1 and REC-2 designated beneficial uses of the Santa Monica Bay beaches. The debris and elevated concentrations of DDT and PCBs are causing impairments to the IND, NAV, REC-1, REC-2, COMM, EST, MAR, BIOL, MIGR, WILD, RARE, SPWN, SHELL, and WET designated beneficial uses of the Santa Monica Bay.

TMDLs have been adopted by the Regional Water Board and USEPA for bacteria at Santa Monica Bay Beaches, and for debris, DDTs, PCBs and sediment toxicity in Santa Monica Bay. In the bacteria TMDL, the Regional Water Board determined that discharges of storm water and non-storm water from the MS4 are the primary source of elevated bacterial indicator densities to Santa Monica Bay beaches during dry and wet weather. In the debris TMDL, the Regional Water Board determined that most of the land-based debris is discharged to the marine environment through the MS4. In the DDT and PCBs TMDL, USEPA determined that although DDT is no longer used, it persists in the environment, adhering strongly to soil particles. The manufacture of PCBs is no longer legal, but PCBs also persist in the environment and are inadvertently produced as a result of some manufacturing processes. Both DDT and PCBs are transported in contaminated sediments via urban runoff through the MS4 to Santa Monica Bay.

The Malibu Creek subwatershed drains an area of about 109 square miles (Figure B-2a). Approximately two-thirds of this subwatershed lies in Los Angeles County and the remaining third in Ventura County. Much of the land is part of the Santa Monica Mountains National Recreation Area and is under the purview of the National Parks Service. The watershed borders the eastern portion of Ventura County to the west and north and Los Angeles River watershed to the east. Major tributaries include Cold Creek, Lindero Creek, Las Virgenes Creek, Medea Creek, and Triunfo Creek. Located at the end of and receiving flows from Malibu Creek is the 40-acre Malibu Lagoon. The Malibu Creek subwatershed land uses are 88% open space, 3% commercial/light industry, 9% residential and less than 1% public.

The Malibu Creek Watershed is on the 2010 CWA Section 303(d) List of impaired water bodies for bacteria, nutrients, and trash. Elevated bacterial indicator densities are

causing impairment of the REC-1 and REC-2 designated beneficial uses of Malibu Creek, Malibu Lagoon, and the adjacent beaches. Excess nutrients are causing impairments to the REC-1, REC-2, WARM, COLD, EST, MAR, WILD, RARE, MIGR, and SPWN designated beneficial uses of waterbodies in the Malibu Creek Watershed. Trash is causing impairments to the MUN, GWR, REC-1, REC-2, WARM, COLD, MIGR, WILD, RARE, SPWN, and WET designated beneficial uses of the waterbodies in the Malibu Creek Watershed.

TMDLs have been adopted by the Regional Water Board for bacteria and trash in Malibu Creek. USEPA established a TMDL for nutrients in Malibu Creek. Fecal coliform bacteria may be introduced from a variety of sources including storm water and non-storm water discharges from the MS4. USEPA determined that high nitrogen and phosphorus loadings are associated with storm water discharges from commercial and residential land uses and also from undeveloped areas. During the summer non-storm water discharges add a significant portion of the load. The Regional Water Board determined in the trash TMDL that discharges from the MS4 are a source of trash to waterbodies in the Malibu Creek Watershed.

Ballona Creek and its tributaries drain a subwatershed of about 127 square miles (Figure B-2b). The watershed boundary extends in the east from the crest of the Santa Monica Mountains southward and westward to the vicinity of central Los Angeles and thence to Baldwin Hills. Tributaries of Ballona Creek include Centinela Creek, Sepulveda Canyon Channel, Benedict Canyon Channel, and numerous other storm drains. Ballona Creek is concrete lined upstream of Centinela Boulevard. All of its tributaries are either concrete channels or covered culverts. The channel downstream of Centinela Boulevard is trapezoidal composed of grouted rip-rap side slopes and an earth bottom. The urbanized areas of Ballona Creek, which consists of residential and commercial properties, accounts for 80% of the watershed; the partially developed foothill and mountains make up the other 20%.

Ballona Creek and Ballona Creek Estuary is on the 2010 CWA Section 303(d) List for trash, toxicity, bacteria, and metals. The Ballona Creek Wetlands is on the 2010 CWA Section 303(d) List for trash, exotic vegetation, habitat alterations and hydromodification. Trash is causing impairments to the REC-1, REC-2, WARM, WILD, EST, MAR, RARE, MIGR, SPWN, COMM, WET, and COLD designated beneficial uses of Ballona Creek. A suite of toxic pollutants, including cadmium, copper, lead, silver, zinc, chlordane, DDT, PCBs, and PAHs in sediments and dissolved copper, dissolved lead, total selenium, and dissolved zinc, are causing impairments to the REC-1, REC-2, EST, MAR, WILD, RARE, MIGR, SPWN, COMM, and SHELL designated beneficial uses of Ballona Creek Estuary and Ballona Creek and Sepulveda Channel, respectively. The elevated bacterial indicator densities are causing impairment of the REC-1, LREC-1, and REC-2 designated beneficial uses of Ballona Creek and Ballona Estuary. The excess sediment and invasive exotic vegetation is causing impairments to the EST, MIGR, RARE, REC-1, REC-2, SPWN, WET, and WILD designated beneficial uses of the Ballona Creek Wetlands.

TMDLs have been adopted by the Regional Water Board for trash, metals and toxic pollutants in Ballona Creek and Estuary, and bacteria. USEPA established a TMDL for

Sediment and Invasive Exotic Vegetation in the Ballona Creek Wetlands. Stormwater discharge is the major source of trash in Ballona Creek. Urban storm water has been recognized as a substantial source of metals. Storm drains convey a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in estuarine sediments where they may pose a risk of toxicity. Similar to metals, the majority of organic constituents in storm water are associated with particulates. There is toxicity associated with suspended solids in urban runoff discharged from Ballona Creek, as well as with the receiving water sediments. This toxicity is likely attributed to metals and organics associated with the suspended sediments. The major contributors of flows and associated bacteria loading to Ballona Creek and Ballona Estuary are storm water and non-storm water discharges from the MS4. The potential for sediment loading into the Ballona Creek Wetlands is associated with the flow coming down the watershed. Sediment moves from the watershed through the MS4 as a result of storms, wind and land based runoff. Major storms usually take place in winter and are responsible for major movements of sediment down the watershed into Ballona Creek and Ballona Wetland towards the coastal waterbodies. These activities can lead to discharge of large quantities of sediments in runoff.

The Marina del Rey subwatershed is approximately 2.9 square miles located adjacent to the mouth of Ballona Creek. The Marina del Rey subwatershed is highly developed at 80%, the remaining 20% is split between water and open/recreation land uses.

Marina del Rey is on the 2010 CWA Section 303(d) List for bacteria and sediment concentrations of copper, lead, zinc, DDT, PCBs, chlordanes, and sediment toxicity. The elevated bacterial indicator densities are causing impairment of the REC-1 and REC-2 designated beneficial uses at Marina del Rey Harbor Mothers' Beach and back basins. The toxic pollutants are causing impairments to the REC-1, MAR, WILD, COMM, and SHELL designated beneficial uses of the Marina del Rey Harbor.

TMDLs have been adopted by the Regional Water Board for bacteria and toxic pollutants. Non-storm water and storm water discharges from the MS4 are the primary sources of elevated bacterial indicator densities to Marina del Rey Harbor Mothers' Beach and back basins during dry and wet weather. Urban storm water has been recognized as a substantial source of metals. Numerous researchers have documented that the most prevalent metals in urban storm water (i.e., copper, lead, and zinc) are consistently associated with suspended solids. Because metals are typically associated with fine particles in storm water runoff, they have the potential to accumulate in marine sediments where they may pose a risk of toxicity. Similar to metals, the majority of organic constituents in storm water are associated with particulates.

On June 7, 2012, the Regional Water Board adopted revised Basin Plan Amendments (BPAs) for the Santa Monica Bay Beaches Bacteria TMDL; the Malibu Creek and Lagoon Bacteria TMDL; the Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL; and the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL. In the revised TMDLs the method of calculating the geometric mean was changed from the existing methods in the current Bacteria TMDLs and the

allowable winter dry weather exceedance days was redefined. Although, the revised BPAs are not in effect until approved by the State Board, OAL and USEPA these changes have been included in the Permit and will become effective upon the effective dates of the revised Bacteria TMDLs.

Dominguez Channel and Greater Harbor Waters Watershed Management Area.

The Dominguez Channel and Los Angeles/Long Beach Harbors Watershed Management Area (Dominguez WMA) is located in the southern portion of the Los Angeles Basin (Figure B-3). Los Angeles Harbor is 7,500 acres and the Long Beach Harbor is 7,600 acres; together they have an open water area of approximately 8,128 acres. The 15 mile-long Dominguez Channel drains a densely urbanized area to Inner Los Angeles Harbor. Near the end of the 19th century and during the beginning of the next century, channels were dredged, marshes were filled, wharves were constructed, the Los Angeles River was diverted, and breakwaters were constructed in order to allow deep draft ships to be directly offloaded at the docks. The Dominguez Slough was completely channelized and became the drainage endpoint for runoff from a highly industrialized area. Eventually, the greater San Pedro Bay was enclosed by two more breakwaters and deep entrance channels were dredged to allow for entry of ships.

Various reaches of the Dominguez WMA are on the 2010 CWA Section 303(d) List of impaired water bodies for metals, DDT, PCBs, PAHs, historic pesticides, coliform, and sediment toxicity. The elevated bacteria indicator densities is causing impairments to the SHELL, REC-1, and REC-2 designated beneficial uses of Los Angeles Harbor. The elevated levels of metals and organics are causing impairments to beneficial uses designated in these waters to protect aquatic life, including MAR and RARE. In addition, the elevated levels are causing impairments in the estuaries, which are designated with SPWN, MIGR, and WILD beneficial uses. Dominguez Channel also has an existing designated use of WARM and the Los Angeles River Estuary has the designated use of WET. Beneficial uses associated with human use of these waters that are impaired due to the elevated concentrations of metals and organics include REC-1, REC-2, IND, NAV, COMM, and SHELL.

TMDLs have been adopted by the Regional Water Board for toxic pollutants in the Dominguez WMA and for bacteria at Inner Cabrillo Beach and the Main Ship Channel. Discharges from the MS4 are a source of elevated bacterial indicator densities to Inner Cabrillo Beach and the Main Ship Channel during dry and wet weather. The major point sources of organochlorine pesticides, PCBs, and metals into Dominguez Channel are storm water and non-storm water discharges. The contaminated sediments are a reservoir of historically deposited pollutants. Storm water runoff from manufacturing, military facilities, fish processing plants, wastewater treatment plants, oil production facilities, and shipbuilding or repair yards in both Ports have discharged untreated or partially treated wastes into Harbor waters. Current activities also contribute pollutants to Harbor sediments, in particular, storm water runoff.

On June 7, 2012, the Regional Water Board adopted a revised Basin Plan Amendment (BPA) for the Los Angeles Harbor Inner Cabrillo Beach and Main Ship Channel Bacteria TMDL. In the revised TMDL the method of calculating the geometric mean was changed from the existing methods in the current Bacteria TMDL and the allowable

winter dry weather exceedance days was redefined. Although, the revised BPA is not in effect until approved by the State Board, OAL and USEPA these changes have been included in the Permit and will become effective upon the effective date of the revised Bacteria TMDL.

Machado Lake is listed for trash, nutrients, PCBs and historic pesticides. Trash, nutrients and toxic pollutants are causing impairments to the WARM, WET, RARE, WILD, REC-1 and REC-2 designated beneficial uses of Machado Lake. TMDLs have been adopted by the Regional Water Board for trash, nutrients, PCBs and pesticides for Machado Lake. The point sources of trash and nutrients into Machado Lake are storm water and non-storm water discharges from the MS4. Storm water discharges occur through the following sub-drainage systems: Drain 553, Wilmington Drain, Project 77/510, and Walteria Lake.

Los Angeles River Watershed Management Area. The Los Angeles River Watershed Management Area (LAR WMA) drains a watershed of 824 square miles (Figure B-4). The LAR WMA is one of the largest in the Region and is also one of the most diverse in terms of land use patterns. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters, which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The remainder of the watershed is highly developed. The river flows through the San Fernando Valley past heavily developed residential and commercial areas. From the Arroyo Seco, north of downtown Los Angeles, to the confluence with the Rio Hondo, the river flows through industrial and commercial areas and is bordered by rail yards, freeways, and major commercial and government buildings. From the Rio Hondo to the Pacific Ocean, the river flows through industrial, residential, and commercial areas, including major refineries and petroleum products storage facilities, major freeways, rail lines, and rail yards serving the Ports of Los Angeles and Long Beach. Due to major flood events at the beginning of the century, by the 1950s most of the LA River was lined with concrete. In the San Fernando Valley, there is a section of the river with a soft bottom at the Sepulveda Flood Control Basin. At the eastern end of the San Fernando Valley, the river bends around the Hollywood Hills and flows through Griffith and Elysian Parks, in an area known as the Glendale Narrows. Since the water table was too high to allow laying of concrete, the river in this area has a rocky, unlined bottom with concrete-lined or rip-rap sides. South of the Glendale Narrows, the river is contained in a concrete-lined channel down to Willow Street in Long Beach. The LA River tidal prism/estuary begins in Long Beach at Willow Street and runs approximately three miles before joining with Queensway Bay. The channel has a soft bottom in this reach with concrete-lined sides. A number of lakes are also part of the LAR WMA, including Legg Lake, Peck Road Park, Belvedere Park, Hollenbeck Park, Lincoln Park, and Echo Park Lakes as well as Lake Calabasas.

Various reaches and lakes within the LAR WMA are on the 2010 CWA Section 303(d) List of impaired water bodies for trash, nitrogen compounds and related effects (ammonia, nitrate, nitrite, algae, pH, odor, and scum), metals (copper, cadmium, lead, zinc, aluminum and selenium), bacteria, and historic pesticides. Beneficial uses impaired by trash in the Los Angeles River are REC-1, REC-2, WARM, WILD, EST, MAR, RARE, MIGR, SPWN, COMM, WET and COLD. The excess nitrogen compounds

are causing impairments to the WARM and WILD designated beneficial uses of Los Angeles River. Excess metals are causing impairments to the WILD, RARE, WARM, WET, and GWR designated beneficial uses of the Los Angeles River and its tributaries. Elevated indicator bacteria densities are causing impairments to the REC-1 and REC-2 designated beneficial uses of Los Angeles River and the Los Angeles River Estuary. Beneficial uses impaired by trash in Legg Lake include REC1, REC2, and WILD.

TMDLs have been adopted by the Regional Water Board for trash, nitrogen, metals, and bacteria in the Los Angeles River. USEPA established TMDLs for bacteria in the Los Angeles River Estuary and for various pollutants in Los Angeles Area Lakes. The Los Angeles River Watershed Trash TMDL identifies discharges from the municipal separate storm sewer system as the principal source of trash to the Los Angeles River and its tributaries. The Regional Water Board determined that urban runoff and storm water may contribute to nitrate loads. Discharges from the MS4 contribute a large percentage of the metals loadings during dry weather because although non-storm water flows from the MS4 are typically low relative to other discharges during dry weather, concentrations of metals in urban runoff may be quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow. On an annual basis, storm water discharges from the MS4 contribute about 40% of the cadmium loading, 80% of the copper loading, 95% of the lead loading, and 90% of the zinc loading. Discharges from the MS4 are the principal source of bacteria to the Los Angeles River, its tributaries and the Los Angeles River Estuary in both dry weather and wet weather.

A TMDL has been adopted by the Regional Water Board for trash in Legg Lake. The Legg Lake Trash TMDL identifies MS4 storm drains as the principal point source for trash discharged to Legg Lake.

The Los Angeles Water Board identified 10 lakes in the Los Angeles region as impaired by algae, ammonia, chlordane, copper, DDT, eutrophication, lead, organic enrichment/low dissolved oxygen, mercury, odor, PCBs, pH and/or trash and placed them on California's 303(d) list of impaired waters. For several lakes, USEPA concluded that ammonia, pH, copper and/or lead are currently meeting water quality standards and TMDLs are not required at this time. In other lakes, recent chlordane and dieldrin data indicate additional impairment. Associated with this WMA are: Lake Calabazas TMDLs for total nitrogen and total phosphorus; Echo Park Lake TMDLs for nutrients (total nitrogen and total phosphorus), total chlordane, dieldrin, total PCBs, and trash; Legg Lake TMDLs for total nitrogen and total phosphorus; and Peck Road Park Lake TMDLs for nutrients (total nitrogen and total phosphorus), total chlordane, total DDT, dieldrin, total PCBs, and trash.

In Lake Calabazas beneficial uses impaired by elevated levels of nutrients include REC1, REC2, and WARM. At high enough concentrations, WILD and MUN uses could also become impaired. MS4 discharges from the surrounding watershed to Lake Calabazas during dry and wet weather contributes 97.7 percent of the total phosphorus load and 74.4 percent of the total nitrogen load.

In Echo Park Lake beneficial uses impaired by elevated levels of nutrients, PCBs, chlordane, and dieldrin are currently impairing the REC1, REC2, and WARM uses. At high enough concentrations WILD and MUN uses could also become impaired. Beneficial uses impaired by trash in Echo Park Lake include REC1, REC2, WARM and WILD. The Echo Park Lake nutrient TMDL found that MS4 discharges from the northern and southern watershed to Echo Lake contribute 29 percent of the total phosphorus load and 28 percent of the total nitrogen load during wet weather with dry weather loading data unavailable due to the majority of runoff being diverted downstream of the lake. PCBs, chlordane, and dieldrin in Echo Park Lake are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Storm water loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake. MS4 discharges via storm drains are the principal point source for trash in Echo Park Lake.

In Legg Lake beneficial uses impaired due to elevated nutrient levels include REC1, REC2, WARM and COLD. At high enough concentrations the WILD, MUN, and GWR uses could also become impaired. The Legg Lake nutrient TMDL found that MS4 discharges from the surrounding watershed to Legg Lake during dry and wet weather contributes 69.1 percent of the total phosphorus load and 36 percent of the total nitrogen load.

In Peck Road Park Lake beneficial uses impaired by elevated levels of nutrients, PCBs, chlordane, DDT, dieldrin, and trash are currently impairing the REC1, REC2, and WARM uses. At high enough concentrations WILD and MUN uses could also become impaired. The Peck Road Park Lake nutrient TMDL found that MS4 discharges from the surrounding watershed including both wet and dry weather contribute 80.2 percent of the total phosphorus load and 55.5 percent of the total nitrogen load. PCBs, chlordane, DDT, and dieldrin in Peck Road Park Lake loads are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Stormwater loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake. MS4 discharges via storm drains are the principal point source for trash in Peck Road Park Lake.

San Gabriel River Watershed Management Area. The San Gabriel River Watershed (SGR WMA) receives drainage from a 689-square mile area of eastern Los Angeles County (Figure B-5). The main channel of the San Gabriel River is approximately 58 miles long. Its headwaters originate in the San Gabriel Mountains with the East, West, and North Forks. The river empties to the Pacific Ocean at the Los Angeles and Orange Counties boundary in Long Beach. The main tributaries of the river are Big and Little Dalton Wash, San Dimas Wash, Walnut Creek, San Jose Creek, Fullerton Creek, and Coyote Creek. Part of the Coyote Creek subwatershed is in Orange County and is under the authority of the Santa Ana Water Board. A number of lakes and reservoirs

are also part of the SGR WMA, including Puddingstone Reservoir. Land use in the watershed is diverse and ranges from predominantly open space in the upper watershed to urban land uses in the middle and lower parts of the watershed.

Various reaches of the SGR WMA are on the 2010 CWA Section 303(d) List of impaired water bodies due to trash, nitrogen, phosphorus, and metals (copper, lead, selenium, and zinc). USEPA established TMDLs for metals and selenium in the San Gabriel River and various pollutants in Los Angeles Area Lakes. Segments of the San Gabriel River and its tributaries exceed water quality objectives for copper, lead, selenium, and zinc. Metals loadings to San Gabriel River are causing impairments of the WILD, WARM, COLD, RARE, EST, MAR, MIGR, SPWN, WET, MUN, IND, AGR, GWR, and PROC beneficial uses. The San Gabriel River metals and selenium TMDL found that the MS4 contributes a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow.

The Regional Water Board identified 10 lakes in the Los Angeles Region as impaired by algae, ammonia, chlordane, copper, DDT, eutrophication, lead, organic enrichment/low dissolved oxygen, mercury, odor, PCBs, pH and/or trash and placed them on California's 303(d) list of impaired waters. For several lakes, USEPA concluded that ammonia, pH, copper and/or lead are currently meeting water quality standards and TMDLs are not required at this time. In other lakes, recent chlordane and dieldrin data indicate additional impairment. Associated with this WMA is: Puddingstone Reservoir TMDLs for total nitrogen, total phosphorus, total chlordane, total DDT, total PCBs, total mercury, and dieldrin.

In Puddingstone Reservoir beneficial uses impaired due to elevated nutrient, mercury, PCBs, chlordane, dieldrin, and DDT levels include REC1, REC2, WARM, and COLD. At high enough concentrations the WILD, MUN, GWR, and RARE uses could also become impaired. The Puddingstone Reservoir nutrients TMDL found that MS4 discharges from the surrounding watershed to Puddingstone Reservoir during dry and wet weather contributes 79.8 percent of the total phosphorus and 74.1 percent of the total nitrogen load. Mercury, PCBs, chlordane, dieldrin, and DDT in Puddingstone Reservoir loads are primarily due to historical loading and storage within the lake sediments, with some ongoing contribution by watershed wet weather loads. Dry weather loading is assumed to be negligible because hydrophobic contaminants primarily move with particulate matter that is mobilized by higher flows. Stormwater loads from the watershed were estimated based on simulated sediment load and observed pollutant concentrations on sediment near inflows to the lake.

Los Cerritos Channel and Alamitos Bay Watershed Management Area. The Los Cerritos Channel is concrete-lined above the tidal prism and drains a small but densely urbanized area of east Long Beach (Figure B-6). The channel's tidal prism starts at Anaheim Road and connects with Alamitos Bay through the Marine Stadium; the wetlands connect to the Channel a short distance from the lower end of the Channel. Alamitos Bay is composed of the Marine Stadium, a recreation facility built in 1932; Long Beach Marina; a variety of public and private berths; and the Bay proper. A small

bathing lagoon, Colorado Lagoon located entirely in Long Beach, has a tidal connection with the Bay. The majority of land use in this WMA is high density residential.

Los Cerritos Channel is on the 2010 CWA Section 303(d) List of impaired water bodies for metals (copper, zinc, and lead). Beneficial uses impaired by metals in the Los Cerritos Channel include WILD, REC2 and WARM. USEPA established a TMDL for various metals in Los Cerritos Channel. The TMDL for metals in Los Cerritos Channel found that the MS4 contributes a large percentage of the metals loadings during dry weather because although their flows are typically low, concentrations of metals in urban runoff may be quite high. During wet weather, most of the metals loadings are in the particulate form and are associated with wet-weather storm water flow.

Middle Santa Ana River Watershed Management Area. The Middle Santa Ana River Watershed Management Area (MSAR WMA) covers approximately 488 square miles (mi²) and lies mostly in San Bernardino and Riverside Counties; however, a small part of Los Angeles County is also included. The area of Los Angeles County, which lays in the MSAR WMA, includes portions of the Cities of Pomona (12.3 mi²), Claremont (8.4 mi²), and Diamond Bar (0.7 mi²) and unincorporated Los Angeles County (12.3 mi²) (Figure B-7). The MSAR WMA is comprised of three subwatersheds. The subwatershed that includes portions of Pomona and Claremont is the Chino Basin Subwatershed. Surface drainage from Pomona and Claremont is generally southward toward San Antonio Creek, which is tributary to Chino Creek, which feeds into the Prado Flood Control Basin.

Various reaches of the MSAR WMA, including Chino Creek, are listed on 2010 CWA Section 303(d) List for bacteria. Elevated bacterial indicator densities are causing impairments of the REC-1 and REC-2 designated beneficial for the Santa Ana River Reach 3; Chino Creek Reaches 1 and 2; Mill Creek (Prado Area); Cucamonga Creek Reach 1; and Prado Park Lake.

The Santa Ana Water Board adopted TMDLs for bacteria for the Middle Santa Ana River Watershed. The Basin Plan amendment incorporating the Middle Santa Ana River Watershed Bacterial Indicator TMDLs was approved by the Santa Ana Water Board on August 26, 2005 (Resolution No. R8-2005-0001), by the State Water Board on May 15, 2006, by the Office of Administrative Law on September 1, 2006, and by the USEPA on May 16, 2007. The TMDL was effective on May 16, 2007. The Santa Ana Water Board concluded based upon data and information collected in 1993, 1996-1998 and in 2002-2004, that urban runoff from the MS4 is a significant source of bacterial indicators year round to the Middle Santa Ana River and its tributaries (Rice, 2005). The TMDL specifies both dry weather and wet weather WLAs, with distinct implementation schedules. Compliance with the summer dry (April 1st through October 31st) WLAs is to be achieved as soon as possible, but no later than December 31, 2015. In recognition of the difficulties associated with the control of storm water discharges, compliance with the winter wet (November 1st through March 31st) WLAs is to be achieved as soon as possible, but no later than December 31, 2025. The MS4 permit allows for discharges of bacteria from the MS4s of the Cities of Claremont and Pomona to be regulated to ensure compliance with the wasteload allocations set forth in the Middle Santa Ana Bacterial Indicator TMDL and with the corresponding receiving water limitations by the

terms of an NPDES permit issued by the Santa Ana Regional Water Quality Control Board that is applicable to such MS4 discharges. The NPDES permit must be issued pursuant to a designation agreement between the Los Angeles and Santa Ana Regional Boards under Water Code § 13228. In the absence of such an NPDES permit, the MS4 permit includes specific provisions in Attachment R that are consistent with the assumptions and requirements of the wasteload allocations applicable to MS4 discharges as set forth in the Middle Santa Ana Bacterial Indicator TMDL.

Calleguas Creek Watershed Management Area. Calleguas Creek and its tributaries drain a watershed area of 343 square miles (sq. miles) in southern Ventura County and a small portion of western Los Angeles County. Approximately, 4.16 sq. miles of Los Angeles County is part of the Calleguas Creek Watershed. The land use of the 4.15 sq. miles is open space and recreation. The land use of the remaining 0.01 sq. miles is divided between low density residential, industrial, and agriculture (Southern California Association of Governments, 2008). Six TMDLs have been adopted and are in effect for the Calleguas Creek Watershed. None of the TMDLs assign waste load allocations to the Los Angeles County Flood Control District, County of Los Angeles or any incorporated city within Los Angeles County. Therefore, no water quality based effluent limitations were incorporated in this Order for TMDLs in the Calleguas Creek Watershed.

Manner of Incorporation of TMDL WLAs. The description of the permit conditions and the basis for the manner for incorporating requirements to implement the TMDLs' WLAs is discussed below.

WLAs may be expressed in different ways in a TMDL. In general, a WLA is expressed as a discharge condition that must be achieved in order to ensure that water quality standards are attained in the receiving water. The discharge condition may be expressed in terms of mass or concentration of a pollutant. However, in some cases, a WLA may be expressed as a receiving water condition such as an allowable number of exceedance days of the bacteria objectives.

In this Order, in most cases, TMDL WLAs have been translated into numeric WQBELs and, where consistent with the expression of the WLA in the TMDL, also as receiving water limitations. For each TMDL included in this Order, the WLA were translated into numeric WQBELs, which were based on the WLAs in terms of the numeric value and averaging period. For those TMDLs where the averaging period was not specific for the WLA, the averaging period was based on the averaging period for the numeric target.

For the bacteria TMDLs, where the WLA are expressed as an allowable number of exceedance days in the water body, the WLAs were translated into receiving water limitations. In addition to the receiving water limitations, WQBELs were established based on the bacteria water quality objectives. In the bacteria TMDLs, the numeric targets are based on the multi-part bacteriological water quality objectives; therefore, this approach is consistent with the assumptions of the bacteria TMDLs.

In the Ballona Creek Trash TMDL, the default baseline WLA for the MS4 Permittees is equal to 640 gallons (86 cubic feet) of uncompressed trash per square mile per year.

No differentiation is applied for different land uses in the default baseline WLA. The default baseline WLAs for the Permittees has been refined based on results from the baseline monitoring conducted by the City of Los Angeles. The City of Los Angeles provided trash generation flux data for five land uses: commercial, industrial, high density residential, low density residential and open space and recreation. The Baseline WLA for any single city is the sum of the products of each land use area multiplied by the WLA for the land use area, as shown below:

$$\text{WLA} = \sum \text{for each city (area by land uses} \times \text{allocations for this land use)}$$

The baseline was calculated using the City of Los Angeles trash generation flux data provided for the 2003-04 and 2004-05 storm years averaged for pounds of trash per acre and the 2003-04 storm year for gallons of trash per acre. The urban portion of the Ballona Creek watershed was divided into twelve types of land uses for every city and unincorporated area in the watershed. The land use categories are: (1) high density residential, (2) low density residential, (3) commercial and services, (4) industrial, (5) public facilities, (6) educational institutions, (7) military installations, (8) transportation, (9) mixed urban, (10) open space and recreation, (11) agriculture, and (12) water. The land use data used in the calculation is based on the Southern California Association of Governments 2005 data.

1. Compliance Determination

For TMDLs that establish individual mass-based WLAs or a concentration-based WLA such as the Trash TMDLs, Nitrogen TMDLs, and Chloride TMDL, this Order requires Permittees to demonstrate compliance with their assigned WQBELs individually.

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

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

Additionally, this Order allows a Permittee to clarify and distinguish their individual contributions and demonstrate that its MS4 discharge did not cause or contribute to exceedances of applicable WQBELs and/or receiving water limitations. In this case, though the Permittee's discharge may commingle with that of other Permittees, the Permittee would not be held jointly responsible for the exceedance of the WQBELs or receiving water limitation.

Individual co-permittees who demonstrate compliance with the WQBELs will not be held responsible for violations by non-compliant co-permittees.

Demonstrating Compliance with Interim Limitations. This Order provides Permittees with several means of demonstrating compliance with applicable interim WQBELs and interim receiving water limitations for the pollutant(s) associated with a specific TMDL. These include any of the following:

- a. There are no violations of the interim WQBELs for the pollutant(s) associated with a specific TMDL at the Permittee's applicable MS4 outfall(s) or access points,⁴² including an outfall to the receiving water that collects discharges from multiple Permittees' jurisdictions;
- b. There are no exceedances of the applicable receiving water limitation for the pollutant(s) associated with a specific TMDL in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
- c. There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the WQBEL and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
- d. The Permittee has submitted and is fully implementing an approved Watershed Management Program or Enhanced Watershed Management Program (EWMP), which includes analyses that provide the Regional Water Board with reasonable assurance that the watershed control measures proposed will achieve the applicable WQBELs and receiving water limitations consistent with relevant compliance schedules.

Demonstrating Compliance with Final Limitations. This Order provides Permittees with three general means of demonstrating compliance with an applicable *final* WQBEL and *final* receiving water limitation for the pollutant(s) associated with a specific TMDL.

These include any of the following:

- a. There are no violations of the final WQBEL for the specific pollutant at the Permittee's applicable MS4 outfall(s)⁴³;

⁴² An access point may include a manhole or other point of access to the MS4 at the Permittee's jurisdictional boundary.

⁴³ Ibid.

- b. There are no exceedances of applicable receiving water limitation for the specific pollutant in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
- c. There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the WQBEL and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
- d. In drainage areas where Permittees are implementing an EWMP, (i) all non-storm water and (ii) all storm water runoff up to and including the volume equivalent to the 85th percentile, 24-hour event is retained for the drainage area tributary to the applicable receiving water. This compliance mechanism does not apply to final trash WQBELs.

This Order provides the opportunity for Permittees to demonstrate compliance with *interim* effluent limitations through development and implementation of a Watershed Management Program or EWMP, where Permittees have provided a reasonable demonstration through quantitative analysis (i.e., modeling or other approach) that the control measures/BMPs to be implemented will achieve the interim effluent limitations in accordance with the schedule provided in this Order. It is premature to consider application of this action based compliance demonstration option to the final effluent limitations and final receiving water limitations that have deadlines outside the term of this Order. More data is needed to validate assumptions and model results regarding the linkage among BMP implementation, the quality of MS4 discharges, and receiving water quality.

During the term of this Order, there are very few deadlines for compliance with final effluent limitations applicable to storm water, or final receiving water limitations applicable during wet weather conditions. Most deadlines during the term of this Order are for interim effluent limitations applicable to storm water, or for final effluent limitations applicable to non-storm water discharges and final dry weather receiving water limitations.

There are only five State-adopted TMDLs for which the compliance deadlines for final water quality-based effluent limitations applicable to storm water occur during the term of this Order. These include: Santa Clara River Chloride TMDL, Santa Clara River Nitrogen TMDL, Los Angeles River Nitrogen TMDL, Marina del Rey Harbor Toxics TMDL, and LA Harbor Bacteria TMDL. In most of these five TMDLs, compliance with the final water quality-based effluent limitations assigned to MS4 discharges is expected to be achieved (e.g., Santa Clara River Chloride TMDL⁴⁴), or a mechanism is in place to potentially allow additional time to come into compliance (e.g. reconsideration of the Marina del Rey Harbor Toxics TMDL implementation schedule).

The Regional Water Board will evaluate the effectiveness of this action-based compliance determination approach in ensuring that interim effluent limitations for

⁴⁴ Data from land use monitoring conducted under the LA County MS4 Permit from 1994-99 indicate chloride concentrations ranging from 3.2-48 mg/L, while more recent data from the mass emissions station in the Santa Clara River (S29) indicate concentrations ranging from 116-126 mg/l in dry weather, and 25.1-96.3 mg/l in wet weather, suggesting that storm water has a diluting effect on chloride concentrations in the receiving water.

storm water are achieved during this permit term. If this approach is effective in achieving compliance with interim effluent limitations for storm water during this permit term, the Regional Water Board will consider during the next permit cycle whether it would be appropriate to allow a similar approach for demonstrating compliance with final water quality-based effluent limitations applicable to storm water. The Order includes a specific provision to support reopening the permit to include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's review of relevant research, including but not limited to data and information provided by Permittees, on storm water quality and control technologies

2. Compliance Schedules for Achieving TMDL Requirements

A Regional Water Board may include a compliance schedule in an NPDES permit when the state's water quality standards or regulations include a provision that authorizes such schedules in NPDES permits.⁴⁵ In California, TMDL implementation plans⁴⁶ are typically adopted through Basin Plan Amendments. The TMDL implementation plan, which is part of the Basin Plan Amendment, becomes a regulation upon approval by the State of California Office of Administrative Law (OAL).⁴⁷ Pursuant to California Water Code sections 13240 and 13242, TMDL implementation plans adopted by the Regional Water Board "shall include ... a time schedule for the actions to be taken [for achieving water quality objectives]," which allows for compliance schedules in future permits. This Basin Plan Amendment becomes the applicable regulation that authorizes an MS4 permit to include a compliance schedule to achieve effluent limitations derived from wasteload allocations.

Where a TMDL implementation schedule has been established through a Basin Plan Amendment, it is incorporated into this Order as a compliance schedule to achieve interim and final WQBELs and corresponding receiving water limitations, in accordance with 40 CFR section 122.47. WQBELs must be consistent with the assumptions and requirements of any WLA, which includes applicable implementation schedules.⁴⁸ California Water Code sections 13263 and 13377 state that waste discharge requirements must implement the Basin Plan.⁴⁹ Therefore,

⁴⁵ See *In re Star-Kist Caribe, Inc.*, (Apr. 16, 1990) 3 E.A.D. 172, 175, modification denied, 4 E.A.D. 33, 34 (EAB 1992).

⁴⁶ TMDL implementation plans consist of those measures, along with a schedule for their implementation, that the Water Boards determine are necessary to correct an impairment. The NPDES implementation measures are thus required by sections 303(d) and 402(p)(3)(B)(iii) of the CWA. State law also requires the Water Boards to implement basin plan requirements. (See Wat. Code §§ 13263, 13377; *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 189.)

⁴⁷ See Gov. Code, § 11353, subd. (b). Every amendment to a Basin Plan, such as a TMDL and its implementation plan, requires approval by the State Water Board and OAL. When the TMDL and implementation plan is approved by OAL, it becomes a state regulation.

⁴⁸ See 40 C.F.R. § 122.44(d)(1)(vii)(B).

⁴⁹ Cal. Wat. Code, § 13263, subd. (a) ("requirements shall implement any relevant water quality control plans that have been adopted"); Cal. Wat. Code, § 13377 ("the state board or the regional boards shall . . . issue waste discharge requirements and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the [CWA], thereto, together with any more stringent effluent standards or limitations necessary to implement waste quality control plans, or for

compliance schedules for attaining WQBELs derived from WLAs must be based on a state-adopted TMDL implementation plan and cannot exceed the maximum time that the implementation plan allows.

In determining the compliance schedules, the Regional Water Board considered numerous factors to ensure that the schedules are as short as possible. Factors examined include, but are not limited to, the size and complexity of the watershed; the pollutants being addressed; the number of responsible agencies involved; time for Co-Permittees to negotiate memorandum of agreements; development of water quality management plans; identification of funding sources; determination of an implementation strategy based on the recommendations of water quality management plans and/or special studies; and time for the implementation strategies to yield measurable results. Compliance schedules may be altered based on the monitoring and reporting results as set forth in the individual TMDLs.

In many ways, the incorporation of interim and final WQBELs and associated compliance schedules is consistent with the iterative process of implementing BMPs that has been employed in the previous Los Angeles County MS4 Permits in that progress toward compliance with the final effluent limitations may occur over the course of many years. However, because the waterbodies in Los Angeles County are impaired due to MS4 discharges, it is necessary to establish more specific provisions in order to: (i) ensure measurable reductions in pollutant discharges from the MS4, resulting in progressive water quality improvements during the iterative process, and (ii) establish a final date for completing implementation of BMPs and, ultimately, achieving effluent limitations and water quality standards.

The compliance schedules established in this Order are consistent with the implementation plans established in the individual TMDLs. The compliance dates for meeting the final WQBELs and receiving water limitations for each TMDL are listed below in Table F-7.

the protection of beneficial uses, or to prevent nuisance”); see also, *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 189.

Table F-7. Compliance Schedule for final compliance dates.

	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
TOTAL MAXIMUM DAILY LOADS (TMDL)				
Santa Clara River Nitrogen Compounds TMDL	March 23, 2004			
Upper Santa Clara River Chloride TMDL	April 6, 2010			
Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (Lake Elizabeth only)		March 6, 2016		
Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL				
Dry Weather				March 21, 2023
Wet Weather				March 21, 2029
Santa Monica Bay Beaches Bacteria TMDL				
Summer Dry Weather	July 15, 2006			
Winter Dry Weather	July 15, 2009			
Wet Weather			July 15, 2021	
Santa Monica Bay Nearshore and Offshore Debris TMDL			March 20, 2020	
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)		March 26, 2012		
Malibu Creek and Lagoon Bacteria TMDL				
Summer Dry Weather	January 24, 2009			
Winter Dry Weather	January 24, 2012			
Wet Weather			July 15, 2021	
Malibu Creek Watershed Trash TMDL		July 7, 2017		
Malibu Creek Watershed Nutrients TMDL (USEPA established)	March 21, 2003			
Ballona Creek Trash TMDL		September 30, 2015		
Ballona Creek Estuary Toxic Pollutants TMDL			January 11, 2021	
Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL				
Dry Weather		April 27, 2013		
Wet Weather			July 15, 2021	
Ballona Creek Metals TMDL				

MS4 Discharges within the
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TOTAL MAXIMUM DAILY LOADS (TMDL)	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
Dry Weather		January 11, 2016		
Wet Weather			January 11, 2021	
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)		March 26, 2012		
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL				
Dry Weather	March 18, 2007			
Wet Weather			July 15, 2021	
Marina del Rey Harbor Toxic Pollutants TMDL		March 22, 2016	March 22, 2021*	
Los Angeles Harbor Bacteria TMDL	March 10, 2010			
Machado Lake Trash TMDL		March 6, 2016		
Machado Lake Nutrient TMDL			September 11, 2018	
Machado Lake Pesticides and PCBs TMDL			September 30, 2019	
Dominguez Channel and Greater LA and LB Harbor Waters Toxic Pollutants TMDL				March 23, 2032
Los Angeles River Watershed Trash TMDL		September 30, 2016		
Los Angeles River Nitrogen Compounds and Related Effects TMDL	March 23, 2004			
Los Angeles River and Tributaries Metals TMDL				
Dry Weather				January 11, 2024
Wet Weather				January 11, 2028
Los Angeles River Watershed Bacteria TMDL				
Dry Weather (Compliance dates range from 10 to 25 years)			March 23, 2022	March 23, 2037
Wet Weather				March 23, 2037
Legg Lake Trash TMDL		March 6, 2016		
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (USEPA established)		March 26, 2012		

MS4 Discharges within the
Coastal Watersheds of Los Angeles County

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TOTAL MAXIMUM DAILY LOADS (TMDL)	Final Compliance date has Passed	Final Compliance date within 5 years (2012-2017)	Final Compliance date between 5 and 10 years (2018-2022)	Final Compliance date after 10 years (2023)
Los Angeles Area Lakes TMDLs (USEPA established)		March 26, 2012		
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	March 26, 2007			
Los Cerritos Channel Metals TMDL (USEPA established)	March 17, 2010			
Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL			July 28, 2018	
Middle Santa Ana River Watershed Bacterial Indicator TMDLs				
Dry Weather		December 31, 2015		
Wet Weather				December 31, 2025

* If an Integrated Water Resources Approach is approved and implemented then Permittees have an extended compliance deadline.

3. State Adopted TMDLs with Past Final Compliance Deadlines

In accordance with federal regulations, this Order includes WQBELs necessary to achieve applicable wasteload allocations assigned to MS4 discharges. In some cases, the deadline specified in the TMDL implementation plan for achieving the final wasteload allocation has passed. (See Table F-8) This Order requires that Permittees comply immediately with WQBELs and/or receiving water limitations for which final compliance deadlines have passed.

Table F-8. State-Adopted TMDLs with Past Final Implementation Deadlines

TOTAL MAXIMUM DAILY LOADS (TMDL)	Final Compliance date has Passed
Santa Clara River Nitrogen Compounds TMDL	March 23, 2004
Upper Santa Clara River Chloride TMDL	April 6, 2010
Santa Monica Bay Beaches Bacteria TMDL <i>Summer Dry Weather only</i>	July 15, 2006
Santa Monica Bay Beaches Bacteria TMDL <i>Winter Dry Weather only</i>	July 15, 2009
Malibu Creek and Lagoon Bacteria TMDL <i>Summer Dry Weather only</i>	January 24, 2009
Malibu Creek and Lagoon Bacteria TMDL <i>Winter Dry Weather only</i>	January 24, 2012
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL <i>Dry Weather Year-round only</i>	March 18, 2007
Los Angeles Harbor Bacteria TMDL	March 10, 2010
Los Angeles River Nitrogen Compounds and Related Effects TMDL	March 23, 2004

Where a Permittee determines that its MS4 discharge may not meet the final WQBELs for the TMDLs in Table F-8 upon adoption of this Order, the Permittee may request a time schedule order (TSO) from the Regional Water Board. TSOs are issued pursuant to California Water Code section 13300, whenever a Water Board "finds that a discharge of waste is taking place or threatening to take place that violates or will violate [Regional Water Board] requirements." Permittees may individually request a TSO, or may jointly request a TSO with all Permittees subject to the WQBELs and/or receiving water limitations. Permittees must request a TSO to achieve WQBELs for the TMDLs in Table F-8 no later than 45 days after the date this Order is adopted.

In the request, the Permittee(s) must include, at a minimum, the following:

- a. Location specific data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
- b. A detailed description and chronology of structural controls and source control efforts, including location(s) of implementation, since the effective date of the TMDL, to reduce the pollutant load in the MS4 discharges to the receiving waters subject to the TMDL;
- c. A list of discharge locations for which additional time is needed to achieve the water quality based effluent limitations and/or receiving water limitations;
- d. Justification of the need for additional time to achieve the water quality-based effluent limitations and/or receiving water limitations for each location identified in Part VI.E.3.c, above;

- e. A detailed time schedule of specific actions the Permittee will take in order to achieve the water quality-based effluent limitations and/or receiving water limitations at each location identified in Part VI.E.3.c, above;
- f. A demonstration that the time schedule requested is as short as possible, consistent with California Water Code section 13385(j)(3)(C)(i), taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation(s); and
- g. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and the date(s) for their achievement. The interim requirements shall include both of the following:
 - i. Effluent limitation(s) for the pollutant(s) of concern; and
 - ii. Actions and milestones leading to compliance with the effluent limitation(s).

The Regional Water Board does not intend to take enforcement action against a Permittee for violations of specific WQBELs and corresponding receiving water limitations for which the final compliance deadline has passed if a Permittee is fully complying with the requirements of a TSO to resolve exceedances of the WQBELs for the specific pollutant(s) in the MS4 discharge.

4. USEPA Established TMDLs

USEPA has established seven TMDLs that include wasteload allocations for MS4 discharges covered by this Order (See Table F-9). Five TMDLs were established since 2010, one in 2007, and one in 2003.

Table F-9. USEPA Established TMDLs with WLAs Assigned to MS4 Discharges

TOTAL MAXIMUM DAILY LOADS (TMDL)	Effective Date
Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)	March 26, 2012
Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)	March 26, 2012
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (USEPA established)	March 26, 2012
Los Angeles Area Lakes TMDLs (USEPA established)	March 26, 2012
Los Cerritos Channel Metals TMDL (USEPA established)	March 17, 2010
San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)	March 26, 2007
Malibu Creek Watershed Nutrients TMDL (USEPA established)	March 21, 2003

In contrast to State-adopted TMDLs, USEPA established TMDLs do not contain an implementation plan or schedule. The Clean Water Act does not allow USEPA to either adopt implementation plans or establish compliance schedules for TMDLs that is establishes. Such decisions are generally left with the States. The Regional Water Board could either (1) adopt a separate implementation plan as a Basin Plan Amendment for each USEPA established TMDL, which would allow inclusion of compliance schedules in the permit where applicable, or (2) issue a Permittee a schedule leading to full compliance in a separate enforcement order (such as a Time Schedule Order or a Cease and Desist Order). To date, the Board has not adopted a

separate implementation plan or enforcement order for any of these TMDLs. As such, the final WLAs in the seven USEPA established TMDLs identified above become effective immediately upon establishment by USEPA and placement in a NPDES permit.

The Regional Water Board's decision as to how to express permit conditions for USEPA established TMDLs is based on an analysis of several specific facts and circumstances surrounding these TMDLs and their incorporation into this Order. First, since these TMDLs do not include implementation plans, none of these TMDLs have undergone a comprehensive evaluation of implementation strategies or an evaluation of the time required to fully implement control measures to achieve the final WLAs. Second, given the lack of an evaluation, the Regional Water Board is not able to adequately assess whether Permittees will be able to immediately comply with the WLAs at this time. Third, the majority of these TMDLs were established by USEPA recently (i.e., since 2010) and permittees have had limited time to plan for and implement control measures to achieve compliance with the WLAs. Lastly, while federal regulations do not allow USEPA to establish implementation plans and schedules for achieving these WLAs, USEPA has nevertheless included implementation recommendations regarding MS4 discharges as part of six of the seven of these TMDLs. The Regional Water Board needs time to adequately evaluate USEPA's recommendations. For the reasons above, the Regional Water Board has determined that numeric water quality based effluent limitations for these USEPA established TMDLs are infeasible at the present time. The Regional Water Board may at its discretion revisit this decision within the term of the Order or in a future permit, as more information is developed to support the inclusion of numeric water quality based effluent limitations.

In lieu of inclusion of numeric water quality based effluent limitations at this time, this Order requires Permittees subject to WLAs in USEPA established TMDLs to propose and implement best management practices (BMPs) that will be effective in achieving the numeric WLAs. Permittees will propose these BMPs to the Regional Water Board in a Watershed Management Program Plan, which is subject to Regional Water Board Executive Officer approval. As part of this Plan, Permittees are also required to propose a schedule for implementing the BMPs that is as short as possible. The Regional Water Board finds that, at this time, it is reasonable to include permit conditions that require Permittees to develop specific Watershed Management Program plans that include interim milestones and schedules for actions to achieve the WLAs. These plans will facilitate a comprehensive planning process, including coordination among co-permittees where necessary, on a watershed basis to identify the most effective watershed control measures and implementation strategies to achieve the WLAs.

At a minimum, the Watershed Management Program Plan must include the following data and information relevant to the USEPA established TMDL:

- i. Available data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;

- ii. A detailed time schedule of specific actions the Permittee will take in order to achieve the WLA(s);
- iii. A demonstration that the time schedule requested is as short as possible, taking into account the time since USEPA establishment of the TMDL, and technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the WLA(s);
 - a. For the Malibu Creek Nutrient TMDL established by USEPA in 2003, in no case shall the time schedule to achieve the final numeric WLAs exceed five years from the effective date of this Order; and
- iv. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements, including numeric milestones, and the date(s) for their achievement.

Each Permittee subject to a WLA in a TMDL established by USEPA must submit a draft of a Watershed Management Program Plan to the Regional Water Board Executive Officer per the timelines outlined for submittal of a Watershed Management Program or EWMP.

Based on the nature and timing of the proposed watershed control measures, the Regional Water Board will consider appropriate actions on its part, which may include: (1) no action and continued reliance on permit conditions that require implementation of the approved watershed control measures throughout the permit term; (2) adopting an implementation plan and corresponding schedule through the Basin Plan Amendment process and then incorporating water quality based effluent limitations and a compliance schedule into this Order consistent with the State-adopted implementation plan; or (3) issuing a time schedule order to provide the necessary time to fully implement the watershed control measures to achieve the WLAs.

If a Permittee chooses not to submit a Watershed Management Program Plan, or the plan is determined to be inadequate by the Regional Water Board Executive Officer and necessary revisions are not made within 90 days of written notification to the Permittee that that plan is inadequate, the Permittee will be required to demonstrate compliance with the numeric WLAs immediately based on monitoring data collected under the MRP (Attachment E) for this Order.

The Regional Water Board does not intend to take enforcement action against a Permittee for violations of specific WLAs and corresponding receiving water limitations for USEPA established TMDLs if a Permittee has developed and is implementing an approved Watershed Management Program to achieve the WLAs in the USEPA TMDL and the associated receiving water limitations.

E. Other Provisions

1. Legal Authority

Adequate legal authority is required to implement and enforce most parts of the Minimum Control Measures and all equivalent actions if implemented with a Watershed Management Program (See 40 CFR section 122.26(d)(2)(i)(A)-(F) and 40 CFR section 122.26(d)(2)(iv). Without adequate legal authority the MS4 would be unable to perform many vital functions such as performing inspections, requiring remedies, and requiring installation of control measures. In addition, the Permittee would not be able to penalize and/or attain remediation costs from violators.

2. Fiscal Resources

The annual fiscal analysis will show the allocated resources, expenditures, and staff resources necessary to comply with the permit, and implement and enforce the Permittee's Watershed Management Program (See 40 CFR section 122.26(d)(2)(vi). The annual analysis is necessary to show that the Permittee has adequate resources to meet all Permit Requirements. The analysis can also show year-to-year changes in funding for the storm water program. A summary of the annual analysis must be reported in the annual report. This report will help the Permitting Authority understand the resources that are dedicated to compliance with this permit, and to implementation and enforcement of the Watershed Management Program, and track how this changes over time. Furthermore, the inclusion of the requirement to perform a fiscal analysis annually is similar to requirements included in Order No. 01-182 permit as well as the current Ventura County MS4 permit.

3. Responsibilities of the Permittees

Because of the complexity and networking of the storm drain system and drainage facilities within and tributary to the LA MS4, the Regional Water Board adopted an area-wide approach in permitting storm water and urban runoff discharges. Order No. 01-182 was structured as a single permit whereby individual Permittees were assigned uniform requirements and additional requirements were assigned to the Principal Permittee (Los Angeles County Flood Control District). This permit does not designate a principal Permittee and as such requires each Permittee to implement provisions as a separate entity. Furthermore it does not hold a Permittee responsible for implementation of provisions applicable to other Permittees.

Part VI.A.4.a requires inter and intra-agency coordination to facilitate implementation of this Order. This requirement is based on 40 CFR section 122.26(d)(2)(iv) which requires "a comprehensive planning process which public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable [...]."

4. Reopener and Modification Provisions

These provisions are based on 40 CFR sections 122.44, 122.62, 122.63, 122.64, 124.5, 125.62, and 125.64, and are also consistent with Order No. 01-182. The Regional Water Board may reopen the permit to modify permit conditions and requirements, as well as revoke, reissue, or terminate in accordance with federal regulations. Causes for such actions include, but are not limited to, endangerment to human health or the environment; acquisition of newly-obtained information that

would have justified the application of different conditions if known at the time of Order adoption; to incorporate provisions as a result of new federal or state laws, regulations, plans, or policies (including TMDLs and other Basin Plan amendments); modification in toxicity requirements; violation of any term or condition in this Order; and/or minor modifications to correct typographical errors or require more frequent monitoring or reporting by a Permittee. The Order also includes additional causes including: within 18 months of the effective date of a revised TMDL or as soon as practicable thereafter, where the revisions warrant a change to the provisions of this Order, the Regional Water Board may modify this Order consistent with the assumptions and requirements of the revised WLA(s), including the program of implementation; in consideration of any State Water Board action regarding the precedential language of State Water Board Order WQ 99-05; and to include provisions or modifications to WQBELs in Part VI.E and Attachments L-R in this Order prior to the final compliance deadlines, if practicable, that would allow an action-based, BMP compliance demonstration approach with regard to final WQBELs for storm water discharges based on the Regional Board's evaluation of whether Watershed Management Programs in Part VI.C. of the Order have resulted in attainment of interim WQBELs for storm water and review of relevant research, including but not limited to data and information provided by Permittees and other stakeholders, on storm water quality and the efficacy and reliability of control technologies.

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 308(a) of the federal Clean Water Act, and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of Title 40 of the Code of Federal Regulations requires that all NPDES permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements. (40 C.F.R. §§ 122.26(d)(2)(i)(F) & (d)(2)(iii)(D), 122.42(c).) California Water Code section 13383 further authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP (Attachment E of this Order) establishes monitoring, reporting, and recordkeeping requirements that implement the federal and state laws and/or regulations. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Order.

A. Integrated Monitoring Plans

1. Integrated Monitoring Program and Coordinated Integrated Monitoring Program

As discussed in Part VI.B of this Fact Sheet, the purpose of the Watershed Management Programs is to provide a framework for Permittees to implement the requirements of this Order in an integrated and collaborative fashion and to address water quality priorities on a watershed scale. Additionally, the Watershed Management Programs are to be designed to ensure that discharges from the Los Angeles County MS4: (i) achieve applicable water quality based effluent limitations that implement TMDLs, (ii) do not cause or contribute to exceedances of receiving water limitations, and (iii) for non-storm water discharges from the MS4, are not a

source of pollutants to receiving waters. This Order allows Permittees in coordination with an approved Watershed Management Program per Part VI.C, to implement a customized monitoring program with the primary objective of allowing for the customization of the outfall monitoring programs and that achieves the five Primary Objectives set forth in Part II.A. of Attachment E and includes the elements set forth in Part II.E. of Attachment E. If pursuing a customized monitoring program, the Permittees must provide sufficient justification for each element of the program that differs from the monitoring program as set forth in Attachment E of the Order. This Order provides options for each Permittee to individually develop and implement an Integrated Monitoring Program (IMP), or alternatively, Permittees may cooperate with other Permittees to develop a Coordinated Integrated Monitoring Program (CIMP). Both the IMP and CIMP are intended to facilitate the effective and collaborative monitoring of receiving waters, storm water, and non-storm water discharges and to report the results of monitoring to the Regional Water Board.

The key requirements for Watershed Management Programs are included in Part VI.C of this Order. The IMP and CIMP requirements within the MRP largely summarize the requirements and reinforce that, at a minimum, the IMP or CIMP must address all TMDL and Non-TMDL monitoring requirements of this Order, including receiving water monitoring, storm water outfall based monitoring, non-storm water outfall based monitoring, and regional water monitoring studies.

Both the IMP and CIMP approach provides opportunities to increase the cost efficiency and effectiveness of the Permittees monitoring program as monitoring can be designed, prioritized and implemented on a watershed basis. The IMP/CIMP approach allows the Permittees to prioritize monitoring resources between watersheds based on TMDL Implementation and Monitoring Plan schedules, coordinate outfall based monitoring programs and implement regional studies. Cost savings can also occur when Permittees coordinate their monitoring programs with other Permittees.

B. TMDL Monitoring Plans

Monitoring requirements established in TMDL Monitoring Plans, presented in Table E-1. Approved TMDL Monitoring Plans by Watershed Management Area, were approved by the Executive Officer of the Regional Water Board prior to the effective date of this Order are incorporated into this Order by reference.

C. Receiving Water Monitoring

The purposes of receiving water monitoring are to measure the effects of storm water and non-storm water discharges from the MS4 to the receiving water, to identify water quality exceedances, to evaluate compliance with TMDL WLAs and receiving water limitations, and to evaluate whether water quality is improving, staying the same or declining.

1. Receiving Water Monitoring Stations

Receiving water monitoring is linked to outfall based monitoring in order to gauge the effects of MS4 discharges on receiving water. Receiving water monitoring stations must be downstream of outfall monitoring stations.

The IMP, CIMP or stand-alone receiving monitoring plan (in the case of jurisdictional monitoring) must include a map identifying proposed wet weather and dry weather monitoring stations. Receiving water monitoring stations may include historical mass emission stations, TMDL compliance monitoring stations, and other selected stations. The Permittee must describe how monitoring at the proposed locations will accurately characterize the effects of the discharges from the MS4 on the receiving water, and meet other stated objectives. The plan must also state whether historical mass emission stations will continue to be monitored, and if not, provide sufficient justification for discontinuation of monitoring at the historical mass emissions stations, and describe the value of past receiving water monitoring data in performing trends analysis to assess whether water quality is improving, staying the same or declining.

2. Minimum Monitoring Requirements

Receiving water is to be monitored during both dry and wet weather conditions to assess the impact of non-storm water and storm water discharges. Wet weather and dry weather are defined in each watershed, consistent with the definitions in TMDLs approved within the watershed. Monitoring is to commence as soon as possible after linked outfall monitoring in order to be reflective of potential impacts from MS4 discharges. At a minimum, the parameters to be monitored and the monitoring frequency are the same as those required for the linked outfalls.

D. Outfall Based Monitoring

The MRP requires Permittees to conduct outfall monitoring, linked with receiving water monitoring, bioassessment monitoring and TMDL special studies. The MRP allows the Permittees flexibility to integrate the minimum requirements of this Order, applicable TMDL monitoring plans and other regional monitoring obligations into a single IMP or within a CIMP.

Per Part VII.A of the MRP, the Permittee must establish a map or geographic database of storm drains, channels and outfalls to aid in the development of the outfall monitoring plan and to assist the Regional Water Board in reviewing the logic and adequacy of the number and location of outfalls selected for monitoring. The map/database must include the storm drain network, receiving waters, other surface waters that may impact hydrology, including dams and dry weather diversions. In addition, the map must identify the location and identifying code for each major outfall within the Permittee's jurisdiction. The map must include overlays including jurisdictional boundaries, subwatershed boundaries and storm drain outfall catchment boundaries. The map must distinguish between storm drain catchment drainage areas and subwatershed drainage areas, as these may differ. In addition, the map must include overlays displaying land use, impervious area and effective impervious area (if available). To the extent known, outfalls that convey significant non-stormwater discharges (see Part I.F to this Fact Sheet), must also be identified on the map, and the map must be updated annually to

include the total list of known outfalls conveying significant flow of non-storm water discharge.

E. Storm Water Outfall Based Monitoring

The purpose of the outfall monitoring plan is to characterize the storm water discharges from each Permittee's drainages within each subwatershed. Outfall based monitoring is also conducted to assess compliance with WQBELs. Unless Permittees have proposed and received approval for a customized monitoring program as previously discussed, each Permittee must identify at least one outfall within each subwatershed (HUC 12) within its jurisdictional boundary to monitor storm water discharges. The selected outfall(s) should receive drainage from an area representative of the land uses within the portion of its jurisdiction that drains to the subwatershed, and not be unduly influenced by storm water discharges from upstream jurisdictions or other NPDES discharges. It is assumed that storm water runoff quality will be similar for similar land use areas, and therefore runoff from a representative area will provide sufficient characterization of the entire drainage area. Factors that may impact storm water runoff quality include the land use (industrial, residential, commercial) and the control measures that are applied. Factors that may impact storm water runoff volume include percent effective impervious cover (connected to the storm drain system), vegetation type, soil compaction and soil permeability.

Storm water outfall monitoring is linked to receiving water monitoring (see above). Monitoring must be conducted at least three times per year during qualifying rain events, including the first rain event of the year and conducted approximately concurrently (within 6 hours) before the commencement of the downstream receiving water monitoring.

Monitoring is conducted for pollutants of concern including all pollutants with assigned WQBELs. Parameters to be monitored during wet weather include: flow, pollutants subject to a TMDL applicable to the receiving water, pollutants listed on the Clean Water Act Section 303(d) list for the receiving water or a downstream receiving water. Flow is necessary to calculate pollutant loading. Sampling requirements, including methods for collecting flow-weighted composite samples, are consistent with the Ventura County Monitoring program (Order No. C17388).

For water bodies listed on the Clean Water Act section 303(d) list as being impaired due to sedimentation, siltation or turbidity, total suspended solids (TSS) and suspended sediment concentration (SSC) must be analyzed. TSS is the parameter most often required in NPDES permits to measure suspended solids. However, studies conducted by the United States Geological Survey (USGS) have found that the TSS procedure may not capture the full range of sediment particle sizes contributing to sediment impairments. Therefore both TSS and SSC are required in this Order.

For freshwater, the following field measurements are also required: hardness, pH, dissolved oxygen, temperature, and specific conductivity. Hardness, pH and temperature are parameters impacting the effect of pollutants in freshwater (i.e., metals water quality standards are dependent on hardness, ammonia toxicity is dependent on

pH and temperature. Temperature and dissolved oxygen are interdependent and fundamental to supporting aquatic life beneficial uses. Specific conductivity is a parameter important to assessing potential threats to MUN and freshwater aquatic life beneficial uses.

Aquatic toxicity monitoring is required in the receiving water twice per year during wet weather conditions. Aquatic toxicity is a direct measure of toxicity and integrates the effects of multiple synergistic effects of known and unidentified pollutants. When samples are found to be toxic, a Toxicity Identification Evaluation must be performed in an attempt to identify the pollutants causing toxicity. Aquatic toxicity is required to be monitored in the receiving water twice per year during wet-weather rather than three times per year due to the expense of the procedure.

The monitoring data is to be accompanied by rainfall data and hydrographs, and a narrative description of the storm event, consistent with the requirements in the Ventura County MS4 (Monitoring Program No. CI 7388). This information will allow the Permittee and the Regional Water Board staff to evaluate the effects of differing storm events in terms of storm water runoff volume and duration and in-stream effects.

F. Non-Stormwater Outfall-Based Screening and Monitoring Program

The non-storm water outfall screening and monitoring program is intended to build off of Permittees prior efforts under Order No. 01-182 to screen all outfalls within their MS4 to identify illicit connections and discharges. Under this Order, the Permittees will use the following step-wise method to assess non-storm water discharges.

- Develop criteria or other means to ensure that all outfalls with significant non-storm water discharges are identified and assessed during the term of this Order.
- For outfalls determined to have significant non-storm water flow, determine whether flows are the result of illicit connections/illicit discharges (IC/IDs), authorized or conditionally exempt non-storm water flows, or from unknown sources.
- Refer information related to identified IC/IDs to the IC/ID Elimination Program (Part VI.D.10 of this Order) for appropriate action.
- Based on existing screening or monitoring data or other institutional knowledge, assess the impact of non-storm water discharges (other than identified IC/IDs) on the receiving water.
- Prioritize monitoring of outfalls considering the potential threat to the receiving water and applicable TMDL compliance schedules.
- Conduct monitoring or assess existing monitoring data to determine the impact of non-storm water discharges on the receiving water.
- Conduct monitoring or other investigations to identify the source of pollutants in non-storm water discharges.
- Use results of the screening process to evaluate the conditionally exempt non-storm water discharges identified in Part III.A.2 and III.A.3 in this Order and take appropriate actions pursuant to Part III.A.4.d of this Order for those discharges that

have been found to be a source of pollutants. Any future reclassification shall occur per the conditions in Parts III.A.2 or III.A.6 of this Order.

The screening and monitoring program is intended to maximize the use of Permittee resources by integrating the screening and monitoring process into existing or planned IMP/CIMP efforts. It is also intended to rely on the illicit discharge source investigation and elimination requirements in Part VI.D.10 of this Order and the MS4 Mapping requirements in Part VII.A of the MRP.

The screening and source identification component of the program is used to identify the source(s) and point(s) of origin of the non-storm water discharge. The Permittee is required to develop a source identification schedule based on the prioritized list of outfalls exhibiting significant non-storm water discharges. The schedule shall ensure that source investigations are to be conducted for no less than 25% of the outfalls in the inventory within three years of the effective date of this Order and 100% of the outfalls within 5 years of the effective date of this Order. This will ensure that all outfalls with significant non-storm water discharges will be assessed within the term of this Order.

Additional requirements have been included to require the Permittee to develop a map and database of all outfalls with known non-storm water discharges. The database and map are to be updated throughout the term of this Order. If the source of the non-storm water discharge is determined to be an NPDES permitted discharge, a discharge subject to a Record of Decision approved by USEPA pursuant to section 121 of CERCLA, a conditionally exempt essential non-storm water discharge, or entirely comprised of natural flows as defined at Part III.A.d of this Order, the Permittee need only document the source and report to the Regional Water Board within 30 days of determination and in the next annual report. Likewise, if the discharge is determined to originate in an upstream jurisdiction, the Permittee is to provide notice and all characterization data to the upstream jurisdiction within 30 days of determination.

However, if the source is either unknown or a conditionally exempt non-essential non-storm water discharge, each Permittee shall conduct monitoring required in Part IX.F of the MRP. Special provisions are also provided if the discharge is found to result from multiple sources.

The parameters to be monitored include flow rate, pollutants assigned a WQBEL or receiving water limitation to implement TMDL provisions for the respective receiving water, as identified in Attachments L - R of this Order, non-storm water action levels as identified in Attachment G of this Order, and CWA Section 303(d) listed pollutants for the respective receiving water. Aquatic Toxicity required only when receiving water monitoring indicates aquatic toxicity and the TIE conducted in the receiving water is inconclusive.

In an effort to provide flexibility and allow the Permittee to prioritize its monitoring efforts, the outfall based monitoring can be integrated within an IMP/CIMP. For outfalls subject to a dry weather TMDL, monitoring frequency is established per the approved TMDL Monitoring Program.

Unless specified in an approved IMP/CIMP, outfalls not subject to dry weather TMDLs must be monitored at least four times during the first year of monitoring. The four times per year monitoring is reflective of the potential for high variability in the quality and volume of non-storm water discharges and duration as opposed to storm water discharges.

Collected monitoring data is to be compared against applicable receiving water limitations, water quality based effluent limitations, non-storm water action levels, or exhibited Aquatic Toxicity as defined in the Parts XII.F and G of the MRP and all exceedances are to be reported in the Integrated Monitoring Compliance Report required in Part XIX.A.5 of the MRP.

After the first year, monitoring for specific pollutants may be reduced to once per year, if the values reported in the first year do not exceed applicable non-storm water WQBELs, non-storm water action levels, or a water quality standard applicable to the receiving water.

After one year of monitoring, the Permittee may submit a written request to the Executive Officer of the Regional Water Board requesting to eliminate monitoring for specific pollutants based on an analysis demonstrating that there is no reasonable potential for the pollutant to exist in the discharge at a concentration exceeding applicable water quality standards.

1. Dry Weather Screening Monitoring

a. Background

Clean Water Act section 402(p) regulates discharges from municipal separate storm sewer systems (MS4s). Clean Water Act section 402(p)(3)(B)(ii) requires the Permittees to effectively prohibit non-storm water from entering the MS4.

Non-exempted, non-storm water discharges are to be effectively prohibited from entering the MS4 or become subject to another NPDES permit (55 Fed.Reg. 47990, 47995 (Nov.16, 1990)). Conveyances which continue to accept non-exempt, non-storm water discharges do not meet the definition of MS4 and are not subject to Clean Water Act section 402(p)(3)(B) unless the discharges are issued separate NPDES permits. Instead, conveyances that continue to accept non-exempt, non-storm water discharges that do not have a separate NPDES permit are subject to sections 301 and 402 of the CWA (55 Fed.Reg. 47990, 48037 (Nov. 16, 1990)).

In part, to implement these statutory provisions, Order No. 01-182 included non-storm water discharge prohibitions. Several categories of non-storm water discharges are specifically identified as authorized or conditionally exempt non-storm water discharges, including:

- i. Discharges covered under an NPDES permit**
- ii. Discharges authorized by USEPA under CERCLA**

- iii. Discharges resulting from natural flows
- iv. Discharges from emergency fire fighting activity
- v. Some Categories of Discharges incidental to urban activities

Further, as another mechanism to effectively prohibit non-storm water discharges into the MS4, Order No. 01-182 also requires the Los Angeles County MS4 Co-Permittees to implement an illicit connections and illicit discharges elimination program as part of their storm water management program pursuant to 40 CFR section 122.26(d)(2)(iv)(B).

Finally, Monitoring and Reporting Program CI 6948, a part of Order No. 01-182, required dry weather monitoring at the Mass Emissions Stations (MES) to estimate pollutant contributions and determine if the MS4 is contributing to exceedances of applicable water quality standards during dry weather.

b. Evaluation of Dry Weather Data

40 CFR section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in the Basin Plan and other state plans and policies, or any applicable water quality criteria contained in the California Toxics Rule (CTR) and National Toxics Rule (NTR).

In an effort to evaluate the Discharger's program to effectively prohibit non-storm water discharges into the MS4, as well as to determine whether MS4 discharges are potentially contributing to exceedances of water quality standards, the Reasonable Potential Analysis (RPA) process was used as a screening tool. In doing so, dry weather monitoring data submitted by the Discharger was evaluated to identify where non-storm water discharges may impact beneficial uses and where additional monitoring and/or investigations of non-storm water discharges should be focused.

Order No. 01-182 and Monitoring and Reporting Program No. 6948 required the Discharger to implement core monitoring at seven mass emission stations:

- Ballona Creek
- Malibu Creek
- Los Angeles River
- San Gabriel River (representing the upper portion of the San Gabriel River Watershed Management Area)

- Coyote Creek (representing the lower portion of the San Gabriel River Watershed Management Area)
- Dominguez Channel
- Santa Clara River

In addition to wet weather monitoring requirements at each of the mass emission stations, a minimum of two dry weather samples were required each year. Monitoring was required for conventional pollutants (BOD, TSS, pH, fecal coliform, oil and grease), priority pollutants, and a variety of other nonconventional pollutants (e.g., nutrients, dissolved oxygen, salinity/conductivity).

Dry weather monitoring data were compiled from Annual Stormwater Monitoring Reports submitted by the Los Angeles County Department of Public Works for the period from 2005 to 2011 to reflect the most recent data. The Annual Stormwater Monitoring Reports include the results for dry weather samples that were collected from 2005 to 2011 on 15 different dates.

For each monitored parameter, the most stringent applicable water quality objective/criterion was identified from the Basin Plan and the CTR at 40 CFR section 131.38. The following assumptions were made when conducting the analysis:

- The mass emissions stations represented only freshwater segments. Accordingly, CTR criteria for the protection of freshwater aquatic life were selected for comparison to monitoring results.
- For hardness-dependent metals, criteria were derived by using the lowest reported dry-weather hardness value for each mass emission station for the period of 2005 to 2011.
- For screening purposes the criteria associated with the most protective beneficial use for any segment within the watershed was selected for comparison to monitoring results.
- Basin Plan surface water quality objectives for minerals (i.e., total dissolved solids, sulfate, and chloride) apply to specific stream reaches within each watershed and are provided in Chapter 3 of the Basin Plan. Where no specific objectives are identified, footnote f to Table 3-8 provides guidelines for protection of various beneficial uses. When guidelines were presented as a range, the most protective (low end of range) value was selected and applied according to beneficial uses in the watershed.
- With the exception of bacteria, the water quality objectives used for the analysis are the most current in effect. Since adoption of Order No. 01-182 in 2001, some Basin Plan objectives and CTR criteria have been amended. As a result, the pollutants monitored under the MRP for Order No. 01-182 may not necessarily reflect current objectives.
- *E coli* bacteria was not required as part of the MRP to Order No. 01-182, thus screening for bacteria was based solely on fecal coliform. Monitoring results for fecal coliform were compared to the Basin Plan fecal coliform objective in

effect during the monitoring period. The Basin Plan objective for bacteria was amended in December 2011 to omit fecal coliform as a fresh water objective. The existing numeric bacteria objective for freshwater is limited to *E. coli*. The Basin Plan bacteria objectives are expressed as a single sample maximum and a geometric mean. In this screening, limited data precluded calculation of geometric means, therefore, the geometric mean objective was treated as a “not-to-exceed” criterion for screening purposes. The geometric mean objective for fecal coliform is 200/100 ml (the Basin Plan objective to protect primary contact recreation beneficial use (REC-1) uses in freshwaters).

- Within a given watershed, where the Basin Plan designates a “Potential” beneficial use of MUN, drinking water maximum contaminant levels (MCLs) were not applied as the most stringent objectives. Within a given watershed, where the Basin Plan designates “Potential” or “Intermittent” for beneficial uses other than MUN, the appropriate protective objectives were used for screening. This is consistent with Basin Plan requirements and existing permitting procedures.

The maximum reported pollutant concentration was compared to the most stringent applicable water quality objective to determine if there was potential for receiving water concentrations to exceed water quality objectives.

Table F-10 summarizes the results of the RPA analysis based on evaluation of the 15 sets of data for the period of 2005 to 2011 for each of the mass emission stations. Generally, all priority pollutant organic parameters were reported as below detection levels at practical quantitation levels (PQLs) consistent with the minimum levels (MLs) listed in the SIP. The most prevalent pollutants of concern among the mass emission stations include fecal coliform bacteria, cyanide, mercury, chloride, sulfate, total dissolved solids, copper, and selenium. Reported fecal coliform bacteria, cyanide, copper, and selenium concentrations appear to consistently exceed objectives/criteria in all watersheds at relatively high levels. For watersheds where objectives apply for sulfate and total dissolved solids, the receiving water concentrations consistently exceeded the objectives. The incidences where exceedances are indicated for mercury are largely due to analytical detection levels that were higher than the applicable criterion.

Table F-10. Summary of LA County Watersheds and Frequency of Receiving Water Exceeding Criteria - 2005 to 2011- Dry Season Data Analysis¹

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
pH	0/15	7/15	5/15	3/15	0/15	1/14	2/15
Total Coliform	No FW Objective	No FW Objective)	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Fecal Coliform	4/15	4/15	10/15	13/15	6/15	11/14	13/15
Enterococcus	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective	No FW Objective
Chloride	15/15	15/15	No Objective	0/15	0/15	14/14	15/15
Dissolved Oxygen	1/15	0/15	0/15	0/15	0/15	√1/14	0/15
Nitrate-N	0/15	0/15	No Objective	No Objective	0/15	7/14	No Objective
Nitrite-N	0/15	3/15	No Objective	No Objective	0/15	0/15	No Objective

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
Methylene Blue Active Substances	4/15	0/15	No Objective	No Objective	0/15	0/14	No Objective
Sulfate	15/15	15/15	No Objective	No Objective	15/15	14/14	15/15
Total Dissolved Solids	15/15	15/15	No Objective	No Objective	13/15	14/14	15/15
Turbidity ²	0/15	2/15	No Objective	No Objective	0/15	0/15	0/15
Cyanide	11/15	14/15	4/15	15/15	3/15	14/14	15/15
Total Aluminum	1/15	2/15	No Objective	No Objective	0/15	1/14	No Objective
Dissolved Copper	0/15	0/15	5/15	0/15	0/15	13/14	0/15
Total Copper	1/15	6/15	11/15	3/15	0/15	13/14	2/15
Dissolved Lead	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Total Lead	0/15	0/15	1/15	1/15	0/15	13/14	0/15
Total Mercury	15/15	14/15	14/15	15/15	15/15	14/14	15/15
Dissolved Mercury	15/15	15/15	15/15	15/15	15/15	14/14	14/14
Total Nickel	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Dissolved Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Total Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Dissolved Zinc	0/15	0/15	0/15	0/15	0/15	7/10	0/15
Total Zinc	0/15	0/15	0/15	0/15	0/15	10/10	0/15

¹ Frequency of exceedance is denoted as number of exceedances/number of dry weather samples evaluated. For example, "2/15" indicates 2 of the 15 samples had analytical results that exceeded the water quality objective for a given parameter.

² The Basin Plan objective for turbidity for the protection of MUN is the secondary MCL of 5 NTU. The Basin Plan contains additional turbidity objectives expressed as incremental changes over natural conditions. Since inadequate data were available to assess criteria expressed as incremental changes, only the MCL was considered in the analysis.

c. Requirements for Controlling Non-Storm Water Discharges

The USEPA's approach for non-storm water discharges from MS4s is to regulate these discharges under the existing CWA section 402 NPDES framework for discharges to surface waters. The NPDES program (40 CFR section 122.44(d)) utilizes discharge prohibitions and effluent limitations as regulatory mechanisms to regulate non-storm water discharges, including the use of technology- and water quality-based effluent limitations. Non-numerical controls, such as BMPs for non-storm water discharges may only be authorized where numerical effluent limitations are infeasible.

As described in Table F-10 above, there were a number of pollutants for which it was determined that receiving water concentrations at the mass emission stations indicate possible exceedances of water quality standards within the watershed. However, for waterbody-pollutant combinations not subject to a TMDL, there is uncertainty regarding whether exceedances occurred within specific segments where standards apply; the extent to which non-storm water discharges from the MS4 have caused or contributed to any exceedances; and whether the exceedances are attributable to any one or more specific MS4 outfalls within the watershed management area.

Given the need for additional data on non-stormwater discharges from the MS4 where a TMDL has not been developed, USEPA and the State have used action

levels as a means to gauge potential impact to water quality and to identify the potential need for additional controls for non-stormwater discharges in the future. If these action levels are exceeded, then additional requirements (e.g., numeric effluent limitations, increased monitoring, special studies, additional BMPs) are typically used to address the potential impacts. In this case, non-storm water action levels are applicable to non-storm water discharges from that MS4 outfall. Non-storm water discharges from the MS4 are those which occur during dry weather conditions. These action levels are not applied to storm water discharges, as defined within this Order. Storm water discharges regulated by this Order are required to meet the MEP standard and other provisions determined necessary by the State to control pollutants and have separate requirements under this Order.

The use of action levels in this Order does not restrict the Regional Water Boards ability to modify this Order in accordance with 40 CFR section 122.62 to include numeric effluent limitations should monitoring data indicate that controls beyond action levels are necessary to ensure that non-storm water discharges do not cause or contribute to exceedances of water quality standards.

i. Approach for Deriving Action Levels

Where exceedances are indicated in Table F-10 and where a TMDL has not been developed, action levels are applied as a screening tool to indicate where non-storm water discharges, including exempted flows and illicit connections may be causing or contributing to exceedances of water quality objectives. Action levels in this Order are based upon numeric or narrative water quality objectives and criteria as defined in the Basin Plan, the Water Quality Control Plan for Ocean Waters of California (Ocean Plan), and the CTR.

(1) Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries

Priority Pollutants Subject to the CTR

Priority pollutant water quality criteria in the CTR are applicable to all inland surface waters, enclosed bays, and estuaries. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist between freshwater and saltwater aquatic communities, the following apply, in accordance with Section 131.38(c)(3):

- For waters in which the salinity is equal to or less than 1 part per thousand (ppt), the freshwater criteria apply.
- For waters in which the salinity is greater than 10 ppt 95 percent or more of the time, the saltwater criteria apply.
- For waters in which the salinity is between 1 ppt and 10 ppt, the more stringent of the freshwater or saltwater criteria apply.

For continuous discharges, 40 CFR section 122.45(d)(1) specifies daily maximum and average monthly effluent limitations. Because of the uncertainty regarding the frequency of occurrence and duration of non-storm water discharges through the MS4, average monthly action levels (AMALs) and maximum daily action levels (MDALs) were calculated following the procedure based on the steady-state model, available in Section 1.4 of the SIP. The SIP procedures were used to calculate action levels for CTR priority pollutants and other constituents for which the Basin Plan contains numeric objectives.

Since many of the streams in the Region have minimal upstream flows, mixing zones and dilution credits are usually not appropriate. Therefore, in this Order, no dilution credit is being allowed.

40 CFR section 122.45(c) requires that effluent limitations for metals be expressed as total recoverable concentration; therefore it is appropriate to include action levels also as a total recoverable concentration. The SIP requires that if it is necessary to express a dissolved metal value as a total recoverable and a site-specific translator has not yet been developed, the Regional Water Board shall use the applicable conversion factor contained in the 40 CFR section 131.38.

Using nickel as an example, and assuming application of saltwater criteria (e.g., a situation where an MS4 outfall discharges to an estuary), the following demonstrates how action levels were established for this Order. The tables in Attachment H provide the action levels for each watershed management area addressed by this Order using the process described below.

The process for developing these limits is in accordance with Section 1.4 of the SIP. Two sets of AMAL and MDAL values are calculated separately, one set for the protection of aquatic life and the other for the protection of human health (consumption of organisms only). The AMALs and MDALs for aquatic life and human health are compared, and the most restrictive AMAL and the most restrictive MDAL are selected as the action level.

Step 1: For each constituent requiring an action level, identify the applicable water quality criteria or objective. For each criterion, determine the effluent concentration allowance (ECA) using the following steady state mass balance equation:

$$\begin{aligned} \text{ECA} &= C + D(C-B) \quad \text{when } C > B, \text{ and} \\ \text{ECA} &= C \quad \text{when } C \leq B, \end{aligned}$$

Where:

C = The priority pollutant criterion/objective, adjusted if

necessary for hardness, pH and translators (criteria for saltwater are independent of hardness and pH).

D = The dilution credit, and

B = The ambient background concentration

As discussed above, for this Order, dilution was not allowed; therefore:

$$ECA = C$$

For nickel the applicable ECAs are:

$$ECA_{acute} = 75 \mu\text{g/L}$$

$$ECA_{chronic} = 8.3 \mu\text{g/L}$$

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80% of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6. For nickel, a CV of 0.6 was assumed.

For nickel, the following data were used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

CV	ECA Multiplier _{acute}	ECA Multiplier _{chronic}
0.6	0.32	0.53

$$LTA_{acute} = 75 \mu\text{g/L} \times 0.32 = 24 \mu\text{g/L}$$

$$LTA_{chronic} = 8.3 \mu\text{g/L} \times 0.53 = 4.4 \mu\text{g/L}$$

Step 3: Select the most limiting (lowest) of the LTA.

$LTA = \text{most limiting of } LTA_{\text{acute}} \text{ or } LTA_{\text{chronic}}$

For nickel, the most limiting LTA was the LTA_{chronic}

$LTA_{\text{nickel}} = LTA_{\text{chronic}} = 4.4 \mu\text{g/L}$

Step 4: Calculate the action levels by multiplying the LTA by a factor (multiplier). Action levels are expressed as AMAL and MDAL. The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the action levels. The value of the multiplier varies depending on the probability basis, the CV of the data set, the number of samples (for AMAL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$AMAL_{\text{aquatic life}} = LTA \times AMAL_{\text{multiplier } 95}$

$MDAL_{\text{aquatic life}} = LTA \times MDAL_{\text{multiplier } 99}$

AMAL multipliers are based on a 95th percentile occurrence probability, and the MDAL multipliers are based on the 99th percentile occurrence probability. If the number of samples is less than four (4), the default number of samples to be used is four (4).

For nickel, the following data were used to develop the AMAL and MDAL for action levels using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

No. of Samples Per Month	CV	Multiplier _{MDAL 99}	Multiplier _{AMAL 95}
4	0.6	3.11	1.55

Therefore:

$AMAL = 4.4 \mu\text{g/L} \times 1.55 = 6.8 \mu\text{g/L}$

$MDAL = 4.4 \mu\text{g/L} \times 3.11 = 14 \mu\text{g/L}$

Step 5: For the ECA based on human health, set the AMAL equal to the $ECA_{\text{human health}}$

$$AMAL_{\text{human health}} = ECA_{\text{human health}}$$

For nickel:

$$AMAL_{\text{human health}} = 4,600 \mu\text{g/L}$$

Step 6: Calculate the MDAL for human health by multiplying the AMAL by the ratio of the Multiplier_{MDAL} to the Multiplier_{AMAL}. Table 2 of the SIP provides pre-calculated ratios to be used in this calculation based on the CV and the number of samples.

$$MDAL_{\text{human health}} = AMAL_{\text{human health}} \times (\text{Multiplier}_{\text{MDAL}} / \text{Multiplier}_{\text{AMAL}})$$

For nickel, the following data were used to develop the MDAL_{human health}:

No. of Samples Per Month	CV	Multiplier _{MDAL 99}	Multiplier _{AMAL 95}	Ratio
4	0.6	3.11	1.55	2.0

For nickel:

$$MDAL_{\text{human health}} = 4,600 \mu\text{g/L} \times 2 = 9,200 \mu\text{g/L}$$

Step 7: Select the lower of the AMAL and MDAL based on aquatic life and human health as the non-storm water action level for this Order.

AMAL _{aquatic life}	MDAL _{aquatic life}	AMAL _{human health}	MDAL _{human health}
6.8	14	4,600	9,200

For nickel, the lowest (most restrictive) levels are based on aquatic toxicity and serve as the basis for non-storm water action levels included in this Order.

Table F-11: Calculations of Freshwater Action Levels¹

Parameter	Units	CV	Aquatic Life Criteria ²		Human Health Criteria	HH Calculations			Aquatic Life Calculations								Final Action Levels		
			C acute = CMC tot	C chronic = CCC tot		HH-Organisms only	ECA _{HH} = AMAL _{HH}	AMAL/MDAL Multiplier _{HH}	MDAL _{HH}	ECA Multiplier _{acute}	LTA _{acute}	ECA Multiplier _{chronic}	LTA _{chronic}	Lowest LTA	AMAL Multiplier ₉₅	AMAL _{AL}	MDAL Multiplier ₉₉	MDAL _{AL}	Lowest AMAL
Cadmium	µg/L	0.6	4.52	2.46	N		2.01		0.321	1.45	0.527	1.30	1.30	1.55	2.02	3.11	4.0	2.0	4.0
Copper	µg/L	0.6	14.00	9.33			2.01		0.321	4.49	0.527	4.92	4.49	1.55	6.98	3.11	14	7.0	14
Lead	µg/L	0.6	81.65	3.18	N		2.01		0.321	26.21	0.527	1.68	1.68	1.55	2.61	3.11	5.2	2.6	5.2
Mercury	µg/L	0.6	R	R	0.051	0.051	2.01	0.1023										0.051	0.10
Nickel	µg/L	0.6	469.17	52.16	4600	4600	2.01	9228	0.321	150.6	0.527	27.51	27.51	1.55	42.71	3.11	86	43	86
Selenium	µg/L	0.6	20.00	5.00	N		2.01		0.321	6.42	0.527	2.64	2.64	1.55	4.09	3.11	8.2	4.1	8.2
Silver	µg/L	0.6	4.06				2.01		0.321	1.30	0.527		1.30	1.55	2.02	3.11	4.1	2.0	4.1
Zinc	µg/L	0.6	119.82	119.82			2.01		0.321	38.47	0.527	63.20	38.47	1.55	59.72	3.11	120	60	120
Cyanide	µg/L	0.6	22.00	5.20	22,0000	22,0000	2.01	44,1362	0.321	7.06	0.527	2.74	2.74	1.55	4.26	3.11	8.5	4.3	8.5

R = Reserved

N = Narrative

¹ Calculations include rounded results. Final AMALs/MDALs are rounded to 2 significant digits.

² Where criteria are based on hardness, a value of 100 mg/L CaCO₃ was used for these sample calculations.

Table F-12: Calculations of Saltwater Action Levels

Parameter	Units	CV	Aquatic Life Criteria		Human Health Criteria	HH Calculations			Aquatic Life Calculations									Final Action Levels	
			C acute = CMC tot	C chronic = CCC tot	HH-Organisms only	ECA _{HH} = AMAL _{HH}	AMAL/MDAL Multiplier _{HH}	MDAL _{HH}	ECA Multiplier _{acute}	LTA _{acute}	ECA Multiplier _{chronic}	LTA _{chronic}	Lowest LTA	AMAL Multiplier ₉₅	AMAL _{LAL}	MDAL Multiplier ₉₉	MDAL _{LAL}	Lowest AMAL	Lowest MDAL
Cadmium	µg/L	0.6	42.25	9.36	N		2.01		0.321	13.57	0.527	4.93	4.93	1.55	7.66	3.11	15.4	7.7	15
Copper	µg/L	0.6	5.78	3.73			2.01		0.321	1.86	0.527	1.97	1.86	1.55	2.88	3.11	5.8	2.9	5.8
Lead	µg/L	0.6	220.82	8.52	N		2.01		0.321	70.90	0.527	4.49	4.49	1.55	6.97	3.11	14	7.0	14
Mercury	µg/L	0.6	R	R	0.051	0.051	2.01	0.1023										0.051	0.10
Nickel	µg/L	0.6	74.75	8.28	4600	4600	2.01	9228	0.321	24.00	0.527	4.37	4.37	1.55	6.78	3.11	14	6.8	14
Selenium	µg/L	0.6	290.58	71.14	N		2.01		0.321	93.30	0.527	37.52	37.52	1.55	58.25	3.11	117	58	117
Silver	µg/L	0.6	2.24				2.01		0.321	0.72	0.527		0.72	1.55	1.11	3.11	2.2	1.1	2.2
Zinc	µg/L	0.6	95.14	85.62			2.01		0.321	30.55	0.527	45.16	30.55	1.55	47.42	3.11	95	47	95
Cyanide	µg/L	0.6	1.00	1.00	22,0000	22,0000	2.01	44,1362	0.321	0.32	0.527	0.53	0.32	1.55	0.50	3.11	1.0	0.50	1.0

R = Reserved

N = Narrative

¹ Calculations include rounded results. Final AMALs/MDALs are rounded to 2 significant digits.

Basin Plan Requirements for Other Pollutants

A number of pollutants were identified that exceed applicable Basin Plan objectives. These objectives however, are not amenable to the SIP process for developing action levels.

Resolution No. 01-018, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Bacteria Objectives for Water Bodies Designated for Water Contact Recreation, adopted by the Regional Water Board on October 25, 2001, served as the basis for the action levels for bacteria. Subsequently, the Basin Plan was amended through Order No. R10-005 (effective on December 5, 2011) to remove the freshwater fecal coliform numeric objective while retaining the freshwater objective for *E. coli*. The dry-weather evaluation conducted for fecal coliform indicates of a need for a bacteria action level. Since the Basin Plan no longer contains freshwater objectives for fecal coliform, action levels have been developed for *E. coli* in freshwater. The current bacteria objectives (saltwater and freshwater) are applied directly to the MS4 outfalls discharging to freshwaters to serve as action levels.

The Basin Plan, in Tables 3-5 through 3-7, include chemical constituents objectives based on the incorporation of Title 22, Drinking Water Standards, by reference, to protect the surface water MUN beneficial use. The Basin Plan in Tables 3-8 and 3-10 also includes mineral quality objectives that apply to specific watersheds and stream reaches and where indicated by the beneficial use of ground water recharge (GWR). These objectives contained in the Basin Plan are listed as not-to-exceed values. Consistent with the approach used by the Regional Water Board in other Orders for dry weather discharges, these not-to-exceed values will be applied as AMALs in this Order.

(2) Discharges to the Surf Zone

From the Table B water quality objectives of the Ocean Plan, action levels are calculated according to Equation 1 of the Ocean Plan for all pollutants:

$$C_e = C_o + D_m(C_o - C_s)$$

Where:

- C_e = the Action Level ($\mu\text{g/L}$)
- C_o = the water quality objective to be met at the completion of initial dilution ($\mu\text{g/L}$)
- C_s = background seawater concentration ($\mu\text{g/L}$)
- D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

The D_m is based on observed waste flow characteristics, receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial dilution process flow across the discharge structure. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. It is conservatively assumed that when non-storm water discharges to the surf zone occur, that conditions are such that no rapid mixing would occur. Therefore, an initial dilution is not allowed and the formula above reduces to:

$$C_e = C_o$$

The following demonstrates how the action levels for copper are established.

Copper

$C_e = 3 \mu\text{g/L}$ (6-Month Median)

$C_e = 12 \mu\text{g/L}$ (Daily Maximum)

$C_e = 30 \mu\text{g/L}$ (Instantaneous Maximum)

ii. Applicability of Action Levels

The action levels included in this Order apply to pollutants in non-storm water discharges from the MS4 to receiving waters that are not already subject to WQBELs to implement TMDL wasteload allocations applicable during dry weather.

This Order requires outfall-based monitoring throughout each Watershed Management Area, including monitoring during dry weather. The dry weather monitoring data will be evaluated by the Permittee(s) in comparison to all applicable action levels.

iii. Requirements When Action Levels are Exceeded

When monitoring data indicates an action level is exceeded for one or more pollutants, then the Permittee will be required to implement actions to identify the source of the non-storm water discharge, and depending on the identified source, implement an appropriate response. With respect to action levels, the Permittee will have identified appropriate procedures within the Watershed Management Program (Part VI.C) and the Illicit Connection and Illicit Discharge Elimination Program (Part VI.D.9).

G. New Development/Re-Development Tracking

This Order requires the use of Low Impact Development (LID) designs to reduce storm water runoff (and pollutant discharges) from new development or re-development projects. In areas that drain to water bodies that have been armored or are not natural drainages, the goal of this requirement is to protect water quality by retaining on-site the

storm water runoff from the 85th percentile storm event. This is the design storm used throughout most of California for water quality protection. If it is not technically feasible due to site constraints (e.g., close proximity to a drinking water supply, slope instability) or if instead the project proponent is proposing to supplement a groundwater replenishment project, the project proponent may provide treatment BMPs to reduce pollutant loading in storm water runoff from the project site. Flow through treatment BMPs are less effective in reducing pollutant loadings than on-site retention for the design storm. Therefore the project proponent must mitigate the impacts further by providing for LID designs at retrofit projects or other off-site locations within the same subwatershed. The effectiveness monitoring is designed to assess and track whether post construction operation of the LID designs are effective in retaining the design storm runoff volume.

For projects located in natural drainages, the goal of the LID design is to retain the pre-development hydrology, unless a water body is not susceptible to hydromodification effects (e.g., estuaries or the ocean). Smaller projects that will disturb less than 50 acres of land are presumed to meet the criteria if the project retains the storm water runoff from the 95th percentile storm. The effectiveness monitoring in this situation should be design to confirm that storm water runoff is not occurring for any storm at or less than the 95th percentile storm. Projects may also demonstrate compliance by showing that the erosion potential will be approximately 1 as described in Attachment J of this Order. For larger projects, the project proponent may be required to conduct modeling to demonstrate compliance by comparing the hydrographs of a two-year storm for the pre-development and post-development conditions, or by comparing the flow duration curves for a reference watershed and the post project condition. Flow monitoring will be required to substantiate the simulated hydrographs or flow duration curves.

Monitoring studies conducted by the California Department of Public Health (CDPH) have documented that mosquitoes opportunistically breed in structural storm water Best Management Practices (BMPs), particularly those that hold standing water for over 96 hours. Certain Low Impact Development (LID) site design measures that hold standing water such as rainwater capture systems may similarly produce mosquitoes. BMPs and LID design features should incorporate design, construction, and maintenance principles to promote drainage within 96 hours to minimize standing water available to mosquitoes. This Order requires regulated MS4 Permittees to coordinate with other agencies necessary to successfully implement the provisions of this Order. These agencies may include CDPH and local mosquito and vector control agencies on vector-related issues surrounding implementation of post-construction BMPs.

This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. and Water Quality Order No. 2012-0003-DWQ.

H. Regional Studies

1. Southern California Stormwater Monitoring Coalition Watershed Monitoring Program

As a condition to this Order, Permittees must participate in the bioassessment studies conducted under the Southern California Stormwater Monitoring Coalition Watershed Monitoring Program. Bioassessment provides a direct measure of whether aquatic life beneficial uses are fully supported and integrates the effects of multiple factors including pollutant discharges, changes in hydrology, geomorphology, and riparian buffers.

I. Aquatic Toxicity Monitoring Methods

Based on the stated goals of the CWA, the USEPA and individual states implement three approaches to monitoring water quality. These approaches include chemical-specific monitoring, toxicity testing, and bioassessments (USEPA 1991a). Each of the three approaches has distinct advantages and all three work together to ensure that the physical, chemical and biological integrity of our waters are protected. Water quality objectives have been developed for only a limited universe of chemicals. For mixtures of chemicals with unknown interactions or for chemicals having no chemical-specific objectives, the sole use of chemical-specific objectives to safeguard aquatic resources would not ensure adequate protection. Aquatic life in southern California coastal watersheds are often exposed to nearly 100% effluent from wastewater treatment plants, urban runoff, or storm water; therefore, toxicity testing and bioassessments are also critical components for monitoring programs as they offer a more direct and thorough confirmation of biological impacts. The primary advantage of using the toxicity testing approach is that this tool can be used to assess toxic effects (acute and chronic) of all the chemicals in aqueous samples of effluent, receiving water, or storm water. This allows the cumulative effect of the aqueous mixture to be evaluated, rather than the toxic responses to individual chemicals (USEPA, EPA Regions 8, 9, and 10 Toxicity Training Tool, January 2010).

Based on available data from the LA County MS4 Permit Annual Monitoring Reports, samples collected at mass emissions stations during both wet weather and dry weather have been found to be toxic in the San Gabriel River, Coyote Creek, the Los Angeles River, Dominguez Channel, Ballona Creek, Malibu Creek, and the Santa Clara River, demonstrating the need for this toxicity monitoring requirement (see Table below).

Summary of Toxicity by Watershed							
Source and Season	San Gabriel River	Coyote Creek	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	Santa Clara River
Integrated Receiving Water Impacts Report (1994-2005)							
Wet Weather	-	CDS, CDR, SUF	CDS, SUF	CDS, CDR, SUF	CDR, SUF	CDR	CDS
Dry Weather	-	SUF	SUF	SUF	SUF	-	-

Annual Monitoring Reports (2005-2010)							
Wet Weather							
2005-06	-	-	SUF	CDS, CDR, SUF	SUF	-	-
2006-07	SUF	SUF	SUF	SUF	SUF	SUF	SUF
2007-08	SUF	-	-	SUF	-	CDS,CDR,SUF	SUF
2008-09	-	SUF	SUF	-	SUF	CDS,CDR,SUF	-
2009-10	-	-	-	-	-	-	-
Dry Weather							
2005-06	-	-	-	-	-	CDS,CDR	-
2006-07	-	-	-	-	SUF	-	-
2007-08	-	-	CDS,CDR	-	SUF	-	-
2008-09	-	-	SUF	-	-	-	-
2009-10	-	-	-	-	-	-	-

Notes:

CDS= Ceriodaphnia survival toxicity

SUF= Sea Urchin fertilization toxicity

CDR= Ceriodaphnia reproduction
toxicity

This Order requires Permittee(s) to conduct chronic toxicity tests on water samples, by methods specified in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR Part 136) or a more recent edition.

To determine the most sensitive test species, the Permittee(s) shall conduct two wet weather and two dry weather toxicity tests with a vertebrate, an invertebrate, and a plant. After this screening period, subsequent monitoring shall be conducted using the most sensitive test species. Alternatively, if a sensitive test species has already been determined, or if there is prior knowledge of potential toxicant(s) and a test species is sensitive to such toxicant(s), then monitoring shall be conducted using only that test species. Sensitive test species determinations shall also consider the most sensitive test species used for proximal receiving water monitoring. After the screening period, subsequent monitoring shall be conducted using the most sensitive test species. Rescreening shall occur in the fourth year of the permit term.

For brackish water, this Order requires the Permittee(s) to conduct the chronic toxicity test in accordance with USEPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms, First Edition, August 1995, (EPA/600/R-95/136), or Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition, October 2002, (EPA/821-R-02-014), or a more recent edition.

Furthermore, the toxicity component of the Monitoring Program includes toxicity identification procedures so that pollutants that are causing or contributing to acute or

chronic effects in aquatic life exposed to these waters can be identified and others can be discounted. TIEs are needed to identify the culprit constituents to be used to prioritize management actions. Where toxicants are identified in a MS4 discharge, the Order requires a Toxicity Reduction Plan (TRE).

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TRE development and implementation is directly tied to the integrated monitoring programs and watershed management program, to ensure that management actions and follow-up monitoring are implemented when problems are identified. Permittees are encouraged to coordinate TREs with concurrent TMDLs where overlap exists. If a TMDL is being developed or implemented for an identified toxic pollutant, much of the work necessary to meet the objectives of a TRE may already be underway, and information and implementation measures should be shared.

Overall, the toxicity monitoring program will assess the impact of storm water and non-storm water discharges on the overall quality of aquatic fauna and flora and implement measures to ensure that those impacts are eliminated or reduced. As stated previously, chemical monitoring does not necessarily reveal the totality of impacts of storm water on aquatic life and habitat-related beneficial uses of water bodies. Therefore, toxicity requirements are a necessary component of the MS4 monitoring program.

J. Special Studies

Requirements to conduct special studies as described in TMDL Implementation Plans that were approved by the Executive Officer of the Regional Water Board prior to the effective date of this Order are incorporated into this Order by reference.

K. Annual Reporting

The Annual Reporting requirement was also required in Order No. 01-182 and provides summary information to the Regional Water Board on each Permittee's participation in one or more Watershed Management Programs; the impact of each Permittee(s) storm water and non-storm water discharges on the receiving water; each Permittee's compliance with receiving water limitations, numeric water quality based effluent limitations, and non-storm water action levels; and the effectiveness of each Permittee(s) control measures in reducing discharges of pollutants from the MS4 to receiving waters. In addition the Annual Report allows the Regional Water Board to assess whether the quality of MS4 discharges and the health of receiving waters is improving, staying the same, or declining as a result watershed management program efforts, and/or TMDL implementation measures, or other Control Measures and whether changes in water quality can be attributed to pollutant controls imposed on new development, re-development, or retrofit projects. The Annual Report provides the Permittee(s) a forum to discuss the effectiveness of its past and ongoing control measure efforts and to convey its plans for future control measures as well as a way to present data and conclusions in a transparent manner so as to allow review and understanding by the general public. Overall the Annual Report allows Permittee's to focus reporting efforts on watershed condition, water quality assessment, and an evaluation of the effectiveness of control measures.

L. Watershed Summary Information, Organization and Content

As a means to establish a baseline and then identify changes or trends, for each watershed, each Permittee shall provide the information on its watershed management area, subwatershed area, and drainage areas within the subwatershed area in its odd year Annual Report (e.g., Year 1, 3, 5). The requested information should be provided for each watershed within the Permittee's jurisdiction. Alternatively, permittees participating in a Watershed Management Program may provide the requested information through the development and submission of a Watershed Management Program report or within a TMDL Implementation Plan Annual Report. However, in either case, the Permittee shall bear responsibility for the completeness and accuracy of the referenced information. This reporting requirement helps to ensure that both the Permittee and the Regional Water Board have up to date information on the status of each of their watersheds and subwatersheds.

M. Jurisdictional Assessment and Reporting

The requested information shall be provided for each watershed within the Permittee's jurisdiction. Annual Reports submitted on behalf of a group of Watershed Permittees shall clearly identify all data collected and strategies, control measures, and assessments implemented by each Permittee within its jurisdiction as well as those implemented by multiple Permittees on a watershed scale. Permittees must provide information on storm water control measures, an effectiveness assessment of storm water control measures, information on non-storm water control measures, an effectiveness assessment of non-storm water control measures, an integrated monitoring compliance report, information on adaptive management strategies, and supporting data and information. The addition of this reporting requirement serves as a mechanism to evaluate and ensure the protection of receiving water quality on a watershed scale. If Permittees do not elect to develop a Watershed Management Program, all required information shall be provided by the Permittee for its jurisdiction.

N. TMDL Reporting

Reporting requirements included in this Order and Attachment E (MRP) were established during the TMDL development process for each individual TMDL. These reporting requirements have incorporated into this Order to implement TMDL requirements.

VIII. CALIFORNIA WATER CODE SECTION 13241

California Water Code section 13241 requires the Regional Water Board to consider certain factors, including economic considerations, in the adoption of water quality objectives. California Water Code section 13263 requires the Board to take into consideration the provisions of section 13241 in adopting waste discharge requirements. In *City of Burbank v. State Water Resources Control Board* (2005) 35 Cal.4th 613, the California Supreme Court considered whether regional water boards must comply with section 13241 when issuing waste discharge requirements under section 13263(a) by taking into account the costs a permittee will incur in complying with the permit requirements. The Court concluded that whether it is necessary to consider such cost information "depends on whether those

restrictions meet or exceed the requirements of the federal Clean Water Act.” (*Id.* at p. 627.) The Court ruled that regional water boards may not consider the factors in section 13241, including economics, to justify imposing pollutant restriction that are less stringent than the applicable federal law requires. (*Id.* at pp. 618, 626-627 “[Water Code s]ection 13377 specifies that [] discharge permits issued by California’s regional boards must meet the federal standards set by federal law. In effect, section 13377 forbids a regional board’s consideration of any economic hardship on the part of the permit holder if doing so would result in the dilution of the requirements set by Congress in the Clean Water Act...Because section 13263 cannot authorize what federal law forbids, it cannot authorize a regional board, when issuing a [] discharge permit, to use compliance costs to justify pollutant restrictions that do not comply with federal clean water standards”].) However, when the pollutant restrictions in an NPDES permit are more stringent than federal law requires, California Water Code section 13263 requires that the Water Boards consider the factors described in section 13241 as they apply to those specific restrictions.

The Regional Water Board finds that the requirements in this Order are not more stringent than the minimum federal requirements. Among other requirements, federal law requires MS4 permits to include requirements to effectively prohibit non-storm water discharges into the storm sewers, in addition to requiring controls to reduce the discharge of pollutants in storm water to the maximum extent practicable and other provisions that the agency determines are necessary for the control of pollutants in MS4 discharges. The requirements in this Order may be more specific or detailed than those enumerated in federal regulations under 40 CFR § 122.26 or in USEPA guidance. However, the requirements have been designed to be consistent with and within the federal statutory mandates described in Clean Water Act section 402(p)(3)(B)(ii) and (iii) and the related federal regulations and guidance. Consistent with federal law, all of the conditions in this Order could have been included in a permit adopted by USEPA in the absence of the in lieu authority of California to issue NPDES permits. Moreover, the inclusion of numeric WQBELs in this Order does not cause the permit to be more stringent than current federal law. Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. The inclusion of WQBELs as discharge specifications in an NPDES permit in order to achieve compliance with water quality standards is not a more stringent requirement than the inclusion of BMP based permit limitations to achieve water quality standards. (State Water Board Order No. WQ 2006-0012 (*Boeing*).) Therefore, consideration of the factors set forth in section 13241 is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water discharges into the MS4, or for controls to reduce the discharge of pollutants in storm water to the maximum extent practicable, or other provisions that the Regional Water Board has determined appropriate to control such pollutants, as those requirements are mandated by federal law..

Notwithstanding the above, the Regional Water Board has considered the factors set forth in California Water Code section 13241 in issuing this Order. That analysis is provided below. The Regional Water Board has also considered all of the evidence that has been presented to the Board regarding the section 13241 factors in adopting this Order. The Regional Water Board finds that the requirements in this Order are reasonably necessary to protect beneficial uses identified in the Basin Plan, and the economic information related to costs of compliance and other section 13241 factors are not sufficient to justify failing to protect those beneficial uses. Where appropriate, the Regional Water Board has provided

Permittees with additional time to implement control measures to achieve final WQBELs and/or water quality standards.

A. Past, present and probable future beneficial uses of water.

Chapter 2 of the Basin Plan identifies designated beneficial uses for water bodies in the Los Angeles Region, which are the receiving waters for MS4 discharges. Beneficial uses are also identified in the findings of this Order and further discussed relative to TMDLs in section VI.D of this Fact Sheet.

B. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.

Environmental characteristics of each of the Watershed Management Areas covered by this Order, including the quality of water, are discussed in the Region's Watershed Management Initiative Chapter as well as available in State of the Watershed reports and the State's CWA Section 303(d) List of impaired waters.

- ❖ Santa Clara River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/santa_clara_river_watershed/santa_clara_river_watershed.doc
- ❖ Santa Monica Bay Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/santa_monica_bayWMA/santa_monica_bayWMA.doc
- ❖ Dominguez Channel Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/dominguez_channelWMA/dominguez_channelWMA.doc
- ❖ Los Angeles River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/los_angeles_river_watershed/los_angeles_river_watershed.doc
- ❖ San Gabriel River Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/san_gabriel_river_watershed/san_gabriel_river_watershed.doc
- ❖ Los Cerritos Channel and Alamitos Bay Watershed Management Area
www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/wmi/los_cerritos_channelWMA/los_cerritos_channelWMA.doc
- ❖ Middle Santa Ana River Watershed Management Area
http://www.waterboards.ca.gov/santaana/water_issues/programs/wmi/index.shtml
<http://www.sawpa.org/watershedinfo.html>

The quality of water in receiving waters for MS4 discharges has been routinely monitored by Permittees through the Monitoring and Reporting Program under Order No. 01-182. Below are summaries of water quality exceedances reported for the 2010-2011 reporting year.

Summary of Constituents that Did Not Meet Water Quality Objectives at Mass Emission Stations during 2010-2011 for One or More Events

Mass Emission/Watershed	Wet	Dry
Ballona Creek (S01) ¹	Fecal coliforms ² pH ³ Dissolved zinc	pH ³
Malibu Creek (S02)	Fecal coliforms Cyanide pH ³ Sulfate	Fecal coliforms Sulfate
Los Angeles River (S10) ¹	Fecal coliforms ² pH ³ Dissolved zinc Cyanide	Fecal coliforms pH ³
Coyote Creek (S13)	Fecal coliforms ² pH ³ Dissolved zinc	Fecal coliforms
San Gabriel River (S14)	Fecal coliforms ² pH ³	
Dominguez Channel (S28) ¹	Fecal coliforms ² Dissolved copper Dissolved zinc	Fecal coliforms pH ³
Santa Clara River (S29)	Fecal coliforms pH ³ Dissolved zinc	

¹ More urbanized watersheds.

² Subject to the fecal coliform water quality objective high-flow suspension (LARWQCB, 2003).

³ pH was evaluated outside of holding time.

The following table summarizes the results of an analysis based on evaluation of the 15 sets of dry weather data for the period of 2005 to 2011 for each of the mass emission stations. The most prevalent pollutants of concern among the mass emission stations include fecal coliform bacteria, cyanide, mercury, chloride, sulfate, total dissolved solids, copper, and selenium. Reported results for fecal coliform bacteria, cyanide, copper, and

selenium concentrations consistently exceeded water quality objectives in all watersheds. For watersheds where objectives apply for sulfate and total dissolved solids, the receiving water concentrations consistently exceeded the objectives. The incidences where exceedances are indicated for mercury are largely due to analytical detection levels that were higher than the applicable objective.

Summary of LA County Watersheds and Frequency of Receiving Water Exceeding Water Quality Objectives (2005 to 2011 - Dry Season Data Analysis)¹

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
pH	0/15	7/15	5/15	3/15	0/15	1/14	2/15
Total Coliform	No FW ³ Objective						
Fecal Coliform	4/15	4/15	10/15	13/15	6/15	11/14	13/15
Enterococcus	No FW ³ Objective						
Chloride	15/15	15/15	No Objective	0/15	0/15	14/14	15/15
Dissolved Oxygen	1/15	0/15	0/15	0/15	0/15	1/14	0/15
Nitrate-N	0/15	0/15	No Objective	No Objective	0/15	7/14	No Objective
Nitrite-N	0/15	3/15	No Objective	No Objective	0/15	0/15	No Objective
Methylene Blue Active Substances	4/15	0/15	No Objective	No Objective	0/15	0/14	No Objective
Sulfate	15/15	15/15	No Objective	No Objective	15/15	14/14	15/15
Total Dissolved Solids	15/15	15/15	No Objective	No Objective	13/15	14/14	15/15
Turbidity ²	0/15	2/15	No Objective	No Objective	0/15	0/15	0/15
Cyanide	11/15	14/15	4/15	15/15	3/15	14/14	15/15
Total Aluminum	1/15	2/15	No Objective	No Objective	0/15	1/14	No Objective
Dissolved Copper	0/15	0/15	5/15	0/15	0/15	13/14	0/15
Total Copper	1/15	6/15	11/15	3/15	0/15	13/14	2/15
Dissolved Lead	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Total Lead	0/15	0/15	1/15	1/15	0/15	13/14	0/15
Total Mercury	15/15	14/15	14/15	15/15	15/15	14/14	15/15
Dissolved Mercury	15/15	15/15	15/15	15/15	15/15	14/14	14/14
Total Nickel	0/15	0/15	0/15	0/15	0/15	1/14	0/15
Dissolved Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Total Selenium	2/15	2/15	1/15	2/15	6/15	1/15	10/11
Dissolved Zinc	0/15	0/15	0/15	0/15	0/15	7/10	0/15
Total Zinc	0/15	0/15	0/15	0/15	0/15	10/10	0/15

¹ Frequency of exceedance is denoted as number of exceedances/number of dry weather samples evaluated. For example, "2/15" indicates 2 of the 15 samples had analytical results that exceeded the water quality objective for a given parameter.

² The Basin Plan water quality objective for turbidity for the protection of MUN is the secondary MCL of 5 NTU. The Basin Plan contains additional turbidity objectives expressed as incremental changes over natural conditions. Since inadequate data were available to assess criteria expressed as incremental changes, only the MCL was considered in the analysis.

³ FW means freshwater

C. *Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.*

Since 2001, municipalities both locally and nationally have gained considerable experience in the management of municipal storm water and non-storm water discharges. The technical capacity to monitor storm water and its impacts on water quality has also increased. In many areas, monitoring of the impacts of storm water on water quality has become more sophisticated and widespread. Better information on the effectiveness of storm water controls to reduce pollutant loadings and address water quality impairments is now available. The International Stormwater BMP Database (<http://www.bmpdatabase.org/>) provides extensive information of the performance capabilities of storm water controls. Additionally, the County of Los Angeles conducted a BMP effectiveness study as a requirement of Order No. 01-182.⁵⁰

Generally, improvements in the quality of receiving waters impacted by MS4 discharges can be achieved by reducing the volume of storm water or non-storm water discharged through the MS4 to receiving waters; reducing pollutant loads to storm water and non-storm water through source control/pollution prevention, including operational source control such as street sweeping, public education, and product or materials elimination or substitution; and removing pollutants that have been loaded into storm water or non-storm water before they enter receiving waters, through treatment or diversion to a sanitary sewer. The following factors are generally accepted to affect pollutant concentrations in MS4 discharges⁵¹:

- Land use
- Climatic conditions
- Season (i.e. for southern California, dry season and winter wet season)
- Percentage imperviousness (in particular, “effective impervious area” or “EIA”)
- Rainfall amount and intensity (including seasonal “first-flush” effects)
- Runoff amount
- Watershed size
- Motor vehicle operation
- Aerial deposition

In their 2010-2011 Annual Report, Permittees identified the following storm water and non-storm water pollutant control measures as particularly effective:

- Street sweeping;
- Catch basin cleaning;
- Catch basin inserts
- Trash bins;
- End-of-pipe controls such as low-flow diversions;
- Infiltration controls;
- Erosion controls; and

⁵⁰ County of Los Angeles Department of Public Works. “Los Angeles County BMP Effectiveness Study,” August 2005.

⁵¹ Maestre, Alexander and Robert Pitt. “Identification of Significant Factors Affecting Stormwater Quality Using the NSQD” (draft monograph, 2005).

- Public education and outreach, including multi-lingual strategies.

Permittees summarized the most-used BMPs and most popular BMPs (according to the number of Permittees using a particular BMP) in their 2010-2011 Annual Report. An itemization of all BMPs installed and maintained during the 2010-11 reporting period is provided in Appendices B and C of the Permittees' Annual Report.

Most installed BMPs County-wide During 2010-11

BMP Type	Total Number Installed
Catch Basin Connector Pipe Full Capture (CPS)	6377
Fossil Filter Catch Basin Insert	5968
Automatic Retractable Catch Basin Trash Screen (ARS)	3870
Clean Screen Catch Basin Insert	3767
Extra Trash Can	3681
Covered Trash Bin	3119
Signage and Stenciling	1884
Drain Pac Catch Basin Insert	1625
CulTec Infiltration Systems	1296
Infiltration Trenches	963
Infiltration Pit	958
Abtech Ultra Urban Catch Basin Insert	748
CDS Gross Pollutant Separator	438
United Storm Water Catch Basin Scree Inserts	403
Restaurants Vent Traps	258
Stormceptor Gross Pollutant Separators	211

Most Used Proprietary and Non-Proprietary BMPs During 2010-11

Types of Nonproprietary BMPs Used By Most Permittees		Types Proprietary BMPs Used By Most Permittees	
BMP Type	No. of Cities	BMP Type	No. of Cities
Infiltration Trenches	40	Fossil Filter Catch Basin Inserts	46
Covered Trash Bins	32	CDS Gross Pollutant Separator	36
Extra Trash Cans	31	Drain Pac Catch Basin Insert	21
Enhanced Street Sweeping	26	Clean Screen Catch Basin Insert	21

Dog Parks	23	Stormceptor Gross Pollutant Separator	19
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Some of the many advances in how to effectively control storm water and pollutants in storm water have occurred locally within the Los Angeles Region and include the development of cost effective trash full capture devices, storm water diversion, treatment and beneficial use facilities such as SMURRF and storm water capture, storage, and reuse facilities such as Sun Valley, low impact development/site design practices, and innovative/opportunistic culvert inlet multi-media filters. There are many other case studies of municipalities that have implemented innovative and effective storm water management measures (e.g., Portland, OR).

This Order is designed to reduce pollutant loading to waterbodies within Los Angeles County from discharges to and from the Los Angeles County MS4 through the implementation of multi-faceted storm water management programs at the municipal and watershed levels. Overall improvements in MS4 discharge quality are expected to occur over time with ongoing implementation of the Los Angeles County MS4 Permit. However, currently little information on the quality of storm water in the region and the water quality that can be achieved with the coordinated control of all MS4 discharges through full implementation of all storm water management measures by individual municipalities and collectively by all Permittees within a watershed is available. This Order, however, is designed to effectively focus and broaden monitoring requirements with the addition of outfall monitoring and monitoring associated with the 33 TMDLs being incorporated, so pollutant loading from the MS4 can be better quantified and improvements in water quality resulting from implementation of storm water management measures can be tracked.

D. Economic considerations.

The Regional Water Board recognizes that Permittees will incur costs in implementing this Order above and beyond the costs from the Permittees' prior permit. Such costs will be incurred in complying with the post-construction, hydromodification, Low Impact Development, TMDL, and monitoring and reporting requirements of this Order. The Regional Water Board also recognizes that, due to California's current economic condition, many Permittees currently have limited staff and resources to implement actions to address its MS4 discharges. Based on the economic considerations below, the Board has provided permittees a significant amount of flexibility to choose how to implement the permit. This Order allows Permittees the flexibility to address critical water quality priorities, namely discharges to waters subject to TMDLs, but aims to do so in a focused and cost-effective manner while maintaining the level of water quality protection mandated by the Clean Water Act and other applicable requirements. For example, the inclusion of a watershed management program option allows Permittees to submit a plan, either individually or in collaboration with other Permittees, for Regional Water Board Executive Officer approval that would allow for actions to be prioritized based on specific watershed needs. The Order also allows Permittees to customize monitoring requirements, which they may do individually, or in collaboration with other Permittees. In the end, it is up to the permittees to determine the effective BMPs and measures needed to comply with this Order. Permittees

can choose to implement the least expensive measures that are effective in meeting the requirements of this Order. This Order also does not require permittees to fully implement all requirements within a single permit term. Where appropriate, the Board has provided permittees with additional time outside of the permit term to implement control measures to achieve final WQBELs and/or water quality standards. Lastly, this Order includes several reopener provisions whereby the Board can modify this Order based on new information gleaned during the term of this Order.

Before discussing the economics associated with regulating MS4 discharges, it should be noted that there are instances outside of this Order where the Board previously considered economics. First, when the Board adopted the water quality objectives that serve as the basis for several requirements in this Order, it took economic considerations into account. (See *In re Los Angeles County Municipal Storm Water Permit Litigation* (Sup. Ct. Los Angeles County, March 24, 2005, Case No. BS 080548), Statement of Decision from Phase II Trial on Petitions for Writ of Mandate, p. 21.) Second, the cost of complying with TMDL wasteload allocations has been previously considered during the adoption of each TMDL. The costs of complying with the water quality based effluent limitations and receiving water limitations derived from the 33 TMDLs, which are incorporated into this Order, are not additive. For example, the costs estimated for compliance with a TMDL for one pollutant in a watershed, such as metals, can be applied to the costs to achieve compliance with a TMDL for another pollutant in the same watershed, such as pesticides, because the same implementation strategies can be used for both pollutants. Several MS4 permittees have recognized this opportunity in the multi-pollutant TMDL implementation plans they have submitted (e.g. Ballona Creek Metals/Bacteria TMDLs and Machado Lake Pesticides/Nutrients TMDLs). In other words, the estimated cost of complying with the Ballona Creek Metals TMDL can apply to metals, pesticides, PCBs, and bacteria. The costs for complying with trash TMDLs are based on different implementation strategies (e.g., full capture devices), but those strategies are effective at removing metals and toxic pollutants as well. Thus, the costs estimated for each TMDL should not be added to determine the cost of compliance with all TMDLs. The staff reports for the various TMDLs include this disclaimer, and also discuss the cost efficiencies that can be achieved by treating multiple pollutants. Further, the Board's considerations of economics in developing each TMDL have often resulted in lengthy implementation schedules to achieve water quality standards. Where appropriate, these implementation schedules have been used to justify compliance schedules in this Order.

Economic Considerations of Regulating MS4 Discharges

It is very difficult to determine the true cost of implementing storm water and urban runoff management programs because of highly variable factors and unknown level of implementation among different municipalities and inconsistencies in reporting by Permittees. In addition, it is difficult to isolate program costs attributable to permit compliance. Reported costs of compliance for the same program element can vary widely from Permittee to Permittee, often by a very wide margin that is not easily explained. Despite these problems, efforts have been made to identify storm water and urban runoff

management program costs, which can be helpful in understanding the costs of program implementation.

Economic considerations of implementing this Order were examined by primarily utilizing the data that are self-reported by the Permittees in their annual reports and a State Water Board funded study, which examined the costs of municipal MS4 programs statewide.⁵² The economic impact to public agencies was tabulated based on the reported costs of implementing the six minimum control measures (Public Information and Participation, Industrial/Commercial Facilities Control, Development Planning, Development Construction, Public Agency Activities, and Illicit Connections and Illicit Discharges Elimination) required by 40 CFR section 122.26(d)(2)(iv) as well as costs associated with program management, monitoring programs, and a category described as other. As noted above, Permittees report wide variability in the cost of compliance, which is not easily explained. Based on reported values, the average annual cost to the Permittees in 2010-11 was \$4,090,876 with a median cost of \$687,633.

It is important to note that reported program costs are not all solely attributable to compliance with requirements of the LA County MS4 Permit. Many program components, and their associated costs, existed before the first LA County MS4 Permit was issued in 1990. For example, storm drain maintenance, street sweeping and trash/litter collection costs are not solely or even principally attributable to MS4 permit compliance, since these practices have long been implemented by municipalities. Therefore, the true program cost related to complying with MS4 permit requirements is some fraction of the total reported costs. For example, after adjusting the total reported costs by subtracting out the costs for street sweeping and trash collection, the average annual cost to the Permittees was \$2,397,315 with a median cost of \$290,000.

These results are consistent with the State Water Board funded study ("State Water Board Study") that surveyed the costs to develop, implement, maintain and monitor municipal separate storm sewer system management and control programs in 2004.⁵³ The objectives of the study were to: 1) document stormwater program costs and 2) assess alternative approaches to MS4 quality control. The six cities selected for the study were judged by State Water Board staff as having good MS4 management programs, adequate accounting systems, and represented a variety of geographic locations, hydrologic areas, populations and incomes. The cities selected were Corona, Encinitas, Fremont, Fresno-Clovis Metropolitan Area, Sacramento and Santa Clarita. The results found that the annual total cost per household ranged from \$18 to \$46. The average cost was found to be \$35 and the median, \$36. The true mean, which is derived by dividing the total sample costs by the total sample number of households, is \$29 in 2002 dollars. This study was further examined and applied to the Ventura County MS4 Permit in "*Economic Considerations of the Proposed (February 25, 2008) State of California Regional Water Quality Control Board Los Angeles Region, Order 08-xxx, NPDES Permit No. CAS004002, Waste Discharge*

⁵² Data from NPDES Stormwater Cost Survey, prepared by the Office of Water Programs, California State University, Sacramento (January 2005) and the Los Angeles County Municipal Storm Water Permit (Order No. 01-182), Unified Annual Stormwater Report, 2010 – 2011, <http://ladpw.org/wmd/npdesrsa/annualreport/>

⁵³ Currier, Brian K., Joseph M. Jones, Glenn L. Moeller. "NPDES Stormwater Cost Survey, Final Report", Prepared for California State Water Resources Control Board, California State University Sacramento, Office of Water Programs, January, 2005.

Requirements for Stormwater (Wet Weather) and Non-Stormwater (Dry Weather) Discharges from the Municipal Separate Storm Sewer Systems within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein,” and found that when adjusted for inflation, the total annual cost to the MS4 Permittees ranged from \$7.15 to \$10.9 million, depending on the averaging method applied.

The State Water Board Study noted inherent limitations in the cost data quality. The most significant data quality limitation cited is that the costs provided by the municipalities were not sufficiently detailed or referenced to provide opportunity for independent review of the accuracy and completeness of the cost data. Similarly, the costs presented in the Los Angeles County Unified Annual Report (“Unified Annual Report”) are not presented with supporting data or references so that they can be independently reviewed. Some of the limitations of the reported cost data are illustrated by a comparison of monitoring costs in different sections of the Unified Annual Report. In the monitoring costs section, the total costs for monitoring, including sample collection, analytical results, and sampling station maintenance was \$713,409 for 2010-2011. In contrast, the same report showed the monitoring costs of \$9,008,460 in the Unified Cost Table. Absent further explanation in the Unified Annual Report, this suggests that the reported costs may not be reliable.

The State Water Board Study also found that certain stormwater implementation costs included activities that provide separate and additional municipal benefits such as street sweeping and storm drain and channel cleaning. The State Water Board Study indicated that the inclusion of these costs as stormwater implementation costs is not uniform across different municipalities. In order to assess the variability of costs reported by different municipalities under the same permit and determine if Los Angeles County MS4 Permittees are reporting costs for activities that provide municipal benefits beyond storm water management and permit compliance, Regional Water Board staff reviewed costs reported by Los Angeles County MS4 Permittees in the Unified Annual Report. The reported storm water costs range from \$11.45 to \$928.10 per household per year. The average reported cost was \$120.04 per household per year and the median cost was \$57.31 per household per year. The wide spread of annual costs and the significant difference between the mean and median costs indicate that the LA County MS4 Permittees are not reporting costs in a uniform manner.

Board staff also reviewed available cost data in the Unified Annual Report for Permittees that provided separate costs regarding street sweeping and trash collection. Staff adjusted the total costs so that the costs for these multi-benefit municipal programs were not included in the storm water cost and found that the adjusted storm water costs were greatly reduced by excluding these activities. These adjusted costs ranged from \$0.00 per household per year to \$903.10 per household per year. The mean adjusted rate is \$42.57 per household per year and the median adjusted rate is \$17.89 per household per year. Clearly, a significant portion (greater than 50%) of the costs attributed to storm water compliance activities also provide additional municipal benefits. (In the case of the Los Angeles County MS4 Permittees, some municipalities reported costs for trash collection; these costs were not reported by municipalities in the State Water Board Study.)

Finally, Board staff reviewed the cost breakdowns reported in the State Water Board Study and the Unified Annual Report for Los Angeles County MS4 Permittees. The following table summarizes the results:

Cost Category	State Water Board Study	Los Angeles County (2010-2011)
Watershed Management	6%	5%
Construction	11%	1%
Illicit Discharge	4%	2%
Industrial and Commercial	8%	1%
Overall Management	37%	5%
Pollution Prevention	2%	2%
Post Construction	3%	
Public Education	13%	2%
Monitoring	16%	3%
BMP Maintenance	Not Reported	2%
Development	Not Reported	1%
Other	Not reported	76%

The reported costs show differences between the MS4 Permittees surveyed in the State Water Board Study and the Los Angeles County MS4 Permittee costs in the following categories: construction, industrial and commercial activities, public education and monitoring. These categories all show greater proportional statewide cost allocations relative to the cost allocations by the Los Angeles County MS4 Permittees. The Los Angeles County MS4 Permittees report a cost category of BMP maintenance, which is not defined in the State Water Board Study. The management costs in the State Water Board Study were greater than the management costs reported by the Los Angeles County MS4 Permittees, but the Los Angeles County MS4 Permittees also reported a category of "Other" that accounted for a large proportion of costs, which is not defined in the Unified Annual Report.

The State Water Board Study found that cost information is crucial in making management decisions regarding storm water requirements. The report also recommends that annual reports required under MS4 permits throughout the State follow a standard format for cost reporting and that costs for all MS4 program activities (per program area) should be identified as existing, enhanced or new according to the extent that the activity was required under the previous permit, is enhanced by the permit, or is exclusively a result of compliance efforts with new provisions of the MS4 permit.

Further, there is an element of cost consideration inherent in the maximum extent practicable (MEP) standard. While the term "maximum extent practicable" is not specifically defined in the Clean Water Act or its implementing regulations, USEPA, courts, and the State Water Board have addressed what constitutes MEP. MEP is not a one-size fits all approach. Rather, MEP is an evolving, flexible, and advancing concept, which considers practicability. This includes technical and economic practicability. Compliance with the MEP standard involves applying BMPs that are effective in reducing or eliminating the discharge

of pollutants in storm water to receiving waters. BMP development is a dynamic process, and the menu of BMPs may require changes over time as experience is gained and/or the state of the science and art progresses. MEP is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically practicable BMPs, ensuring that the most appropriate controls are implemented in the most effective manner. The State Water Board has held that “MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the costs would be prohibitive.” (State Water Board Order WQ 2000-11.)

In addition to considering the costs of storm water management, it is important to consider the benefits of storm water and urban runoff management programs. A recent study conducted by USC/UCLA assessed the costs and benefits of implementing various approaches for achieving compliance with the MS4 permits in the Los Angeles Region. The study found that non-structural systems would cost \$2.8 billion but provide \$5.6 billion in benefit. If structural systems were determined to be needed, the study found that total costs would be \$5.7 to \$7.4 billion, while benefits could reach \$18 billion.⁵⁴ Costs are anticipated to be borne over many years. As can be seen, the benefits of the programs are expected to considerably exceed their costs. Such findings are corroborated by USEPA, which found that the benefits of implementation of its Phase II storm water rule would also outweigh the costs.⁵⁵

Economic Considerations of Not Regulating MS4 Discharges

Economic discussions of storm water and urban runoff management programs tend to focus on costs incurred by municipalities in developing and implementing the programs. This is appropriate, and these costs are significant and a major issue for the Permittees. However, in adopting Order WQ 2000-11, the State Water Board further found that in considering the cost of compliance, it is also important to consider the costs of impairment; that is, the negative impact of pollution on the economy and the positive impact of improved water quality. For example, economic benefits may result through program implementation, and alternative costs (as well as environmental impacts) may be incurred by not fully implementing the program. So, while it is appropriate and necessary to consider the cost of compliance, it is also important to consider the alternative costs incurred by not fully implementing the programs, as well as the benefits which result from program implementation.

The benefits of implementation of the Los Angeles County MS4 Permit include improvements in water quality, enhancement of beneficial uses, and increased employment, income and satisfaction from environmental amenities. Most of the benefits of this permit can be identified and, in some cases, quantified in monetary terms. Others cannot be expressed in dollar terms and can only be described. For example, household willingness to pay for improvements in fresh water quality for fishing and boating has been estimated by USEPA⁵⁶ to be \$158-210.62. This estimate can be considered conservative, since it does not include important considerations such as marine waters benefits, wildlife

⁵⁴ LARWQCB, 2004. Alternative Approaches to Stormwater Control.

⁵⁵ Federal Register / Vol. 64, No. 235 / Wednesday, December 8, 1999 / Rules and Regulations. P. 68791.

⁵⁶ Federal Register / Vol. 64, No. 235 / Wednesday, December 8, 1999 / Rules and Regulations. P. 68793.

benefits, or flood control benefits. The California State University, Sacramento study corroborates USEPA's estimates, reporting annual household willingness to pay for statewide clean water to be \$180.63.⁵⁷ When viewed in comparison to household costs of existing urban runoff management programs, these household willingness to pay estimates exhibit that per household costs incurred by Permittees to implement their urban runoff management programs remain reasonable.

Not regulating discharges from the Los Angeles County MS4 will result in greater pollution of rivers, streams, lakes, reservoirs, bays, harbors, estuaries, groundwater, coastal shorelines and wetlands. Urban runoff in southern California has been found to cause illness in people bathing near storm drains.⁵⁸ A study of south Huntington Beach and north Newport Beach found that an illness rate of about 0.8% among bathers at those beaches resulted in about \$3 million annually in health-related expenses.⁵⁹ In addition, poor beach water quality negatively affects tourism, which in turn reduces revenues to local businesses.

Funding Sources.

Public agencies (both federal and state) recognize the importance of storm water improvement projects and have provided significant sources of funding through grants, bonds, and fee collections to help offset the costs of storm water management in Los Angeles County. The table below summarizes the funds that have been allocated to storm water management in Los Angeles County, to date.

Source of Money	Dollars	% of total costs funded by State (only for those projects which included State funding)
Only State Board-awarded funding (Propositions 12, 13, 40, 50, and 84; and federal money, 319h, 205j, ARRA)	\$49,143,132	47%
Only State money from any State agency (propositions only, no federal); includes State Board, DWR, Coastal Conservancy, Fish & Game	\$67,461,699	58%
Total costs (approx.) for projects involving State money	\$114,703,731	N/A
Prop A	\$4,981,772	N/A
Prop O	\$508,678,258	N/A
Measure V	\$9,107,959	N/A
Total Public Funds (federal,	\$645,389,932	N/A (information not

⁵⁷ State Water Board, 2005. NPDES Stormwater Cost Survey. P. iv.

⁵⁸ Haile, R.W., et al, 1996. An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay. Santa Monica Bay Restoration Project.

⁵⁹ Los Angeles Times, May 2, 2005. Here's What Ocean Germs Cost You: A UC Irvine Study Tallies the Cost of Treatment and Lost Wages for Beachgoers Who Get Sick.

State, local bonds and measures) expended on stormwater control projects		available for projects funded by local bonds and measures)
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In addition to current funding options, future funding options continue to be created. Assembly Bill 2554, known as the Los Angeles County Flood Control District’s Water Quality Funding Initiative, is currently under consideration by the LACFCD’s Board of Supervisors. If the Board of Supervisors approve the fee proposal and no majority protest is received, then it will be submitted for voter approval and could create an estimated annual revenue of \$300 million to be utilized for various storm water projects including but not limited to:

- New and Existing Water Quality Projects and Programs
- Maintenance of Existing Facilities
- TMDL and MS4 Permit Implementation

Of the annual revenue, forty percent would be returned to the municipalities to create new local projects and programs and maintenance. Below are the estimated revenues that would be allocated to certain municipalities based on the estimated annual revenue of \$300 million.

Municipalities	Estimated Annual Revenue
City of Los Angeles	\$37 million
City of Santa Monica	\$1 million
El Segundo	\$600,000
Manhattan Beach	\$300,000
Redondo Beach	\$750,000
Unincorporated Areas on Los Angeles County	\$15 million

Fifty percent of the annual revenue would be spread across nine watershed authority groups (WAGs) to develop Water Quality Improvement Plans and implement regional projects and programs. Some examples of the possible annual revenues available to the WAGs are provided below:

WAG	Estimated Revenue
Santa Monica Bay	\$12 million
Upper Los Angeles River	\$36 million
Lower Los Angeles River	\$15 million
Upper San Gabriel River	\$17 million

The remaining ten percent of the annual revenues would be allocated to the Los Angeles County Flood Control District for administration of the program and other district water quality projects and programs.

E. Need for developing housing within the region.

For over 100 years, this region has relied on imported water to meet many of our water resource needs. Imported water makes up approximately 70 to 75% of the Southern California region's water supply, with local groundwater, local surface water, and reclaimed water making up the remaining 25 to 30%.⁶⁰ The area encompassed by this Order imports approximately 50% of its water supply. The Los Angeles County MS4 permit helps address the need for housing by controlling pollutants in MS4 discharges, which will improve the quality of water available for recycling and re-use. This in turn may reduce the demand for imported water thereby increasing the region's capacity to support continued housing development.

A reliable water supply for future housing development is required by law, and with less imported water available to guarantee this reliability, an increase in local supply is necessary.

In this Order, the Regional Water Board supports integrated water resources approaches. An integrated water resources approach manages water resources by integrating wastewater, stormwater, recycled water, and potable water planning through the capture and beneficial use of stormwater. An integrated approach can preserve local groundwater resources and reduce imported water needs. Thus, complying with this Order can positively affect the need for developing housing in the region. Furthermore, the low impact development (LID) requirements of this MS4 permit emphasize the necessity to balance growth with the protection of water quality. LID emphasizes cost effective, lot-level strategies that replicate the natural hydrology of the site and reduces the negative impacts of development. By avoiding the installation of more costly conventional storm water management strategies and harnessing runoff at the source, LID practices enhance the environment while providing cost savings to both developers and local governments.

F. Need to develop and use recycled water.

Storm water runoff that travels across the urban landscape quickly becomes contaminated with the wastes inherent from urban living. This polluted water is then discharged to the surface waters and eventually the ocean where it wreaks havoc on the natural coastal ecosystem and impacts human health. If the storm water is captured and treated (or captured prior to contamination) a new resource could be added to local water supplies. If this water is more effectively harnessed and recycled, numerous benefits could be achieved. These include:

- Regional reduction on imported water;
- Aid in the restoration of area aquifers;
- Reduction in the need for extensive public works projects; and
- Improvement in the quality of impaired water bodies.

⁶⁰ Southern California Association of Governments. The State of the Region 2007 Measuring Regional Progress (Housing, Environment). December 6, 2007. <http://www.scag.ca.gov/publications/index.htm>.

The exact volume of storm water available for capture is dependent on the intensity and duration of storm events. Looking at land uses across the region and applying land use-specific runoff coefficients, the annual average runoff in the Los Angeles subarea is 450,000 acre-feet/year (with an average annual rainfall of 15.5 inches). The Los Angeles and San Gabriel Rivers Watershed Council estimates that, on average, about 550,000 acre-feet/year of runoff are discharged from Los Angeles area to the ocean.⁶¹

It is not possible to capture all MS4 discharges; however, a significant portion could be put to beneficial use. Potentially, in Los Angeles, “[i]f we could capture 80% of the rainfall that falls on just a quarter of the urban area-15% of the total watershed-we would be reducing total runoff by approximately 30%. That translates into a diversion of 43 billion gallons of water per year (132,000 acre-feet) or enough to supply 800,000 people for a year.”⁶² That water capture would render a savings of almost sixty million dollars of imported State Water Project water. Capturing storm water from a larger portion of the watershed could increase the volume of this “new” water even further. Unlike traditional recycled water that requires the installation of dual plumbing and intensive infrastructure, much of the storm water capture could be done with minimal infrastructure retrofits in established communities.

Larger projects (and the corresponding savings) are also possible. The County of Los Angeles recharges storm water already. While the scale of these recharge activities is limited compared to the volume of water potentially available to recharge, the value of the process is significant. For example, in 2000 “County conservation efforts captured 220,000 acre-feet of local storm water runoff that was valued at \$80 million dollars.”⁶³

The unknown effects of infiltrating stormwater to recharge ground water have created some concern that such activities could introduce pollutants to the water supply. However, the U.S. Bureau of Reclamation has found⁶⁴:

“Based on the findings of the WAS research, decentralized stormwater management would provide a local and reliable supply of water that would not negatively impact groundwater quality. A decentralized approach could contribute up to 384,000 acre-feet of additional groundwater recharge annually if the first $\frac{3}{4}$ ” of each storm is infiltrated on all parcels, enough to provide water annually to approximately 1.5 million people. The value of this new water supply would be approximately \$311 million, using the MWD Tier 2 rate for 2010.”

Recent studies in the Los Angeles area have also shown that in the process of infiltration through the soil, many contaminants are removed with no immediate impacts, and no apparent trends to indicate that storm water infiltration will negatively impact groundwater.⁶⁵ In areas with groundwater contamination issues, utilizing recycled storm water to recharge the aquifers may actually aid in the dilution of the buildup of salts. The value of this is hard to quantify but is an additional benefit. The use of recycled water can be accomplished in direct (such as irrigation projects or dual plumbing fixtures) or indirect

⁶¹ http://www.lasgrwc.org/WAS/WASflyer_web.pdf

⁶² Los Angeles and San Gabriel River Watershed Council. 1999. *Stormwater: asset not liability*.

⁶³ Los Angeles County Department of Regional Planning. 2008. 2008 Draft General Plan-Planning Tomorrow's Great Places.

⁶⁴ Los Angeles and San Gabriel River Watershed Council. 2010. *Water Augmentation Study: Research, Strategy, and Implementation Report*.

⁶⁵ Los Angeles and San Gabriel River Watershed Council. 2005. *Los Angeles Basin Water Augmentation Study Phase II Final Report*.

(such as infiltration) ways. Both direct and indirect methods can be completed on a variety of different scales. To maximize the benefits available from using recycled water, the direct and indirect projects will need to be completed on household, neighborhood, watershed and regional scales. Currently there are a limited (but growing) number of projects in the region that can serve as examples of what may be accomplished through the development and implementation of recycled water projects. The Los Angeles County MS4 permit addresses the need for recycled water by controlling pollutants in storm water, which will result in water of improved quality with a greater potential for recycling or beneficial use. State law and policy advocates greatly expanding the use of recycled water to help meet local demand and reduce the volumes of water that are imported from other regions. Increased utilization of recycled water will require looking beyond the traditional reclaimed wastewater and will require utilizing storm water that is wasted by conveyance in the MS4 and dumping into the ocean. Storm water capture and use has not traditionally been included in the discussion of water recycling, but the process meets the definitional constraints and is bound by the same limitations and boundaries.

In addition, there are a number of Total Maximum Daily Loads (TMDLs) developed by the Regional Water Board that incorporate recycled water programs as potential implementation actions to meet TMDL requirements. These potential actions focus on both traditional water recycling and the newer storm water recycling approaches. Such recycled water programs could also reduce reliance on potable water supplies by expanding water recycling and aiding in the reclamation of poor quality, unconfined groundwater supplies. The capture, treatment and use of stormwater could augment these techniques as well. On-site capture of storm water helps prevent the water from being contaminated by urban by-products to begin with and the use of this high quality resource could reduce the unnecessary use of potable water for non-potable needs.

Some great examples of onsite capture are being demonstrated by TreePeople⁶⁶ who have demonstration projects ranging from small scale rainwater harvesting at the single family home locations, to large scale watershed projects at Tuxedo Green in Sun Valley where the project redesigned the intersection with a flood control system that conveys most stormwater under, instead of into, the busy intersection. The water is stored in a 45,000-gallon cistern to be used for irrigating the landscaping at the new pocket park, which is planted with native and drought-tolerant species.

Another state of the art project was implemented by the City of Santa Monica called the Santa Monica Urban Runoff Recycling Facility (SMURRF).⁶⁷ The project harnesses the urban runoff (primarily during the dry season) and treats it for various pollutants to create a source of high quality water for reuse in landscape irrigation. Because the facility captures the dry weather runoff before it reaches the Santa Monica Bay it decreases a significant amount of pollutants from negatively impacting the Bay and associated beaches. The SMURRF is also open to the public and has several exhibits to raise public awareness of Santa Monica Bay pollution and the role of each individual in the watershed's health.

⁶⁶ www.treepeople.org

⁶⁷ <http://c0133251.cdn.cloudfiles.rackspacecloud.com/Case%20Study%20-%20Santa%20Monica%20Urban%20Runoff%20Recycling%20Facility%20SMURRF.pdf>

The County of Los Angeles Department of Public Works, Watershed Management Division has targeted the Sun Valley Watershed "...to solve the local flooding problem while retaining all storm water runoff from the watershed, increasing water conservation, recreational opportunities, wildlife habitat, and reducing stormwater pollution."⁶⁸ This aggressive plan involves several stakeholders and has implemented a variety of on-site BMPs as well as storm water infiltration retrofits and diversions.

IX. STATE MANDATES

Article XIII B, Section 6(a) of the California Constitution provides that whenever "any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service." The requirements of this Order do not constitute state mandates that are subject to a subvention of funds for several reasons, including, but not limited to, the following.

First, the requirements of this Order do not constitute a new program or a higher level of service as compared to the requirements contained in the previous permit, Order No. 01-182 (as amended). The overarching requirement to impose controls to reduce the pollutants in discharges from MS4s is dictated by the Clean Water Act and is not new to this permit cycle. (33 U.S.C. §1342(p)(3)(B).) The inclusion of new and advanced measures as the MS4 programs evolve and mature over time is anticipated under the Clean Water Act (55 Fed.Reg. 47990, 48052 (Nov. 16, 1990)), and these new and advanced measures do not constitute a new program or higher level of service.

Second, and more broadly, mandates imposed by federal law, rather than by a state agency, are exempt from the requirement that the local agency's expenditures be reimbursed. (Cal. Const., art. XIII B, §9, subd. (b).) This Order implements federally mandated requirements under the Clean Water Act and its requirements are therefore not subject to subvention of funds. This includes federal requirements to effectively prohibit non-storm water discharges, to reduce the discharge of pollutants to the maximum extent practicable, and to include such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. (30 U.S.C. §1342(p)(3)(B).) Federal cases have held these provisions require the development of permits and permit provisions on a case-by-case basis to satisfy federal requirements. (*Natural Resources Defense Council, Inc. v. U.S. E.P.A.* (9th Cir. 1992) 966 F.2d 1292, 1308, fn. 17.) The authority exercised under this Order is not reserved state authority under the Clean Water Act's savings clause (cf. *Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 627-628 [relying on 33 U.S.C. § 1370, which allows a state to develop requirements which are not "less stringent" than federal requirements]), but instead is part of a federal mandate to develop pollutant reduction requirements for municipal separate storm sewer systems. To this extent, it is entirely federal authority that forms the legal basis to establish the permit provisions. (See, *City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389; *Building Industry Ass'n of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866, 882-883.)

⁶⁸ http://www.sunvalleywatershed.org/watershed_management_plan/wmp-0ES.pdf

The maximum extent practicable standard is a flexible standard that balances a number of considerations, including technical feasibility, cost, public acceptance, regulatory compliance, and effectiveness. (*Building Ind. Asso.*, *supra*, 124 Cal. App.4th at pp. 873, 874, 889.) Such considerations change over time with advances in technology and with experience gained in storm water management. (55 Fed.Reg. 47990, 48052 (Nov. 16, 1990).) Accordingly, a determination of whether the conditions contained in this Order exceed the requirements of federal law cannot be based on a point by point comparison of the permit conditions and the six minimum control measures that are required “at a minimum” to reduce pollutants to the maximum extent practicable and to protect water quality (40 CFR § 122.34). Rather, the appropriate focus is whether the permit conditions, as a whole, exceed the maximum extent practicable standard. In recent months, the County of Los Angeles and County of Sacramento Superior Courts have granted writs setting aside decisions of the Commission on State Mandates that held that certain requirements in Phase I permits constituted unfunded mandates. In both cases, the courts found that the correct analysis in determining whether a MS4 permit constituted a state mandate was to evaluate whether the permit as a whole -- and not a specific permit provision -- exceeds the maximum extent practicable standard. (*State of Cal. v. Comm. on State Mandates* (Super. Ct. Sacramento County, 2012, No. 34-2010-80000604), *State of Cal. v. County of Los Angeles* (Super. Ct. Los Angeles County, 2011, No. BS130730).)

The requirements of the Order, taken as a whole rather than individually, are necessary to reduce the discharge of pollutants to the maximum extent practicable and to protect water quality. The Regional Water Board finds that the requirements of the Order are practicable, do not exceed federal law, and thus do not constitute an unfunded mandate. These findings are the expert conclusions of the principal state agency charged with implementing the NPDES program in California. (Cal. Wat. Code, §§ 13001, 13370.)

It should also be noted that the provisions in this Order to effectively prohibit non-storm water discharges are also mandated by the Clean Water Act. (33 U.S.C. § 1342(p)(3)(B)(ii).) Likewise, the provisions of this Order to implement total maximum daily loads (TMDLs) are federal mandates. The Clean Water Act requires TMDLs to be developed for water bodies that do not meet federal water quality standards. (33 U.S.C. § 1313(d).) Once the USEPA or a state establishes or adopts a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions and requirements of any applicable waste load allocation in a TMDL. (40 CFR § 122.44(d)(1)(vii)(B).)

Third, the local agency Permittees’ obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental dischargers who are issued NPDES permits for storm water discharges. With a few inapplicable exceptions, the Clean Water Act regulates the discharge of pollutants from point sources (33 U.S.C. § 1342) and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) regulates the discharge of waste (Cal. Wat. Code, § 13263), both without regard to the source of the pollutant or waste. As a result, the “costs incurred by local agencies” to protect water quality reflect an overarching regulatory scheme that places similar requirements on governmental and non-governmental dischargers. (See *County of Los Angeles v. State of California* (1987) 43 Cal.3d 46, 57-58 [finding comprehensive workers compensation scheme did not create a cost for local agencies that was subject to state subvention].)

The Clean Water Act and the Porter-Cologne Act largely regulate storm water with an even hand, but to the extent there is any relaxation of this even-handed regulation, it is in favor of the local agencies. Generally, the Clean Water Act requires point source dischargers, including discharges of storm water associated with industrial or construction activity, to comply strictly with water quality standards. (33 U.S.C. § 1311(b)(1)(C), *Defenders of Wildlife v. Browner* (1999) 191 F.3d 1159, 1164-1165 [noting that industrial storm water discharges must strictly comply with water quality standards].) As discussed in prior State Water Resources Control Board decisions, certain provisions of this Order do not require strict compliance with water quality standards. (SWRCB Order No. WQ 2001-15, p. 7.) Those provisions of this Order regulate the discharge of waste in municipal storm water under the Clean Water Act MEP standard, not the BAT/BCT standard that applies to other types of discharges. These provisions, therefore, regulate the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.

Fourth, the Permittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in Clean Water Act section 301, subdivision (a) (33 U.S.C. § 1311(a)). To the extent that the local agencies have voluntarily availed themselves of the permit, the program is not a state mandate. (*Accord County of San Diego v. State of California* (1997) 15 Cal.4th 68, 107-108.)

Fifth, the local agencies' responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under state law predates the enactment of Article XIII B, Section (6) of the California Constitution.

Finally, even if any of the permit provisions could be considered unfunded mandates, under Government Code section 17556, subdivision (d), a state mandate is not subject to reimbursement if the local agency has the authority to charge a fee. The local agency Permittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order subject to certain voting requirements contained in the California Constitution. (See California Constitution XIII D, section 6, subdivision (c); see also *Howard Jarvis Taxpayers Association v. City of Salinas* (2002) 98 Cal. App. 4th 1351, 1358-1359.) Additional fee authority has recently been established through amendments to the Los Angeles County Flood Control Act (Chapter 755 of the Statutes of 1915, as amended by Assembly Bill 2554 (2010)) to provide funding for municipalities, watershed authority groups, and the LACFCD to initiate, plan, design, construct, implement, operate, maintain, and sustain projects and services to improve surface water quality and reduce storm water and non-storm water pollution in the LACFCD, which may directly support Permittees' implementation of the requirements in this Order. The Fact Sheet demonstrates that numerous activities contribute to the pollutant loading in the municipal separate storm sewer system. Local agencies can levy service charges, fees, or assessments on these activities, independent of real property ownership. (See, e.g., *Apartment Ass'n of Los Angeles County, Inc. v. City of Los Angeles* (2001) 24 Cal.4th 830, 842 [upholding inspection fees associated with renting property].) The authority and ability of a local agency to defray the cost of a program without raising taxes indicates that a program does not entail a cost subject to subvention. (*Clovis Unified School Dist. v. Chiang* (2010) 188

Cal. App.4th 794, 812, quoting *Connell v. Superior Court* (1997) 59 Cal.App.4th 382, 401; *County of Fresno v. State of California* (1991) 53 Cal.3d 482, 487-488.)

X. PUBLIC PARTICIPATION

Regional Water Board staff held a kick-off meeting on May 25, 2011 to discuss the preliminary schedule for permit development; identify potential alternative permit structures; and outline some of the major technical and policy aspects of permit development. All LA County MS4 Permittees, as well as other known interested stakeholders, were invited to attend. Ninety-five individuals attended the meeting, representing most of the permittees as well as environmental organizations. After a presentation by Board staff, Permittees and interested persons had an initial opportunity to ask questions of staff, raise concerns, and provide feedback.

At the May 25, 2011 kick-off meeting, Board staff requested input from the attendees on various permit structures. In order to solicit more focused input from permittees on alternative permit structures, and per suggestions at the kick-off meeting, Board staff developed and distributed an on-line survey to permittees using the on-line survey tool, SurveyMonkey®. The survey was distributed to all Los Angeles County MS4 Permittees on June 14, 2011 and responses were requested within two weeks. Fifty-two permittees responded using the on-line survey tool. The on-line survey sought input on several options for permit structure, including an individual permit for each municipality, a single permit for all permittees (i.e., the existing permit structure), and a single or multiple watershed-based permits.

Regional Water Board staff also held three topical workshops on December 15, 2011, January 23, 2012, and March 1, 2012. At the December 2011 workshop, staff discussed and invited feedback on: tentative permit requirements for the “minimum control measures” that comprise Permittees core storm water management program, approaches to addressing non-storm water MS4 discharges, and options for flexibility in permit requirements to address watershed priorities. At the January 2012 workshop, staff discussed and invited feedback on: tentative permit requirements to implement TMDL waste load allocations assigned to MS4 discharges and monitoring and reporting requirements for this Order. At the March 2012 workshop, staff discussed the use of water quality-based effluent limitations in this Order, discussed a revised proposal for monitoring requirements based on comments from the January 2012 workshop, and provided additional detail on proposed minimum control measure requirements.

Three Regional Water Board workshops were held during regularly scheduled Board meetings on November 10, 2011, April 5, 2012, and May 3, 2012. At the November 2011 Board workshop, staff discussed the objectives for the new permit, the status and schedule for permit development, alternatives for permit structure, provisions to implement TMDL WLAs, and provisions for minimum control measures, and identified preliminary considerations related to provisions for non-storm water discharges, receiving water limitations, water quality-based effluent limitations, and requirements for monitoring and reporting.

Prior to the April 5, 2012 Board workshop, staff released complete working proposals of the permit provisions related to two key parts of this Order: the storm water management

program “minimum control measures” and the non-storm water MS4 discharge prohibitions on March 21, 2012 and March 28, 2012, respectively. Staff provided Permittees and interested persons the opportunity to submit written and oral comments over a period of three weeks for early consideration by staff prior to the release of the tentative Order. At the April 2012 Board workshop, staff presented the working proposals and the Board invited public comments. Detailed comments were made on both working proposals, and in particular, comments were made on how to address “essential” non-storm water discharges from drinking water supplier distribution systems and fire fighting activities in this Order.

Prior to the May 3, 2012 Board workshop, staff released complete working proposals of the permit provisions related to three other key parts of this Order: provisions for watershed management programs, TMDL-related requirements, and receiving water limitations language. Staff provided Permittees and interested persons the opportunity to submit written and oral comments over a period of three weeks for early consideration by staff prior to the release of the tentative Order. At the May 2012 Board workshop, staff presented the three working proposals and the Board invited public comments. Staff answered extensive questions from Board members following public comments.

In addition to staff and Board workshops, Regional Water Board staff met regularly with Permittees, including the LA Permit Group (a coalition of 62 of the 86 Permittees covered by this Order), the Los Angeles County Flood Control District and the County of Los Angeles, the City of Los Angeles, and interested environmental organizations including Heal the Bay, Santa Monica Baykeeper, and the Natural Resources Defense Council (NRDC). Staff also met on several occasions with other affected agencies including large public water suppliers (Los Angeles Department of Water and Power and Metropolitan Water District), small community water suppliers, and local fire departments.

Finally, staff hosted several “joint” meetings to bring together key leaders among the Permittees and environmental organizations to discuss significant issues and work towards consensus on these issues where possible. The first two of these were held on May 17, 2012 and May 31, 2012, during which the group discussed permit requirements for USEPA established TMDLs. Staff prepared a working proposal based on the areas of agreement from the May 17th joint meeting, and distributed the proposal for review prior to the second meeting on May 31st. The proposal was discussed and refined at the second meeting. A third meeting was held on June 14, 2012.

Prior to the Board’s consideration of this Order, the Regional Water Board notified the Permittees and all interested agencies and persons of its intent to hold a hearing to issue an NPDES permit for discharges from the Los Angeles County MS4 and provided them with an opportunity to submit written comments over a 45-day period. The procedures followed for submission of written comments are described in the Notice of Hearing and Opportunity to Comment published for this Order. Notification was provided through the Regional Water Board’s website, the Regional Water Board’s e-mail subscription service, and the LA Times. After releasing the tentative permit for public review, the Regional Water Board held a staff level workshop on July 9, 2012 to answer questions regarding the tentative permit. A Board member field tour of portions of the MS4 in the San Gabriel Valley was held on July 31, 2012.

The Regional Water Board held a public hearing on the tentative Order during its regular Board meeting on October 4-5, 2012. The Regional Water Board continued the public hearing at its next regular Board meeting on November 8, 2012. Permittees and interested persons were invited to attend. At the public hearing, the Regional Water Board heard testimony and comments pertinent to the discharge and this Order. The hearing procedures followed by the Regional Water Board are described in the Notice of Hearing and Opportunity to Comment published for this Order.

ATTACHMENT G. NON-STORM WATER ACTION LEVELS AND MUNICIPAL ACTION LEVELS**I. SANTA CLARA RIVER WATERSHED AREA****Table G-1. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)**

Parameter	Units	Average Monthly	Daily Maximum
<i>E. coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Chloride	mg/L	³	--
Sulfate	mg/L	³	--
Total Dissolved Solids	mg/L	³	--
Methylene Blue Active Substances	mg/L	0.5 ⁴	--
Aluminum, Total Recoverable	mg/L	1.0 ⁴	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	⁵	⁵
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. coli* density shall not exceed a geometric mean of 126/100 ml.

² *E. coli* density in a single sample shall not exceed 235/100 ml.

³ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.

⁴ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

⁵ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-2. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Total Coliform Bacteria	#/100 ml	1,000 ³	10,000 ⁴
Fecal Coliform Bacteria	#/100 ml	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ³	104 ⁴
Chloride	mg/L	⁵	--
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Methylene Blue Active Substances	mg/L	0.5 ⁶	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁷	⁷
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. coli* density shall not exceed a geometric mean of 126/100 ml.

² *E. coli* density in a single sample shall not exceed 235/100 ml.

³ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁷ The applicable action level is the most stringent between corresponding Table G-1 and Table G-3 action levels.

Table G-3. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ^{1,2}	10,000 ^{2,3}
Fecal Coliform Bacteria	#/100 ml	200 ¹	400 ³
Enterococcus Bacteria	#/100 ml	35 ¹	104 ³
Chloride	mg/L	4	--
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--
Methylene Blue Active Substances	mg/L	0.5 ⁵	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	58	117

- ¹ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-4. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Coliform Bacteria	#/100 ml	70 ¹	230 ¹	--
Fecal Coliform Bacteria	#/100 ml	--	200 ²	400 ³
Enterococcus Bacteria	#/100 ml	--	35 ²	104 ³
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

- ² Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

II. LOS ANGELES RIVER WATERSHED MANAGEMENT AREA

Table G-5. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Chloride	mg/L	⁴	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁵	--
Sulfate	mg/L	⁴	--
Total Dissolved Solids	mg/L	⁴	--
Turbidity	NTU	5 ⁵	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	⁶	⁶
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁶ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-6. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Chloride	mg/L	⁶	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁷	--
Sulfate	mg/L	⁶	--
Total Dissolved Solids	mg/L	⁶	--
Turbidity	NTU	5 ⁷	--
Aluminum, Total Recoverable	mg/L	1.0 ⁷	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁸	⁸

Parameter	Units	Average Monthly	Daily Maximum
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁷ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁸ The applicable action level is the most stringent between corresponding Table G-5 and Table G-7 action levels.

Table G-7. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2, 3}	10,000 ^{3, 4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Chloride	mg/L	⁵	--
Nitrite Nitrogen, Total (as N)	mg/L	1.0 ⁶	--
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Turbidity	NTU	5 ⁶	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-8. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Turbidity	NTU	75	100	225
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

¹ Within the range of 6.0 to 9.0 at all times.

² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

III. DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA

Table G-9. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	4	4
Lead, Total Recoverable	µg/L	4	4
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ Within the range of 6.5 to 8.5 at all times.

² *E. coli* density shall not exceed a geometric mean of 126/100 ml.

³ *E. coli* density in a single sample shall not exceed 235/100 ml.

⁴ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-10. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	s.u	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵

Parameter	Units	Average Monthly	Daily Maximum
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	⁶	⁶
Lead, Total Recoverable	µg/L	⁶	⁶
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ The applicable action level is the most stringent between corresponding Table G-9 and Table G-11 action levels.

Table G-11. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	s.u	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{3,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

Table G-12. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	s.u	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

¹ Within the range of 6.0 to 9.0 at all times.

² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

IV. BALLONA CREEK WATERSHED MANAGEMENT AREA

Table G-13. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Cyanide, Total Recoverable	µg/L	4.3	8.5
Copper, Total Recoverable	µg/L	4	4
Lead, Total Recoverable	µg/L	4	4
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ Within the range of 6.5 to 8.5 at all times.

² *E. coli* density shall not exceed a geometric mean of 126/100 ml.

³ *E. coli* density in a single sample shall not exceed 235/100 ml.

⁴ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-14. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Cyanide	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	6	6
Lead, Total Recoverable	µg/L	6	6
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ Within the range of 6.5 to 8.5 at all times.

² *E. coli* density shall not exceed a geometric mean of 126/100 ml.

- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ The applicable action level is the most stringent between corresponding Table G-13 and Table G-15 action levels.

Table G-15. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.5-8.5 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{3,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Cyanide, Total Recoverable	µg/L	0.50	1.0
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.1
Selenium, Total Recoverable	µg/L	58	117

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

Table G-16. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ Within the range of 6.0 to 9.0 at all times.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

V. MALIBU CREEK WATERSHED MANAGEMENT AREA NON-STORM WATER ACTION LEVELS

Table G-17. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Sulfate	mg/L	³	--
Total Dissolved Solids	mg/L	³	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. coli* density shall not exceed a geometric mean of 126/100 ml.

² *E. coli* density in a single sample shall not exceed 235/100 ml.

³ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.

Table G-18. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
<i>E. coli</i> Bacteria	#/100 ml	126 ¹	235 ²
Total Coliform Bacteria	#/100 ml	1,000 ³	10,000 ⁴
Fecal Coliform Bacteria	#/100 ml	200 ³	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ³	104 ⁴
Sulfate	mg/L	⁵	--
Total Dissolved Solids	mg/L	⁵	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	4.1	8.2

¹ *E. coli* density shall not exceed a geometric mean of 126/100 ml.

² *E. coli* density in a single sample shall not exceed 235/100 ml.

³ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

⁵ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.

Table G-19. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
Total Coliform Bacteria	#/100 ml	1,000 ^{1,2}	10,000 ^{2,3}
Fecal Coliform Bacteria	#/100 ml	200 ¹	400 ³
Enterococcus Bacteria	#/100 ml	35 ¹	104 ³
Sulfate	mg/L	⁴	--
Total Dissolved Solids	mg/L	⁴	--

Parameter	Units	Average Monthly	Daily Maximum
Cyanide, Total Recoverable	µg/L	0.50	1.0
Mercury, Total Recoverable	µg/L	0.051	0.10
Selenium, Total Recoverable	µg/L	58	117

- ¹ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ³ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.

Table G-20. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Coliform Bacteria	#/100 ml	70 ¹	230 ¹	--
Fecal Coliform Bacteria	#/100 ml	--	200 ²	400 ³
Enterococcus Bacteria	#/100 ml	--	35 ²	104 ³
Cyanide, Total Recoverable	µg/L	1	4	10
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Selenium, Total Recoverable	µg/L	15	60	150

- ¹ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ² Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

VI. SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA

Table G-21. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or less than 1 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Chloride	mg/L	4	--
Nitrate Nitrogen, Total (as N)	mg/L	4	--
Sulfate	mg/L	4	--
Total Dissolved Solids	mg/L	4	--
Aluminum, Total Recoverable	mg/L	1.0 ⁵	--
Cyanide, Total Recoverable	µg/L	4.3	8.5
Cadmium, Total Recoverable	µg/L	6	6

Parameter	Units	Average Monthly	Daily Maximum
Copper, Total Recoverable	µg/L	6	6
Lead, Total Recoverable	µg/L	6	6
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	6	6
Selenium, Total Recoverable	µg/L	4.1	8.2
Silver, Total Recoverable	µg/L	6	6
Zinc, Total Recoverable	µg/L	6	6

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁵ Applicable only to discharges to receiving waters or receiving waters with underlying groundwater designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁶ Action levels are hardness dependent. See Section VII of this Attachment for a listing of the applicable action levels.

Table G-22. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity between 1 ppt and 10 ppt)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
<i>E. coli</i> Bacteria	#/100 ml	126 ²	235 ³
Total Coliform Bacteria	#/100 ml	1,000 ⁴	10,000 ⁵
Fecal Coliform Bacteria	#/100 ml	200 ⁴	400 ⁵
Enterococcus Bacteria	#/100 ml	35 ⁴	104 ⁵
Chloride	mg/L	6	--
Nitrate Nitrogen, Total (as N)	mg/L	6	--
Sulfate	mg/L	6	--
Total Dissolved Solids	mg/L	6	--
Aluminum, Total Recoverable	mg/L	1.0 ⁷	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Cadmium, Total Recoverable	µg/L	8	8
Copper, Total Recoverable	µg/L	8	8
Lead, Total Recoverable	µg/L	8	8
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	8	8
Selenium, Total Recoverable	µg/L	4.1	8.2
Silver, Total Recoverable	µg/L	8	8
Zinc, Total Recoverable	µg/L	8	8

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² *E. coli* density shall not exceed a geometric mean of 126/100 ml.
- ³ *E. coli* density in a single sample shall not exceed 235/100 ml.
- ⁴ Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ⁵ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁶ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁷ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.
- ⁸ The applicable action level is the most stringent between corresponding Table G-21 and Table G-23 action levels.

Table G-23. Action Levels for Discharges to Inland Surface Waters, Enclosed Bays, and Estuaries (with receiving water salinity equal to or greater than 10 ppt 95% or more of the time)

Parameter	Units	Average Monthly	Daily Maximum
pH	Standard units	6.0-9.0 ¹	
Total Coliform Bacteria	#/100 ml	1,000 ^{2,3}	10,000 ^{2,4}
Fecal Coliform Bacteria	#/100 ml	200 ²	400 ⁴
Enterococcus Bacteria	#/100 ml	35 ²	104 ⁴
Chloride	mg/L	5	--
Nitrate Nitrogen, Total (as N)	mg/L	5	--
Sulfate	mg/L	5	--
Total Dissolved Solids	mg/L	5	--
Aluminum, Total Recoverable	mg/L	1.0 ⁶	--
Cyanide, Total Recoverable	µg/L	0.50	1.0
Cadmium, Total Recoverable	µg/L	7.7	15
Copper, Total Recoverable	µg/L	2.9	5.8
Lead, Total Recoverable	µg/L	7.0	14
Mercury, Total Recoverable	µg/L	0.051	0.10
Nickel, Total Recoverable	µg/L	6.8	14
Silver, Total Recoverable	µg/L	1.1	2.2
Selenium, Total Recoverable	µg/L	58	117
Zinc, Total Recoverable	µg/L	47	95

- ¹ Within the range of 6.5 to 8.5 at all times.
- ² Total coliform density shall not exceed a geometric mean of 1,000/100 ml. Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.
- ³ In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.
- ⁴ Total coliform density in a single sample shall not exceed 10,000/100 ml. Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.
- ⁵ In accordance with applicable water quality objectives contained in Chapter 3 of the Basin Plan.
- ⁶ Applicable only to discharges to receiving waters designated for Municipal and Domestic Supply (MUN) use as specified in Tables 2-1 and 2-2 of the Basin Plan.

Table G-24. Action Levels for Discharges to Ocean Waters (Surf Zone)

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
pH	Standard units	6.0-9.0 ¹		
Total Coliform Bacteria	#/100 ml	70 ²	230 ²	--
Fecal Coliform Bacteria	#/100 ml	--	200 ³	400 ⁴
Enterococcus	#/100 ml	--	35 ³	104 ⁴
Cyanide, Total Recoverable	µg/L	1	4	10
Cadmium, Total Recoverable	µg/L	1	4	10
Copper, Total Recoverable	µg/L	3	12	30

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Lead, Total Recoverable	µg/L	2	8	20
Mercury, Total Recoverable	µg/L	0.04	0.16	0.4
Nickel, Total Recoverable	µg/L	5	20	50
Silver, Total Recoverable	µg/L	0.7	2.8	7.0
Selenium, Total Recoverable	µg/L	15	60	150
Zinc, Total Recoverable	µg/L	20	80	200

¹ Within the range of 6.0 to 9.0 at all times.

² In areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the median total coliform density shall not exceed 70/100 ml and not more than 10 percent of the samples shall exceed 230/100 ml.

³ Fecal coliform density shall not exceed a geometric mean of 200/100 ml. Enterococcus density shall not exceed a geometric mean of 35/100 ml.

⁴ Fecal coliform density in a single sample shall not exceed 400/100 ml. Enterococcus density shall not exceed a geometric mean of 104/100 ml.

VII. HARDNESS-BASED ACTION LEVELS FOR METALS

Cadmium, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.1	0.2	125.0	2.4	4.8	245.0	4.1	8.2
10.0	0.2	0.3	130.0	2.5	5.0	250.0	4.1	8.3
15.0	0.3	0.5	135.0	2.5	5.1	255.0	4.2	8.4
20.0	0.4	0.7	140.0	2.6	5.3	260.0	4.3	8.5
25.0	0.5	0.9	145.0	2.7	5.4	265.0	4.3	8.7
30.0	0.6	1.2	150.0	2.8	5.5	270.0	4.4	8.8
35.0	0.7	1.4	155.0	2.8	5.7	275.0	4.5	8.9
40.0	0.8	1.6	160.0	2.9	5.8	280.0	4.5	9.1
45.0	0.9	1.8	165.0	3.0	6.0	285.0	4.6	9.2
50.0	1.0	2.1	170.0	3.1	6.1	290.0	4.6	9.3
55.0	1.1	2.3	175.0	3.1	6.3	295.0	4.7	9.4
60.0	1.3	2.5	180.0	3.2	6.4	300.0	4.8	9.6
65.0	1.4	2.8	185.0	3.3	6.5	310.0	4.9	9.8
70.0	1.5	3.0	190.0	3.3	6.7	320.0	5.0	10.1
75.0	1.6	3.2	195.0	3.4	6.8	330.0	5.1	10.3
80.0	1.7	3.4	200.0	3.5	7.0	340.0	5.3	10.5
85.0	1.8	3.6	205.0	3.5	7.1	350.0	5.4	10.8
90.0	1.9	3.7	210.0	3.6	7.2	360.0	5.5	11.0
95.0	1.9	3.9	215.0	3.7	7.4	370.0	5.6	11.3
100.0	2.0	4.0	220.0	3.7	7.5	380.0	5.7	11.5
105.0	2.1	4.2	225.0	3.8	7.6	390.0	5.9	11.7
110.0	2.2	4.3	230.0	3.9	7.8	400.0	6.0	12.0
115.0	2.2	4.5	235.0	3.9	7.9	>400	6.0	12.0

Cadmium, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
120.0	2.3	4.7	240.0	4.0	8.0			

Copper, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.4	0.8	125.0	8.6	17.2	245.0	16.2	32.5
10.0	0.8	1.6	130.0	8.9	17.9	250.0	16.5	33.1
15.0	1.2	2.3	135.0	9.2	18.5	255.0	16.8	33.8
20.0	1.5	3.1	140.0	9.6	19.2	260.0	17.1	34.4
25.0	1.9	3.8	145.0	9.9	19.8	265.0	17.4	35.0
30.0	2.2	4.5	150.0	10.2	20.5	270.0	17.8	35.6
35.0	2.6	5.2	155.0	10.5	21.1	275.0	18.1	36.2
40.0	2.9	5.9	160.0	10.8	21.8	280.0	18.4	36.9
45.0	3.3	6.6	165.0	11.2	22.4	285.0	18.6	37.4
50.0	3.6	7.3	170.0	11.5	23.0	290.0	18.9	38.0
55.0	4.0	8.0	175.0	11.8	23.7	295.0	19.2	38.5
60.0	4.3	8.6	180.0	12.1	24.3	300.0	19.5	39.1
65.0	4.6	9.3	185.0	12.4	25.0	310.0	20.0	40.2
70.0	5.0	10.0	190.0	12.8	25.6	320.0	20.6	41.3
75.0	5.3	10.7	195.0	13.1	26.2	330.0	21.1	42.4
80.0	5.6	11.3	200.0	13.4	26.9	340.0	21.7	43.5
85.0	6.0	12.0	205.0	13.7	27.5	350.0	22.2	44.6
90.0	6.3	12.7	210.0	14.0	28.1	360.0	22.8	45.7
95.0	6.6	13.3	215.0	14.3	28.7	370.0	23.3	46.8
100.0	7.0	14.0	220.0	14.6	29.4	380.0	23.8	47.8
105.0	7.3	14.6	225.0	15.0	30.0	390.0	24.4	48.9
110.0	7.6	15.3	230.0	15.3	30.6	400.0	24.9	50.0
115.0	7.9	15.9	235.0	15.6	31.3	>400	24.9	50.0
120.0	8.3	16.6	240.0	15.9	31.9			

Lead, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	0.1	0.1	125.0	3.5	6.9	245.0	8.1	16.3
10.0	0.1	0.3	130.0	3.6	7.3	250.0	8.3	16.7
15.0	0.2	0.5	135.0	3.8	7.6	255.0	8.6	17.2
20.0	0.3	0.7	140.0	4.0	8.0	260.0	8.8	17.6
25.0	0.4	0.9	145.0	4.2	8.4	265.0	9.0	18.0
30.0	0.6	1.1	150.0	4.4	8.7	270.0	9.2	18.5
35.0	0.7	1.4	155.0	4.5	9.1	275.0	9.4	18.9
40.0	0.8	1.6	160.0	4.7	9.5	280.0	9.6	19.3

Lead, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
45.0	0.9	1.9	165.0	4.9	9.9	285.0	9.9	19.8
50.0	1.1	2.2	170.0	5.1	10.2	290.0	10.1	20.2
55.0	1.2	2.4	175.0	5.3	10.6	295.0	10.3	20.7
60.0	1.4	2.7	180.0	5.5	11.0	300.0	10.5	21.1
65.0	1.5	3.0	185.0	5.7	11.4	310.0	11.0	22.0
70.0	1.7	3.3	190.0	5.9	11.8	320.0	11.4	22.9
75.0	1.8	3.6	195.0	6.1	12.2	330.0	11.9	23.8
80.0	2.0	3.9	200.0	6.3	12.6	340.0	12.3	24.8
85.0	2.1	4.2	205.0	6.5	13.0	350.0	12.8	25.7
90.0	2.3	4.6	210.0	6.7	13.4	360.0	13.3	26.6
95.0	2.4	4.9	215.0	6.9	13.8	370.0	13.7	27.6
100.0	2.6	5.2	220.0	7.1	14.2	380.0	14.2	28.5
105.0	2.8	5.5	225.0	7.3	14.6	390.0	14.7	29.5
110.0	2.9	5.9	230.0	7.5	15.1	400.0	15.2	30.5
115.0	3.1	6.2	235.0	7.7	15.5	>400	15.2	30.5
120.0	3.3	6.6	240.0	7.9	15.9			

Nickel, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	3.4	6.8	125.0	51.5	103.3	245.0	90.9	182.5
10.0	6.1	12.2	130.0	53.2	106.7	250.0	92.5	185.6
15.0	8.6	17.2	135.0	54.9	110.2	255.0	94.1	188.7
20.0	10.9	21.9	140.0	56.6	113.6	260.0	95.6	191.9
25.0	13.2	26.5	145.0	58.3	117.1	265.0	97.2	195.0
30.0	15.4	30.9	150.0	60.0	120.5	270.0	98.7	198.1
35.0	17.5	35.2	155.0	61.7	123.9	275.0	100.3	201.2
40.0	19.6	39.4	160.0	63.4	127.2	280.0	101.8	204.3
45.0	21.7	43.5	165.0	65.1	130.6	285.0	103.3	207.4
50.0	23.7	47.6	170.0	66.8	133.9	290.0	104.9	210.4
55.0	25.7	51.6	175.0	68.4	137.3	295.0	106.4	213.5
60.0	27.7	55.5	180.0	70.1	140.6	300.0	107.9	216.6
65.0	29.6	59.4	185.0	71.7	143.9	310.0	111.0	222.7
70.0	31.5	63.2	190.0	73.3	147.1	320.0	114.0	228.7
75.0	33.4	67.0	195.0	75.0	150.4	330.0	117.0	234.7
80.0	35.3	70.8	200.0	76.6	153.7	340.0	120.0	240.7
85.0	37.1	74.5	205.0	78.2	156.9	350.0	123.0	246.7
90.0	39.0	78.2	210.0	79.8	160.2	360.0	125.9	252.7
95.0	40.8	81.9	215.0	81.4	163.4	370.0	128.9	258.6
100.0	42.6	85.5	220.0	83.0	166.6	380.0	131.8	264.5
105.0	44.4	89.1	225.0	84.6	169.8	390.0	134.8	270.4
110.0	46.2	92.7	230.0	86.2	173.0	400.0	137.7	276.2
115.0	48.0	96.2	235.0	87.8	176.1	>400	137.7	276.2

Nickel, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
120.0	49.7	99.8	240.0	89.4	179.3			

Zinc, Total Recoverable								
Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)	Hardness (mg/L as CaCO ₃)	AMAL (µg/L)	MDAL (µg/L)
5.0	4.7	9.4	125.0	72.0	144.5	245.0	127.4	255.6
10.0	8.5	17.0	130.0	74.5	149.4	250.0	129.6	260.0
15.0	11.9	24.0	135.0	76.9	154.2	255.0	131.8	264.4
20.0	15.2	30.6	140.0	79.3	159.1	260.0	134.0	268.8
25.0	18.4	37.0	145.0	81.7	163.9	265.0	136.1	273.1
30.0	21.5	43.1	150.0	84.1	168.6	270.0	138.3	277.5
35.0	24.5	49.1	155.0	86.4	173.4	275.0	140.5	281.9
40.0	27.4	55.0	160.0	88.8	178.1	280.0	142.6	286.2
45.0	30.3	60.8	165.0	91.1	182.8	285.0	144.8	290.5
50.0	33.1	66.5	170.0	93.5	187.5	290.0	146.9	294.8
55.0	35.9	72.1	175.0	95.8	192.2	295.0	149.1	299.1
60.0	38.7	77.6	180.0	98.1	196.8	300.0	151.2	303.4
65.0	41.4	83.0	185.0	100.4	201.4	310.0	155.5	312.0
70.0	44.1	88.4	190.0	102.7	206.0	320.0	159.7	320.5
75.0	46.7	93.7	195.0	105.0	210.6	330.0	163.9	328.9
80.0	49.3	99.0	200.0	107.3	215.2	340.0	168.1	337.4
85.0	51.9	104.2	205.0	109.5	219.8	350.0	172.3	345.8
90.0	54.5	109.4	210.0	111.8	224.3	360.0	176.5	354.1
95.0	57.1	114.5	215.0	114.0	228.8	370.0	180.6	362.4
100.0	59.6	119.6	220.0	116.3	233.3	380.0	184.8	370.7
105.0	62.1	124.7	225.0	118.5	237.8	390.0	188.9	379.0
110.0	64.6	129.7	230.0	120.7	242.3	400.0	193.0	387.2
115.0	67.1	134.7	235.0	123.0	246.7	>400	193.0	387.2
120.0	69.6	139.6	240.0	125.2	251.2			

VIII. MUNICIPAL ACTION LEVELS**Conventional Pollutants**

Pollutants	pH	TSS mg/L	COD mg/L	Kjedahl Nitrogen (TKN) mg/L	Nitrate & Nitrite- total mg/L	P- total mg/L
Municipal Action Level	6.0- 9.0	264.1	247.5	4.59	1.85	0.80

Metals

Pollutants	Cd- total µg/L	Cr-total µg/L	Cu- total µg/L	Pb- total µg/L	Ni- total µg/L	Zn- total µg/L	Hg- total µg/L
Municipal Action Level	2.52	20.20	71.12	102.00	27.43	641.3	0.32

This Order establishes Municipal Action Levels (MALs) to identify subwatersheds requiring additional Best Management Practices (BMPs) to reduce pollutant loads and prioritize implementation of additional BMPs. MALs for selected pollutants are based on nationwide Phase I MS4 monitoring data for pollutants in storm water (<http://unix.eng.ua.edu/~rpitt/Research/Research.shtml>, last visited on May 9, 2012). The MALs were obtained by computing the upper 25th percentile for selected pollutants using the statistical program Minitab. Non-detects were removed from the data set and all data from the database were used.

Under this Order, the Municipal Action Levels (MALs) shall be utilized by Permittees to identify subwatersheds discharging pollutants at levels in excess of the MALs. Within those subwatersheds where pollutant levels in the discharge are in excess of the MALs, Permittees shall implement controls and measures necessary to reduce the discharge of pollutants.

In order to determine if MS4 discharges are in excess of the MALs, Permittees shall conduct outfall monitoring as required in the Monitoring and Reporting Program (MRP) (Attachment E). A MAL Assessment Report shall be submitted to the Regional Water Board Executive Officer as part of the Annual Report. The MAL Assessment Report shall present the monitoring data in comparison to the applicable MALs, and identify those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs listed in this attachment in discharges of storm water from the MS4.

Beginning in Year 3 after the effective date of this Order, each Permittee shall submit a MAL Action Plan with the Annual Report (first MAL Action Plan due with December 15, 2015 Annual Report) to the Regional Water Board Executive Officer, for those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs in any discharge of

storm water from the MS4. The plan shall include an assessment of the sources responsible for the MAL exceedances, the existing storm water programs and BMPs that address those sources, an assessment of potential program enhancements, alternative BMPs and actions the Permittee shall implement to reduce discharges to a level that is equivalent to or below the MALs, and an implementation schedule for such actions for Executive Officer approval. The MAL Action Plan shall provide the technical rationale to demonstrate the proposed measures and controls will attain the MALs. If the MAL Action Plan is not approved within 90 days of the due date, the Executive Officer may establish an appropriate plan with at least 90 day notification and consultation to the Permittees.

Within 90 days of the plan approval by the Regional Water Board Executive Officer, the Permittee shall initiate the BMPs and actions proposed in the MAL Action Plan, together with any other practicable BMPs or actions that the Executive Officer determines to be necessary to meet the MALs. The Permittee shall complete the proposed actions in accordance with the approved implementation schedule.

Upon completion of the actions specified in the approved MAL Action Plan, the Permittee shall re-monitor the subject subwatershed in accordance with the MRP, and submit a Post-Project MAL Assessment Report to the Regional Water Board Executive Officer.

Implementation of an approved Watershed Management Program per Part VI.C of the Order fulfills all requirements related to the development and implementation of the MAL Action Plan.

As additional data become available through the MRP or from the Regional Subset of the National Dataset, MALs may be revised annually by the Regional Water Board Executive Officer in accordance with an equivalent statistical method as that used to establish the MALs in this attachment with at least 90 day notification and consultation to the Permittees.

ATTACHMENT H. BIORETENTION / BIOFILTRATION DESIGN CRITERIA

Note: A significant portion of the information in this appendix has been copied verbatim from the *Ventura County Technical Guidance Manual*, Updated 2011, and modified to reflect recent changes to the bioretention/biofiltration soil media specifications as adopted by the California Regional Water Quality Control Board, San Francisco Region, on November 28, 2011, Order No. R2-2011-083, Attachment L. Permittees can submit alternate Bioretention/Biofiltration Design Criteria subject to Executive Officer approval.

1. Geometry

- a. Bioretention/biofiltration areas shall be sized to capture and treat the design with an 18-inch maximum ponding depth. *The intention is that the ponding depth be limited to a depth that will allow for a healthy vegetation layer.*
- b. Minimum planting soil depth should be 2 feet, although 3 feet is preferred. *The intention is that the minimum planting soil depth should provide a beneficial root zone for the chosen plant palette and adequate water storage for the SWQDv.*
- c. A gravel storage layer below the bioretention/biofiltration soil media is required as necessary to provide adequate temporary storage to retain the SWQDv and to promote infiltration.

2. Drainage

- a. Bioretention and biofiltration BMPs should be designed to drain below the planting soil in less than 48 hours and completely drain in less than 96 hours. *The intention is that soils must be allowed to dry out periodically in order to restore hydraulic capacity needed to receive flows from subsequent storms, maintain infiltration rates, maintain adequate soil oxygen levels for healthy soil biota and vegetation, and to provide proper soil conditions for biodegradation and retention of pollutants.*
- b. *Biofiltration BMPs are designed and constructed with an underdrain. The underdrain is preferably placed near the top of the gravel storage area to promote incidental infiltration and enhanced nitrogen removal. However, if in-situ, underlying soils do not provide sufficient drainage, the underdrain may need to be placed lower in the gravel storage area (within 6 inches of the bottom) to prevent the unit from holding stagnant water for extended periods of time. At many sites, clay soils will drain sufficiently fast, particularly if they are not compacted. Observing soil moisture and surface conditions in the days following a wet period may provide sufficient information for making this decision and may be more directly applicable than in situ or laboratory testing of soil characteristics¹.*

3. Overflow

An overflow device is required at the 18-inch ponding depth. The following, or equivalent, should be provided:

- a. A vertical PVC pipe (SDR 35) to act as an overflow riser.

¹ Dan Cloak, Dan Cloak Environmental Consulting to Tom Dalziel, Contra Costa County, February 22, 2011.

- b. The overflow riser(s) should be 6 inches or greater in diameter, so it can be cleaned without damage to the pipe.

The inlet to the riser should be at the ponding depth (18 inches for fenced bioretention areas and 6 inches for areas that are not fenced), and be capped with a spider cap to exclude floating mulch and debris. Spider caps should be screwed in or glued, i.e., not removable.

4. Integrated Water Quality/ Flow Reduction/Resources Management Criteria

- a. When calculating the capacity of an infiltration system, each Permittee shall account for the 24-hour infiltration assuming that the soil is saturated. Infiltration BMPs shall be limited to project sites where the in-situ soil or the amended on-site soils have a demonstrated infiltration rate under saturated conditions of no less than 0.3 inch per hour.
- b. Bioretention BMPs shall be designed to accommodate the minimum design flow at a surface loading rate of 5 inches per hour and no greater than 12 inches per hour, and shall have a total volume, including pore spaces and pre-filter detention volume of no less than the SWQDv.
- c. If rainwater harvested for use in irrigation is to be credited toward the total volume of storm water runoff retained on-site, each Permittee shall require the project proponent to conduct a conservative (assuming reasonable worst-case scenarios) assessment of water demand during the wet-weather season. This volume will be referred to as the "reliable" estimate of irrigation demand. The portion of water to be credited as retained on-site for use in irrigation shall not exceed the reliable estimate of irrigation demand.
- d. Harvested rainwater must be stored in a manner that precludes the breeding of mosquitoes or other vectors or with a draw down not to exceed 96 hours.
- e. When evaluating the potential for on-site retention, each Permittee shall consider the maximum potential for evapotranspiration from green roofs and rainfall harvest and use.
- f. Project requirements shall address at a minimum the potential use of harvested rainwater for non-potable uses including toilet flushing, laundry, and cooling water makeup water. If the municipal, building or county health code(s) does not allow such use of harvested rainwater, each Permittee shall develop a model ordinance and submit it to the city council or County Supervisors for consideration within 24 months after the Order effective date. The model ordinances shall be based on the International Association of Plumbing and Mechanical Officials' (IAPMO's) Green Plumbing and Mechanical Code Supplement to the 2012 National Standard Plumbing Code, or similar guidance to ensure the safe and effective use of harvested rainwater, separate from the existing provisions, if any, for reclaimed wastewater. California is in the process of adopting its 2012 update to the Uniform Plumbing Code that incorporates the IAPMO Green Plumbing and Mechanical Code Supplement. If the State of California update incorporates the IAPMO Green Plumbing and Mechanical Code Supplement, Permittees are not required to adopt a model ordinance addressing the potential use of harvested rainwater for non-potable uses including toilet flushing, laundry, and cooling water makeup water.

5. Hydraulic Restriction Layers

Infiltration pathways may need to be restricted due to the close proximity of roads, foundations, or other infrastructure. A geomembrane liner, or other equivalent water proofing, may be placed along the vertical walls to reduce lateral flows. This liner should have a minimum thickness of 30 mils. Generally, waterproof barriers should not be placed on the bottom of the biofiltration unit, as this would prevent incidental infiltration which is important to meeting the required pollutant load reduction.

6. Planting/Storage Media Specifications

- a. The planting media placed in the cell should achieve a long-term, in-place infiltration rate of at least 5 inches per hour. Higher infiltration rates of up to 12 inches per hour are permissible. Bioretention/biofiltration soil shall retain sufficient moisture to support vigorous plant growth.
- b. Planting media should consist of 60 to 80% fine sand and 20 to 40% compost.
- c. Sand should be free of wood, waste, coating such as clay, stone dust, carbonate, etc. or any other deleterious material. All aggregate passing the No. 200 sieve size should be non-plastic. Sand for bioretention should be analyzed by an accredited lab using #200, #100, #40, #30, #16, #8, #4, and 3/8 sieves (ASTM D 422 or as approved by the local permitting authority) and meet the following gradation (Note: all sands complying with ASTM C33 for fine aggregate comply with the gradation requirements provided in Table H-1):

Table H-1. Sand Texture Specifications

Sieve Size ASTM D422	Percent Passing by Weight	
	Minimum	Maximum
3 /8 inch	100	100
No. 4	90	100
No. 8	70	100
No. 16	40	95
No. 30	15	70
No. 40	5	55
No. 110	0	15
No. 200	0	5

Note: The gradation of the sand component of the media is believed to be a major factor in the hydraulic conductivity of the media mix. If the desired hydraulic conductivity of the media cannot be achieved within the specified proportions of sand and compost (#2), then it may be necessary to utilize sand at the coarser end of the range specified in above (“minimum” column).

- d. Compost should be a well decomposed, stable, weed free organic matter source derived from waste materials including yard debris, wood wastes, or other organic materials not including manure or biosolids meeting standards developed by the US Composting Council (USCC). The product shall be certified through the USCC Seal of Testing Assurance (STA) Program (a compost testing and information disclosure program). Compost quality should be verified via a lab analysis to be:

- Feedstock materials shall be specified and include one or more of the following: landscape/yard trimmings, grass clippings, food scraps, and agricultural crop residues.
- Organic matter: 35-75% dry weight basis.
- Carbon and Nitrogen Ratio: 15:1 < C:N < 25:1
- Maturity/Stability: shall have dark brown color and a soil-like odor. Compost exhibiting a sour or putrid smell, containing recognizable grass or leaves, or is hot (120 F) upon delivery or rewetting is not acceptable.
- Toxicity: any one of the following measures is sufficient to indicate non-toxicity:
 - NH₄:NH₃ < 3
 - Ammonium < 500 ppm, dry weight basis
 - Seed Germination > 80% of control
 - Plant trials > 80% of control
 - Solvita® > 5 index value
- Nutrient content:
 - Total Nitrogen content 0.9% or above preferred
 - Total Boron should be <80 ppm, soluble boron < 2.5 ppm
- Salinity: < 6.0 mmhos/cm
- pH between 6.5 and 8 (may vary with plant palette)
- Compost for bioretention should be analyzed by an accredited lab using #200, ¼ inch, ½ inch, and 1 inch sieves (ASTM D 422) and meet the gradation described in Table H-2:

Table H-2. Compost Texture Specifications

Sieve Size ASTM D422	Percent Passing by Weight	
	Minimum	Maximum
1 inch	99	100
½ inch	90	100
¼ inch	40	90
#200	2	10

Tests should be sufficiently recent to represent the actual material that is anticipated to be delivered to the site. If processes or sources used by the supplier have changed significantly since the most recent testing, new tests should be requested.

Note: the gradation of compost used in bioretention/biofiltration media is believed to play an important role in the saturated hydraulic conductivity of the media. To achieve a higher saturated hydraulic conductivity, it may be necessary to utilize compost at the coarser end of this range (“minimum” column). The percent passing the #200 sieve (fines) is believed to be the most important factor in hydraulic conductivity.

In addition, a coarser compost mix provides more heterogeneity of the bioretention media, which is believed to be advantageous for more rapid development of soil structure needed to support health biological processes. This may be an advantage for plant establishment with lower nutrient and water input.

- e. Bioretention/Biofiltration soils not meeting the above criteria shall be evaluated on a case by case basis. Alternative bioretention soil shall meet the following specification:

“Soils for bioretention facilities shall be sufficiently permeable to infiltrate runoff at a minimum rate of 5 inches per hour during the life of the facility, and provide sufficient retention of moisture and nutrients to support healthy vegetation.” The following steps shall be followed by the Permittees to verify that alternative soil mixes meet the specification:

- Submittals – The applicant must submit to the Permittee for approval:
 - A sample of mixed bioretention/biofiltration soil.
 - Certification from the soil supplier or an accredited laboratory that the bioretention/biofiltration soil meets the requirements of this specification.
 - Certification from an accredited geotechnical testing laboratory that the bioretention/biofiltration soil has an infiltration rate of between 5 and 12 inches per hour.
 - Organic content test results of mixed bioretention/biofiltration soil. Organic content test shall be performed in accordance with by Testing Methods for the Examination of Compost and Composting (TMECC) 05.07A, “Loss-On-Ignition Organic Matter Method”.
 - Organic Grain size analysis results of mixed bioretention/biofiltration soil performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.
 - A description of the equipment and methods used to mix the sand and compost to produce the bioretention/biofiltration soil.
- The name of the testing laboratory(s) and the following information:
 - Contact person(s)
 - Address(s)
 - Phone contact(s)
 - email address(s)
 - Qualifications of laboratory(s), and personnel including date of current
 - Certification by STA, ASTM, or approved equal.
- Bioretention/biofiltration soils shall be analyzed by an accredited lab using #200, and 1/2” inch sieves (ASTM D 422 or as approved by municipality), and meet the gradation described in Table H-3).

Table H-3. Alternative Bioretention/Biofiltration Soil Texture Specifications

Sieve Size ASTM D422	Percent Passing by Weight	
	Minimum	Maximum
1/2 inch	97	100
200	2	5

- Bioretention/biofiltration soils shall be analyzed by an accredited geotechnical lab for the following tests:
 - Moisture – density relationships (compaction tests) shall be conducted on bioretention soil. Bioretention/biofiltration soil for the permeability test shall be compacted to 85 to 90 percent of the maximum dry density (ASTM D1557).
 - Constant head permeability testing in accordance with ASTM D2434 shall be conducted on a minimum of two samples with a 6-inch mold and vacuum saturation.

7. Mulch for Bioretention/Biofiltration Facilities

Mulch is recommended for the purpose of retaining moisture, preventing erosion and minimizing weed growth. Projects subject to the State's Model Water Efficiency Landscaping Ordinance (or comparable local ordinance) will be required to provide at least two inches of mulch. Aged mulch, also called compost mulch, reduces the ability of weeds to establish, keeps soil moist, and replenishes soil nutrients. Aged mulch can be obtained through soil suppliers or directly from commercial recycling yards. It is recommended to apply 1" to 2" of composted mulch, once a year, preferably in June following weeding

8. Plants

- a. Plant materials should be tolerant of summer drought, ponding fluctuations, and saturated soil conditions for 48 to 96 hours.
- b. It is recommended that a minimum of three types of tree, shrubs, and/or herbaceous groundcover species be incorporated to protect against facility failure due to disease and insect infestations of a single species.
- c. Native plant species and/or hardy cultivars that are not invasive and do not require chemical inputs should be used to the maximum extent practicable.

References

California Regional Water Quality Control Board, San Francisco Bay Region. 2011. Municipal Regional Stormwater Permit (Order No. R2-2011-0083, Attachment L). Adopted November 28, 2011.

Dan Cloak, Dan Cloak Environmental Consulting to Tom Dalziel, Contra Costa County, February 22, 2011.<<http://www.cccleanwater.org/c3-guidebook.html>>. Accessed on January 31, 2012.

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

ATTACHMENT I. DEVELOPER TECHNICAL INFORMATION AND GUIDELINES

1. Each Permittee shall make available to the Development Community reference information and recommended guidelines. Such information may include the following:
 - a. Hydromodification Control criteria described in this Order, including numerical criteria
 - b. Links to the State Water Board's Water Balance Calculator
 - c. Expected BMP pollutant removal performance including effluent quality (ASCE/ U.S. EPA International BMP Database, CASQA New Development BMP Handbook, technical reports, local data on BMP performance, and the scientific literature appropriate for southern California geography and climate)
 - d. Selection of appropriate BMPs for stormwater pollutants of concern
 - e. Data on observed local effectiveness and performance of implemented BMPs
 - f. BMP maintenance and cost considerations
 - g. Guiding principles to facilitate integrated water resources planning and management in the selection of BMPs, including water conservation, groundwater recharge, public recreation, multipurpose parks, open space preservation, and existing retrofits
 - h. LID principles and specifications, including the objectives and specifications for integration of LID strategies in the areas of:
 - i. Site Assessment
 - ii. Site Planning and Design
 - iii. Vegetative Protection, Revegetation, and Maintenance
 - iv. Techniques to Minimize Land Disturbance
 - v. Techniques to Implement LID Measures at Various Scales
 - vi. Integrated Water Resources Management Practices
 - vii. LID Design and Flow Modeling Guidance
 - viii. Hydrologic Analysis
 - ix. LID Credits for trees or other features that intercept storm water runoff.
 - i. Recommended Guidelines to include:
 - i. Locate structures on less pervious soils where possible so as to preserve areas with permeable soils (Hydrologic Soil Group Classes A and B, as defined by the National Cooperative Soil Survey), for use in stormwater infiltration and groundwater recharge. Minimize the need to grade the site by concentrating development in areas with minimal non-engineered slopes and existing infrastructure, and mitigate any construction disturbance.
 - ii. The total disturbed area shall be no greater than 110 percent of the final project footprint plus the area of the construction stormwater detention basins, if any, and as required to meet applicable Fire Department regulations for brush clearance.

- iii. Construction vehicles shall be confined at all times to the area specifically permitted to be disturbed by construction as depicted in the approved construction documents. Physical barriers shall be used to designate and protect the boundary between disturbed and undisturbed areas.
 - iv. Materials staging shall be confined to the area permitted to be disturbed by construction or may be temporarily stored off-site at an approved location at the Contractor's option.
 - v. Construction vehicles shall not traverse areas within the drip lines of those trees and other landscaping to be preserved. Approved visible physical barriers, such as continuous fencing, shall be provided to completely surround all trees and other landscaping to be preserved. Barriers shall be placed not less than 5 feet outside the drip lines of trees.
 - vi. Preserve or restore continuous riparian buffers widths along all natural drainages to a minimum width of 100 feet from each bank top, for a total of 200 feet plus the width of the stream, unless the Watershed Plan demonstrates that a smaller riparian buffer width is protective of water quality, hydrology, and aquatic life beneficial uses within a specific drainage.
 - vii. Identify and avoid development of areas containing habitat with threatened or endangered plant and animal species¹.
- j. Each Permittee shall facilitate implementation of LID by providing key industry, regulatory, and other stakeholders with information regarding LID objectives and specifications through a training program. The LID training program will include the following:
- i. LID targeted sessions and materials for builders, design professionals, regulators, resource agencies, and stakeholders
 - ii. A combination of awareness on national efforts and local experience gained through LID pilot projects and demonstration projects
 - iii. Materials and data from LID pilot projects and demonstration projects including case studies
 - iv. Guidance on how to integrate LID requirements at various project scales
 - v. Guidance on the relationship among LID strategies, Source Control BMPs, Treatment Control BMPs, and Hydromodification Control requirements

¹ Federal Endangered Species Act, 16 U.S.C. §§ 1531–1544 (<http://water.epa.gov/lawsregs/guidance/wetlands/eo11990.cfm>); California Endangered Species Act, California Fish and Game Code, §§ 2050 to 2115.5.

ATTACHMENT J. DETERMINATION OF EROSION POTENTIAL

E_p is determined as follows - The *total effective work* done on the channel boundary is derived and used as a metric to predict the likelihood of channel adjustment given watershed and stream hydrologic and geomorphic variables. The index under urbanized conditions is compared to the index under pre-urban conditions expressed as a ratio (E_p). The effective work index (W) can be computed in a number of different ways including simplistic work equations, material specific sediment transport equations, or more complex functions based on site calibrated sediment rating curves. One such work equation, which represents the total work done on the channel boundary, includes the following:

$$W = \sum_{i=1}^n (i - c)^{1.5} \cdot V \cdot \Delta t_i \quad (1)$$

Where: W = effective work, c = critical shear stress that initiates bed mobility or erodes the weakest bank layer, i = applied hydraulic shear stress, Δt = duration of flows (in hours), V = mid-channel flow velocity, and n = length of flow record. The effective work index for presumed stable stream channels under pre-urban conditions is compared to stable and unstable channels under current urbanized conditions. The comparison, expressed as a ratio, is defined as the Erosion Potential (E_p)¹ (McRae (1992, 1996)).

$$E_p = \frac{W_{post}}{W_{pre}} \quad (2)$$

where:

W_{post} = work index estimated for the post-urban condition

W_{pre} = work index estimated for the pre-urban condition

Alternatively, a sediment transport function such as the Brownlie equation or the Meyer-Peter and Muller equation (*US Department of Agriculture, Natural Resources Conservation Service, 2007. Part 654 Stream Restoration Design, National Engineering Handbook, August 2007*) can be used to demonstrate appropriate Hydromodification control.

¹ MacRae, C.R. 1992. The Role of Moderate Flow Events and Bank Structure in the Determination of Channel Response to Urbanization. Resolving conflicts and uncertainty in water management: Proceedings of the 45th Annual Conference of the Canadian Water Resources Association. Shrubsole, D, ed. 1992, pg. 12.1-12.21; MacRae, C.R. 1996. Experience from Morphological Research on Canadian Streams: Is Control of the Two-Year Frequency Runoff Event the Best Basis for Stream Channel Protection. Effects of Watershed Development and Management on Aquatic Ecosystems, ASCE Engineering Foundation Conference, Snowbird, Utah, pg. 144-162.

ATTACHMENT K. PERMITTEES AND TMDLS MATRIX

Note: For all tables in this Attachment, Permittees listed in *italics* are Multi-Jurisdictional Permittees.

Table K-1: Santa Clara River Watershed Management Area TMDLs

SANTA CLARA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	Santa Clara River Nitrogen Compounds TMDL	Upper Santa Clara River Chloride TMDL	Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL	Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X		X
<i>Santa Clarita</i>	X	X		X

Table K-2: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Agoura Hills</i>	X	X	X	X	X	X
<i>Beverly Hills</i>	X	X	X			
<i>Calabasas</i>	X	X	X	X	X	X
<i>Culver City</i>	X	X	X			
<i>El Segundo</i>	X	X	X			
<i>Hermosa Beach</i>	X	X	X			
<i>Hidden Hills</i>	X	X	X	X	X	X
<i>Inglewood</i>	X	X	X			
<i>Los Angeles (City of)</i>	X	X	X			

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					
				Malibu Creek Subwatershed		
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Debris TMDL	Santa Monica Bay TMDL for DDTs and PCBs	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL
<i>Los Angeles (County of)</i>	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X
Malibu	X	X	X	X	X	X
<i>Manhattan Beach</i>	X	X	X			
<i>Palos Verdes Estates</i>	X	X	X			
<i>Rancho Palos Verdes</i>	X	X	X			
<i>Redondo Beach</i>	X	X	X			
<i>Rolling Hills</i>	X	X	X			
<i>Rolling Hills Estates</i>	X	X	X			
Santa Monica	X	X	X			
<i>Torrance</i>	X	X	X			
West Hollywood	X	X	X			
Westlake Village	X	X	X	X	X	X

Table K-3: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Agoura Hills							
Beverly Hills	X	X	X	X	X		
Calabasas							
Culver City	X	X	X	X	X	X	X
<i>El Segundo</i>							
Hermosa Beach							
<i>Hidden Hills</i>							
<i>Inglewood</i>	X	X	X	X	X		
<i>Los Angeles (City of)</i>	X	X	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X	X	X
Malibu							
<i>Manhattan Beach</i>							
<i>Palos Verdes Estates</i>							
<i>Rancho Palos Verdes</i>							
<i>Redondo Beach</i>							
<i>Rolling Hills</i>							
<i>Rolling Hills Estates</i>							
Santa Monica	X	X	X	X	X		

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
<i>Torrance</i>							
West Hollywood	X	X	X	X	X		
Westlake Village							

Table K-4: Dominguez Channel Watershed Management Area TMDLs

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹
<i>Carson</i>		X	X	X	X
<i>Compton</i>					X
<i>El Segundo</i>					X
<i>Gardena</i>					X
<i>Hawthorne</i>					X
<i>Inglewood</i>					X
<i>Lawndale</i>					X
<i>Lomita</i>		X	X	X	
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X
<i>Manhattan Beach</i>					X
<i>Palos Verdes Estates</i>		X	X	X	

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹
<i>Rancho Palos Verdes</i>		X	X	X	X
<i>Redondo Beach</i>		X	X	X	X
<i>Rolling Hills</i>		X	X	X	X
<i>Rolling Hills Estates</i>		X	X	X	X
<i>Torrance</i>		X	X	X	X

¹ The requirements of this Order to implement the obligations of this TMDL do not apply to a Permittee to the extent that it is determined that the Permittee has been released from that obligation pursuant to the Amended Consent Decree entered in *United States v. Montrose Chemical Corp.*, Case No. 90-3122 AAH (JRx).

Table K-5: Los Angeles River Watershed Management Area TMDLs

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹
<i>Alhambra</i>	X	X	X	X				
<i>Arcadia</i>	X	X	X	X			X	
<i>Bell</i>	X	X	X	X				
<i>Bell Gardens</i>	X	X	X	X				
<i>Bradbury</i>	X	X	X	X			X	
<i>Burbank</i>	X	X	X	X				
<i>Calabasas</i>	X	X	X	X			X	
<i>Carson</i>	X	X	X	X				X
<i>Commerce</i>	X	X	X	X				
<i>Compton</i>	X	X	X	X				X

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabastas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹
<i>Cudahy</i>	X	X	X	X				
<i>Downey</i>	X	X	X	X				
<i>Duarte</i>	X	X	X	X			X	
<i>El Monte</i>	X	X	X	X	X		X	
<i>Glendale</i>	X	X	X	X				
<i>Hidden Hills</i>	X	X	X	X				
<i>Huntington Park</i>	X	X	X	X				
<i>Irwindale</i>	X	X	X	X			X	
<i>La Canada Flintridge</i>	X	X	X	X				
<i>Lakewood</i>	X	X						X
<i>Los Angeles (City of)</i>	X	X	X	X			X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X		X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X	X	X	X
<i>Lynwood</i>	X	X	X	X				
<i>Maywood</i>	X	X	X	X				
<i>Monrovia</i>	X	X	X	X			X	
<i>Montebello</i>	X	X	X	X				
<i>Monterey Park</i>	X	X	X	X				
<i>Paramount</i>	X	X	X	X				X
<i>Pasadena</i>	X	X	X	X				
<i>Pico Rivera</i>	X	X	X	X				

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS							
	Los Angeles River Watershed Trash TMDL	Los Angeles River Nitrogen Compounds and Related Effects TMDL	Los Angeles River and Tributaries Metals TMDL	Los Angeles River Watershed Bacteria TMDL	Legg Lake Trash TMDL	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, Legg Lake and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹
Rosemead	X	X	X	X				
San Fernando	X	X	X	X				
San Gabriel	X	X	X	X				
San Marino	X	X	X	X				
Santa Clarita	X	X	X	X				
Sierra Madre	X	X	X	X			X	
Signal Hill	X	X	X	X		X		X
South El Monte	X	X	X	X	X		X	
South Gate	X	X	X	X				
South Pasadena	X	X	X	X				
Temple City	X	X	X	X				
Vernon	X	X	X	X				

¹ The requirements of this Order to implement the obligations of this TMDL do not apply to a Permittee to the extent that it is determined that the Permittee has been released from that obligation pursuant to the Amended Consent Decree entered in *United States v. Montrose Chemical Corp.*, Case No. 90-3122 AAH (JRx).

Table K-6: San Gabriel River Watershed Management Area TMDLs

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Los Angeles Area Lakes TMDLs for Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹
<i>Arcadia</i>	X		
<i>Artesia</i>	X		
<i>Azusa</i>	X	X	
<i>Baldwin Park</i>	X		
<i>Bellflower</i>	X		X
<i>Bradbury</i>	X		
<i>Cerritos</i>	X		
<i>Claremont</i>	X	X	
<i>Covina</i>	X		
<i>Diamond Bar</i>	X		
<i>Downey</i>	X		
<i>Duarte</i>	X		
<i>El Monte</i>	X		
<i>Glendora</i>	X		
<i>Hawaiian Gardens</i>	X		
<i>Industry</i>	X		
<i>Irwindale</i>	X	X	
<i>La Habra Heights</i>	X		
<i>La Mirada</i>	X		
<i>La Puente</i>	X		
<i>La Verne</i>	X	X	
<i>Lakewood</i>	X		X
<i>Los Angeles (County of)</i>	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Los Angeles Area Lakes TMDLs for Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹
<i>Monrovia</i>	X		
Norwalk	X		
<i>Pico Rivera</i>	X		
Pomona	X	X	
San Dimas	X	X	
Santa Fe Springs	X		
<i>South El Monte</i>	X		
Walnut	X		
West Covina	X		
Whittier	X		

¹ The requirements of this Order to implement the obligations of this TMDL do not apply to a Permittee to the extent that it is determined that the Permittee has been released from that obligation pursuant to the Amended Consent Decree entered in *United States v. Montrose Chemical Corp.*, Case No. 90-3122 AAH (JRx).

Table K-7: Los Cerritos Channel and Alamitos Bay Watershed Management Area TMDLs

LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	Los Cerritos Channel Metals TMDL	Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹
<i>Bellflower</i>	X		X
<i>Cerritos</i>	X		
<i>Downey</i>	X		
<i>Lakewood</i>	X		X
<i>Los Angeles (County of)</i>	X		X
<i>Los Angeles County Flood Control</i>	X	X	X
<i>Paramount</i>	X		X
<i>Signal Hill</i>	X		X

¹ The requirements of this Order to implement the obligations of this TMDL do not apply to a Permittee to the extent that it is determined that the Permittee has been released from that obligation pursuant to the Amended Consent Decree entered in *United States v. Montrose Chemical Corp.*, Case No. 90-3122 AAH (JRx).

Table K-8: Middle Santa Ana River Watershed Management Area TMDLs

MIDDLE SANTA ANA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDL
	Middle Santa Ana River Watershed Bacterial Indicator TMDL
<i>Claremont</i>	X
<i>Pomona</i>	X

Table K-9: Los Angeles River Watershed Management Area Metals TMDLs by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Alhambra		X			
Arcadia		X			
Bell		X			
Bell Gardens		X			
Bradbury		X			
Burbank			X	X	
Calabasas					X
Carson	X				
Commerce		X			
Compton	X	X			
Cudahy		X			
Downey		X			
Duarte		X			
El Monte		X			
Glendale		X	X	X	
Hidden Hills					X
Huntington Park	X	X			
Irwindale		X			
La Canada Flintridge		X	X		
Lakewood					
Los Angeles (City of)	X	X	X	X	X
Los Angeles (County of)	X	X	X	X	X
Los Angeles County Flood Control	X	X	X	X	X
Lynwood	X	X			
Maywood		X			

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
<i>Monrovia</i>		X			
<i>Montebello</i>		X			
<i>Monterey Park</i>		X			
<i>Paramount</i>		X			
<i>Pasadena</i>		X	X		
<i>Pico Rivera</i>		X			
<i>Rosemead</i>		X			
<i>San Fernando</i>				X	
<i>San Gabriel</i>		X			
<i>San Marino</i>		X			
<i>Santa Clarita</i>					
<i>Sierra Madre</i>		X			
<i>Signal Hill</i>	X				
<i>South El Monte</i>		X			
<i>South Gate</i>	X	X			
<i>South Pasadena</i>		X			
<i>Temple City</i>		X			
<i>Vernon</i>		X			

Table K-10: Los Angeles River Watershed Management Area Bacteria TMDL by Reach

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
Alhambra		X												X		
Arcadia														X		
Bell		X														
Bell Gardens		X												X		
Bradbury														X		
Burbank			X						X							
Calabasas											X	X				
Carson										X						
Commerce		X												X		
Compton	X	X								X						
Cudahy		X														
Downey		X												X		
Duarte														X		
El Monte														X		
Glendale		X	X				X		X						X	X
Hidden Hills								X				X				
Huntington Park		X								X						
Irwindale														X		
La Canada Flintridge			X				X									X
Lakewood	X															
Los Angeles (City of)		X	X	X	X	X	X	X	X	X	X	X	X		X	X
Los Angeles (County of)	X	X	X		X	X	X	X	X		X	X	X	X	X	X

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River Watershed Bacteria TMDL															
	Los Angeles River Segment					Los Angeles River Tributary										
	A	B	C	D	E	Aliso Canyon Wash	Arroyo Seco	Bell Creek	Bull Creek	Burbank Western Channel	Compton Creek	Dry Canyon Creek	McCoy Canyon Creek	Rio Hondo	Tujunga Wash	Verdugo Wash
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lynwood	X	X								X						
Maywood		X														
<i>Monrovia</i>													X			
Montebello		X											X			
Monterey Park		X											X			
<i>Paramount</i>	X	X														
Pasadena		X	X				X						X			X
<i>Pico Rivera</i>													X			
Rosemead													X			
San Fernando														X		
San Gabriel													X			
San Marino													X			
<i>Santa Clarita</i>									X							
Sierra Madre													X			
<i>Signal Hill</i>	X															
<i>South El Monte</i>													X			
South Gate		X								X			X			
South Pasadena		X					X						X			
Temple City													X			
Vernon		X														

Table K-11: Santa Monica Bay Watershed Management Area Bacteria TMDL by Reach

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
Agoura Hills									X
Beverly Hills								X	
Calabasas	X								X
Culver City								X	
El Segundo		X			X				
Hermosa Beach					X	X			
Hidden Hills									X
Inglewood								X	
Los Angeles (City of)	X	X	X				X	X	
Los Angeles (County of)	X	X		X	X	X	X	X	X
Los Angeles County Flood Control	X	X	X	X	X	X	X	X	X
Malibu	X			X					X
Manhattan Beach					X	X			
Palos Verdes Estates							X		
Rancho Palos Verdes							X		
Redondo Beach						X			
Rolling Hills							X		
Rolling Hills Estates							X		
Santa Monica		X	X					X	
Torrance						X			
West Hollywood								X	

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)								
	Jurisdiction Group 1	Jurisdiction Group 2	Jurisdiction Group 3	Jurisdiction Group 4	Jurisdiction Group 5	Jurisdiction Group 6	Jurisdiction Group 7	Jurisdiction Group 8	Jurisdiction Group 9
Westlake Village									X

Table K-12: San Gabriel River Watershed Management Area Metals TMDLs by Reach

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
<i>Arcadia</i>							X	
Artesia			X	X				
Azusa	X							X
Baldwin Park	X					X	X	
<i>Bellflower</i>				X				
Bradbury								
<i>Cerritos</i>			X	X				
Claremont	X	X						
Covina	X							
Diamond Bar		X	X					
<i>Downey</i>				X	X			
<i>Duarte</i>								X
<i>El Monte</i>						X	X	
Glendora	X							X
Hawaiian Gardens			X					
Industry	X	X			X	X		
<i>Irwindale</i>	X					X	X	X
La Habra Heights		X	X					

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
La Mirada			X					
La Puente	X	X				X		
La Verne	X	X						
Lakewood			X	X				
Los Angeles (County of)	X	X	X		X	X		X
Los Angeles County Flood Control	X	X	X	X	X	X	X	X
Monrovia								X
Norwalk			X	X				
Pico Rivera					X	X		
Pomona	X	X						
San Dimas	X	X						
Santa Fe Springs			X	X	X			
South El Monte						X		
Walnut	X	X						
West Covina	X	X						
Whittier		X	X		X	X		

Table K-13: Dominguez Channel Watershed Management Area Toxics TMDL by Reach

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL ¹					
	Dominguez Channel	Dominguez Channel Estuary	Greater Los Angeles and Long Beach Harbors	Los Angeles River Estuary	Consolidated Slip	Los Angeles River and San Gabriel River
<i>Bellflower</i>			X			
<i>Carson</i>	X	X				
<i>Compton</i>	X	X				
<i>El Segundo</i>	X					
<i>Gardena</i>	X	X				
<i>Hawthorne</i>	X					
<i>Inglewood</i>	X					
<i>Lakewood</i>			X			
<i>Lawndale</i>	X					
<i>Los Angeles (City of)</i>	X	X	X	X	X	
<i>Los Angeles (County of)</i>	X	X	X	X	X	
<i>Los Angeles County Flood Control District</i>	X	X	X	X	X	
<i>Manhattan Beach</i>	X					
<i>Paramount</i>			X			
<i>Rancho Palos Verdes</i>			X			
<i>Redondo Beach</i>	X					
<i>Rolling Hills</i>			X			
<i>Rolling Hills Estates</i>			X			
<i>Signal Hill</i>			X	X		
<i>Torrance</i>	X	X				
Los Angeles River and San Gabriel River Metals TMDLs Responsible Parties²						see note 2 below

¹ The requirements of this Order to implement the obligations of this TMDL do not apply to a Permittee to the extent that it is determined that the Permittee has been released from that obligation pursuant to the Amended Consent Decree entered in *United States v. Montrose Chemical Corp.*, Case No. 90-3122 AAH (JRx).

² Permittees subject to the Los Angeles River Metals TMDL and the San Gabriel River Metals TMDL are required to submit a monitoring plan and a report of implementation.

ATTACHMENT L. TMDLs IN THE SANTA CLARA RIVER WATERSHED MANAGEMENT AREA (WMA)

A. Santa Clara River Nitrogen Compounds TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following water quality-based effluent limitations for discharges to the Santa Clara River Reach 5¹ as of the effective date of this Order:

Constituent	Effluent Limitations (mg/L)	
	1-hour Average	30-day Average
Total Ammonia as Nitrogen	5.2	1.75
Nitrate as Nitrogen plus Nitrite as Nitrogen	--	6.8

B. Upper Santa Clara River Chloride TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following water quality-based effluent limitation for discharges to the Santa Clara River Reaches 5 and 6 as of the effective date of this Order:

Constituent	Effluent Limitation Instantaneous Maximum (mg/L)
Chloride	100

C. Lake Elizabeth Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Lake Elizabeth no later than March 6, 2016 and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to Lake Elizabeth, per the schedule below:

Deadline	Effluent Limitation	
	Drainage Area covered by Full Capture Systems (%)	Annual Trash Discharge (gal/yr)
Baseline	0	529
March 6, 2012	20	423
March 6, 2013	40	317
March 6, 2014	60	212
March 6, 2015	80	106
March 6, 2016	100	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in C.2 and C.3 above per the provisions in Part VI.E.5.

¹ The Basin Plan Chapter 7-9 Santa Clara River Nitrogen Compounds TMDL uses the USEPA Santa Clara River reach designations. The USEPA's Santa Clara River Reach 7 corresponds to Santa Clara River Reach 5 in the Los Angeles Region's Basin Plan Chapter 2.

D. Santa Clara River Indicator Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-1.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Santa Clara River Reaches 5, 6 and 7 during dry weather no later than March 21, 2023 and during wet weather² no later than March 21, 2029:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

3. Receiving Water Limitations

- a. Permittees shall comply with the following interim bacteria receiving water limitations³ for the Santa Clara River Reaches 5, 6, and 7:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)		Deadline
	Daily Sampling	Weekly Sampling	
Dry Weather	17	3	March 21, 2016
Wet Weather	61	9	March 21, 2016

- b. Permittees shall comply with the following final bacteria receiving water limitations⁴ for the Santa Clara River Reaches 5, 6, and 7:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)		Deadline
	Daily Sampling	Weekly Sampling	
Dry Weather	5	1	March 21, 2023
Wet Weather	16	3	March 21, 2029

² Wet weather is defined as days with 0.1 inch of rain or more and the three days following the rain event.

³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each reach.

⁴ Ibid.

- c.** Permittees shall comply with the following geometric mean receiving water limitation for the Santa Clara River Reaches 5, 6, and 7 during dry weather no later than March 21, 2023 and during wet weather no later than March 21, 2029:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

- d.** Permittees may propose wet-weather load-based compliance at MS4 outfalls. The plan shall include an estimate of existing load and the allowable load from MS4 outfalls to attain the allowable number of exceedance days instream. The plan shall include a technically defensible quantitative linkage to the allowable number of exceedance days. The plan shall include quantitative estimates of the water quality benefits provided by the proposed implementation approach.

ATTACHMENT M. TMDLs IN THE SANTA MONICA BAY WATERSHED MANAGEMENT AREA

A. Santa Monica Bay Beaches Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Santa Monica Bay during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Section A.2 above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Santa Monica Bay during dry weather as of the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each individual monitoring location, calculated as defined in the revised Santa Monica Bay Beaches Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

4. Receiving Water Limitations

- a. Permittees in each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group as identified in Table M-1
July 15, 2013	25%
July 15, 2018	50%

- b. Section A.4.a above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees in each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total wet weather exceedance day reductions required for each jurisdictional group as identified in Table M-2
July 15, 2013	25%
July 15, 2018	50%

Table M-1: Interim Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	SMB 1-1	221	212	197
			Carbon Canyon	SMB 1-13			
			Corral Canyon	SMB 1-11, SMB 1-12			
			Encinal Canyon	SMB 1-3			
			Escondido Canyon	SMB 1-8			
			Las Flores Canyon	SMB 1-14			
			Latigo Canyon	SMB 1-9			
			Los Alisos Canyon	SMB 1-2			
			Pena Canyon	SMB 1-16			
			Piedra Gorda Canyon	SMB 1-15			
			Ramirez Canyon	SMB 1-6, SMB 1-7			
			Solstice Canyon	SMB 1-10			
			Topanga Canyon	SMB 1-18			
			Trancas Canyon	SMB 1-4			
			Tuna Canyon	SMB 1-17			
Zuma Canyon	SMB 1-5						

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
2	City of Los Angeles	County of Los Angeles El Segundo (Dockweiler only) Santa Monica	Castlerock	SMB 2-1	342	324	294
			Dockweiler	SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15			
			Venice Beach	SMB 2-8, SMB 2-9			
			Pulga Canyon	SMB 2-4, SMB 2-5			
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			
3	Santa Monica	City of Los Angeles County of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6, SMB 3-7, SMB 3-8 [#] , SMB 3-9	257	237	203
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	14	14	14
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach County of Los Angeles	Hermosa	SMB 5-1 [#] , SMB 5-2, SMB 5-3 [#] , SMB 5-4 [#] , SMB 5-5 [#]	29	29	29

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 [#] , SMB 6-3, SMB 6-4, SMB 6-5 [#] , SMB 6-6 [#]	58	57	56
7	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Rolling Hills Rolling Hills Estates County of Los Angeles	Palos Verdes Peninsula	SMB 7-1 [#] , SMB 7-2 [#] , SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	36	36	36

For those beach monitoring locations subject to the antidegradation implementation provision in the TMDL, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified in Table M-3.

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group, except for Jurisdiction 7, and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

Table M-2: Interim Wet Weather Single Sample Bacteria Receiving Water Limitations by Jurisdictional Group

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Exceedance Days Beyond those Allowed during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	SMB 1-1	393	327	218
			Carbon Canyon	SMB 1-13			
			Corral Canyon	SMB 1-11, SMB 1-12, SMB O-2 [#]			
			Encinal Canyon	SMB 1-3 [#]			
			Escondido Canyon	SMB 1-8			
			Las Flores Canyon	SMB 1-14			
			Latigo Canyon	SMB 1-9			
			Los Alisos Canyon	SMB 1-2 [#]			
			Pena Canyon	SMB 1-16 [#]			
			Piedra Gorda Canyon	SMB 1-15			
			Ramirez Canyon	SMB 1-6, SMB 1-7, SMB O-1 [#]			
			Solstice Canyon	SMB 1-10			
			Topanga Canyon	SMB 1-18			
			Trancas Canyon	SMB 1-4			
Tuna Canyon	SMB 1-17 [#]						
Zuma Canyon	SMB 1-5						

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Exceedance Days Beyond those Allowed during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
2	City of Los Angeles	County of Los Angeles El Segundo (Dockweiler only) Santa Monica	Castlerock	SMB 2-1	382	318	212
			Dockweiler	SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15			
			Venice Beach	SMB 2-8, SMB 2-9			
			Pulga Canyon	SMB 2-4, SMB 2-5			
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			
3	Santa Monica	City of Los Angeles County of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6, SMB 3-7, SMB 3-8, SMB 3-9	219	183	122
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	15	12	8

Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Exceedance Days Beyond those Allowed during Wet Weather		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach County of Los Angeles	Hermosa	SMB 5-1 [#] , SMB 5-2, SMB 5-3 [#] , SMB 5-4 [#] , SMB 5-5 [#]	63	52	35
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 [#] , SMB 6-3, SMB 6-4, SMB 6-5 [#] , SMB 6-6 [#]	62	51	34
7	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Rolling Hills Rolling Hills Estates County of Los Angeles	Palos Verdes Peninsula	SMB 7-1 [#] , SMB 7-2 [#] , SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	88	73	49

For those beach monitoring locations subject to the antidegradation implementation provision in the TMDL, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified in Table M-4.

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group, except for Jurisdiction 7, and is jointly responsible for complying with the allowable number of exceedance days. Caltrans is separately regulated under the Statewide Storm Water Permit for State of California Department of Transportation (NPDES No. CAS000003).

- c. Permittees shall comply with the following grouped¹ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart e. below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ² (Year-round)	17	3

- d. Section A.4.c above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following grouped³ final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to the antidegradation implementation provision as established in the TMDL and identified in subpart f. below, during dry weather as of the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	9	2
Wet Weather ⁴ (Year-round)	17	3

¹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

² Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

- e. Permittees shall comply with the following grouped⁵ final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation implementation provision in the TMDL as of the effective date of this Order:

Table M-3: Allowable Number of Days that may Exceed any Single Sample Bacteria Receiving Water Limitations

Station ID	Beach Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)					
		Summer Dry Weather (April 1 – October 31)		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-4	Trancas Creek at Broad Beach	0	0	0	0	17	3
SMB 1-5	Zuma Creek at Zuma Beach	0	0	0	0	17	3
SMB 2-13	Imperial Highway storm drain	0	0	2	1	17	3
SMB 3-8	Windward Ave. storm drain at Venice Pavilion	0	0	2	1	13	2
SMB 4-1	San Nicholas Canyon Creek at Nicholas Beach	0	0	0	0	14	2
SMB 5-1	Manhattan Beach at 40th Street	0	0	1	1	4	1
SMB 5-3	Manhattan Beach Pier, southern drain	0	0	1	1	5	1
SMB 5-4	Hermosa City Beach at 26th St.	0	0	3	1	12	2
SMB 5-5	Hermosa Beach Pier	0	0	2	1	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south	0	0	3	1	14	2
SMB 6-5	Avenue I storm drain at Redondo Beach	0	0	3	1	6	1
SMB 6-6	Malaga Cove, Palos Verdes Estates	0	0	1	1	3	1

⁵ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station ID	Beach Monitoring Location	Summer Dry Weather (April 1 – October 31)		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 7-1	Malaga Cove, Palos Verdes Estates	0	0	1	1	14	2
SMB 7-2	Bluff Cove, Palos Verdes Estates	0	0	1	1	0	0
SMB 7-3	Long Point, Rancho Palos Verdes	0	0	1	1	5	1
SMB 7-4	Abalone Cove, Rancho Palos Verdes	0	0	0	0	1	1
SMB 7-5	Portuguese Bend Cove, Rancho Palos Verdes	0	0	1	1	2	1
SMB 7-6	White's Point, Royal Palms County Beach	0	0	1	1	6	1
SMB 7-8	Point Fermin/Wilder Annex, San Pedro	0	0	1	1	2	1
SMB 7-9	Outer Cabrillo Beach	0	0	1	1	3	1

- f. Section A.4.e above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following grouped⁶ final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation implementation provision in the TMDL as of the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL:

Table M-4: Allowable Number of Days that may Exceed any Single Sample Bacteria Receiving Water Limitations

Station ID	Beach Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)					
		Summer Dry Weather (April 1 – October 31)		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-2	El Pescador State Beach	0	0	1	1	5	1
SMB 1-3	El Matador State Beach	0	0	1	1	3	1
SMB O-1	Paradise Cove	0	0	9	2	15	3
SMB 1-10	Solstice Creek	0	0	5	1	17	3
SMB O-2	Puerco Canyon Storm Drain	0	0	0	0	6	1
SMB 1-14	Las Flores Creek	0	0	6	1	17	3
SMB 1-16	Pena Creek	0	0	3	1	14	2
SMB 1-17	Tuna Canyon Creek	0	0	7	1	12	2
SMB 2-11	North Westchester Storm Drain	0	0	0	0	17	3
SMB 2-13	Imperial Highway Storm Drain	0	0	4	1	17	3
SMB 3-6	Rose Avenue Storm Drain at Venice Beach	0	0	6	1	17	3
SMB 4-1	San Nicholas Canyon Creek	0	0	4	1	14	2
SMB 5-1	Manhattan State Beach at 40th Street	0	0	1	1	4	1

⁶ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the sub-drainage area to each beach monitoring location.

		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station ID	Beach Monitoring Location	Summer Dry Weather (April 1 – October 31)		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 5-3	Manhattan Beach Pier, southern drain	0	0	3	1	6	1
SMB 5-4	Hermosa Beach at 26th Street	0	0	3	1	12	2
SMB 5-5	Hermosa Beach Pier	0	0	2	1	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south at Redondo Beach	0	0	3	1	14	2
SMB 6-3	Sapphire Street Storm Drain at Redondo Beach	0	0	5	1	17	3
SMB 6-5	Avenue I Storm Drain at Redondo Beach	0	0	4	1	11	2
SMB 6-6	Malaga Cove, Palos Verdes Estates	0	0	1	1	3	1
SMB 7-1	Malaga Cove	0	0	1	1	14	2
SMB 7-2	Bluff Cove	0	0	1	1	0	0
SMB 7-3	Long Point	0	0	1	1	5	1
SMB 7-4	Abalone Cove	0	0	0	0	1	1
SMB 7-5	Portuguese Bend Cove	0	0	1	1	2	1
SMB 7-6	Royal Palms County Beach	0	0	1	1	6	1
SMB 7-8	Wilder Annex	0	0	1	1	2	1
SMB 7-9	Outer Cabrillo Beach	0	0	1	1	3	1

- g.** Permittees shall comply with the following geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- h.** Section A.4.g above shall not be applicable upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL (Attachment A of Resolution No. R12-007). Upon the effective date of the revised Santa Monica Bay Beaches Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, calculated as defined in the revised Santa Monica Bay Beaches Bacteria TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

B. Santa Monica Bay Nearshore and Offshore Debris TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged into water bodies within the Santa Monica Bay WMA and then into Santa Monica Bay or on the shoreline of Santa Monica Bay no later than March 20, 2020⁷, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged into Santa Monica Bay or on the shoreline of Santa Monica Bay, per the schedule below:

⁷ If a Permittee by November 4, 2013, adopts local ordinances to ban plastic bags, smoking in public places and single use expanded polystyrene food packaging then the final compliance date will be extended until March 20, 2023.

Permittees	Baseline ⁸	Mar 20, 2016	Mar 20, 2017	Mar 20, 2018	Mar 20, 2019	Mar 20, 2020 ⁹
		(80%)	(60%)	(40%)	(20%)	(0%)
Annual Trash Discharge (gals/yr)						
Agoura Hills ¹⁰	1,044	835	626	418	209	0
Calabasas ¹⁰	1,656	1,325	994	663	331	0
Culver City	52	42	31	21	10	0
El Segundo	2,732	2,186	1,639	1,093	546	0
Hermosa Beach	1,117	894	670	447	223	0
Los Angeles, City of	25,112	20,090	15,067	10,045	5,022	0
Los Angeles, County of	5,138	4,110	3,083	2,055	1,028	0
Malibu	5,809	4,648	3,486	2,324	1,162	0
Manhattan Beach	2,501	2,001	1,501	1,001	500	0
Palos Verdes Estates	3,346	2,677	2,007	1,338	669	0
Rancho Palos Verdes	7,254	5,803	4,353	2,902	1,451	0
Redondo Beach	3,197	2,558	1,918	1,279	639	0
Rolling Hills	515	412	309	206	103	0
Rolling Hills Estates	365	292	219	146	73	0
Santa Monica	5,672	4,537	3,403	2,269	1,134	0
Torrance	2,484	1,987	1,490	993	497	0
Westlake Village ¹⁰	3,131	2,505	1,879	1,252	626	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Santa Monica Bay TMDL for DDTs and PCBs (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
2. Permittees shall comply with the following WLAs, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay, per the provisions in Part VI.E.3:

Constituent	Annual Mass-Based WLA (g/yr)
DDT	27.08
PCBs	140.25

⁸ If a Permittee elects not to use the default baseline, then the Permittee shall include a plan to establish a site specific trash baseline in their Trash Monitoring and Reporting Plan.

⁹ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2019-2020 storm year and every year thereafter.

¹⁰ Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established to implement the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established to implement the Malibu Creek Watershed Trash TMDL.

3. Compliance shall be determined based on a three-year averaging period.

D. TMDLs in the Malibu Creek Subwatershed

1. Malibu Creek and Lagoon Bacteria TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

b. Water Quality-Based Effluent Limitations

i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

ii. Section D.1.b.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Malibu Lagoon during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

iii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	235/100 mL	126/100 mL

- iv. Section D.1.b.iii above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	235/100 mL	126/100 mL

c. Receiving Water Limitations

- i. Permittees shall comply with the following grouped¹¹ final single sample bacteria receiving water limitations for Malibu Creek, its tributaries, and Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ¹² (Year-round)	17	3

- ii. Section D.1.c.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following grouped¹³ final single sample bacteria receiving water limitations for each monitoring location within Malibu Creek and its tributaries during

¹¹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

¹² Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

¹³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Dry-Weather (Year-round)	5	1
Wet Weather ¹⁴ (Year-round)	15	2

iii. Section D.1.c.i above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following grouped¹⁵ final single sample bacteria receiving water limitations for each monitoring location within Malibu Lagoon during dry weather as of the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL and during wet weather no later than July 15, 2021:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	9	2
Wet Weather ¹⁶ (Year-round)	17	3

iv. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

v. Section D.1.c.iv above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of

¹⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

¹⁵ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area to the receiving water.

¹⁶ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon, calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- vi. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
<i>E. coli</i>	126/100 mL

- vii. Section D.1.c.vi above shall not be applicable upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL (Attachment A of Resolution No. R12-009). Upon the effective date of the revised Malibu Creek and Lagoon Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Creek and its tributaries, calculated as defined in the revised Malibu Creek and Lagoon Bacteria TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
<i>E. coli</i>	126/100 mL

2. Malibu Creek Watershed Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.
- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Malibu Creek from Malibu Lagoon to Malibou Lake, Malibu Lagoon, Malibou Lake, Medea Creek, Lindero Creek, Lake Lindero, and Las Virgenes Creek in the Malibu Creek Watershed no later than July 7, 2017 and every year thereafter.
- c. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Malibu Creek, per the schedule below:

Permittees	Baseline	July 7, 2013 (80%)	July 7, 2014 (60%)	July 7, 2015 (40%)	July 7, 2016 (20%)	July 7, 2017 (0%)
	Annual Trash Discharge (gals/yr)					
Agoura Hills	1810	1448	1086	724	362	0
Calabasas	673	539	404	269	135	0
Hidden Hills	71	57	43	28	14	0
Los Angeles County	1117	894	670	447	223	0
Malibu	226	181	136	91	45	0
Westlake Village	143	114	86	57	29	0

d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in D.2.b and D.2.c above per the provisions in Part VI.E.5.

3. Malibu Creek Watershed Nutrients TMDL (USEPA established)

a. Permittees subject to the provisions below are identified in Attachment K, Table K-2.

b. Permittees shall comply with the following grouped¹⁷ WLAs per the provisions in Part VI.E.3 for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibu Lake, Malibu Creek and Malibu Lagoon and its tributaries. Tributaries to Malibu Creek and Lagoon, include the following upstream water bodies; Triunfo Creek, Palo Comado Creek, Cheesebro Creek, Strokes Creek and Cold Creek.

Time Period	WLA	
	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus
	Daily Maximum	Daily Maximum
Summer (April 15 to November 15) ¹⁸	8 lbs/day	0.8 lbs/day
Winter (November 16 to April 14)	8 mg/L	n/a

E. TMDLs in the Ballona Creek Subwatershed

1. Ballona Creek Trash TMDL

a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.

¹⁷ USEPA was unable to specifically distinguish the amounts of pollutant loads from allocation categories associated with areas regulated by the storm water permits. Therefore, allocations for storm water permits are grouped.

¹⁸ The mass-based summer WLAs are calculated as the sum of the allocations for “runoff from developed areas” and “dry weather urban runoff.”

- b. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Ballona Creek no later than September 30, 2015 and every year thereafter.
- c. Permittees shall comply with the interim and final water quality-based effluent limitations for trash discharged to Ballona Creek, per the schedule below:

**Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year¹⁹
(pounds of drip-dry trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ²⁰ (0%)
		Annual Trash Discharge (pounds of trash)			
Beverly Hills	70,712	14,142	7,071	2,333	0
Culver City	37,271	7,454	3,727	1,230	0
Inglewood	22,324	4,465	2,232	737	0
Los Angeles, City of	942,720	188,544	94,272	31,110	0
Los Angeles, County of	52,693	10,539	5,269	1,739	0
Santa Monica	2,579	516	258	85	0
West Hollywood	13,411	2,682	1,341	443	0

**Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year¹⁹
(gallons of uncompressed trash)**

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 ²⁰ (0%)
		Annual Trash Discharge (gallons of uncompressed trash)			
Beverly Hills	45,336	9,067	4,534	1,496	0
Culver City	25,081	5,016	2,508	828	0
Inglewood	14,717	2,943	1,472	486	0
Los Angeles, City of	602,068	120,414	60,207	19,868	0
Los Angeles, County of	32,679	6,536	3,268	1,078	0
Santa Monica	1,749	350	175	58	0
West Hollywood	9,360	1,872	936	309	0

- d. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.1.b and E.1.c above per the provisions in Part VI.E.5.

¹⁹ For purposes of the provisions in this subpart, a storm year is defined as October 1 to September 30.

²⁰ Permittees shall achieve their final water quality-based effluent limitation of zero trash discharged for the 2014-2015 storm year and every year thereafter.

2. Ballona Creek Estuary Toxic Pollutants TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of sediment-bound pollutants deposited to Ballona Creek Estuary:

Constituent	Effluent Limitations	
	Annual	Units
Cadmium	8.0	kg/yr
Copper	227.3	kg/yr
Lead	312.3	kg/yr
Silver	6.69	kg/yr
Zinc	1003	kg/yr
Chlordane	3.34	g/yr
DDTs	10.56	g/yr
Total PCBs	152	g/yr
Total PAHs	26,900	g/yr

- c. Permittees shall comply with interim and final water quality-based effluent limitations for sediment-bound pollutant loads deposited to Ballona Creek Estuary, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)
January 11, 2013	25
January 11, 2015	50
January 11, 2017	75
January 11, 2021	100

- d. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part E.2.b by demonstrating any one of the following:
 - i. Final water quality-based effluent limitations for sediment-bound pollutants deposited to Ballona Creek Estuary are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - iii. Concentrations of sediments discharged meet the numeric targets for sediment as defined in the TMDL.

- 3. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL
 - a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - b. Water Quality-Based Effluent Limitations
 - i. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- ii. Section E.3.b.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- iii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	235/100 mL	126/100 mL

- iv. Section E.3.b.iii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria

TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	235/100 mL	126/100 mL

- v. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	576/100 mL	126/100 mL

- vi. Section E.3.b.v above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	576/100 mL	126/100 mL

- vii. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
Fecal coliform	4000/100 mL	2000/100 mL

viii. Section E.3.b.vii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
Fecal coliform	4000/100 mL	2000/100 mL

c. Receiving Water Limitations

i. Permittees shall comply with the following grouped²¹ single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; Centinela Creek at the confluence with Ballona Creek Estuary; Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective*		Deadline
	Daily Sampling	Weekly Sampling	
Summer Dry-Weather (April 1 to October 31)	0	0	April 27, 2013
Winter Dry-Weather (November 1 to March 31)	3	1	April 27, 2013
Wet Weather ²² (Year-round)	17**	3	July 15, 2021

* Exceedance days for Ballona Creek Estuary and at the confluence with Ballona Creek Estuary based on REC-1 marine water single sample bacteria water quality objectives (WQO). Exceedance days for Ballona Creek Reach 2 and at the confluence with Ballona Creek Reach 2 based on LREC-1 freshwater single sample bacteria WQO. Exceedance days for Sepulveda Channel based on REC-1 freshwater single sample bacteria WQO.

** In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

ii. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria

²¹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²² Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

TMDL, Permittees shall comply with the following grouped²³ single sample bacteria receiving water limitations for Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary:

Time Period	Annual Allowable Exceedance Days of the REC-1 Marine Water Single Sample Bacteria Water Quality Objectives		Deadline
	Daily Sampling	Weekly Sampling	
Summer Dry-Weather (April 1 to October 31)	0	0	April 27, 2013
Winter Dry-Weather (November 1 to March 31)	9	2	April 27, 2013
Wet Weather ²⁴ (Year-round)	17	3	July 15, 2021

iii. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following grouped²⁵ single sample bacteria receiving water limitations for Sepulveda Channel:

Time Period	Annual Allowable Exceedance Days of the REC-1 Fresh Water Single Sample Bacteria Water Quality Objectives		Deadline
	Daily Sampling	Weekly Sampling	
Dry-Weather	5	1	April 27, 2013
Wet Weather ²⁶	15	2	July 15, 2021

iv. Section E.3.c.i above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following grouped²⁷ single sample bacteria receiving water limitations for Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2:

²³ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁵ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

²⁶ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁷ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

Time Period	Annual Allowable Exceedance Days of the LREC-1 Fresh Water Single Sample Bacteria Water Quality Objectives		Deadline
	Daily Sampling	Weekly Sampling	
Dry-Weather	5	1	April 27, 2013
Wet Weather ²⁸	15*	2	July 15, 2021

* In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

- v. Permittees shall not exceed the single sample bacteria objective of 4000/100 ml in more than 10% of the samples collected from Ballona Creek Reach 1 during any 30-day period. Permittees shall achieve compliance with this receiving water limitation during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021.
- vi. Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
<i>Enterococcus</i>	35/100 mL

- vii. Section E.3.c.vi above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary, calculated as defined in the revised TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
<i>Enterococcus</i>	35/100 mL

- viii. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at

²⁸ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
<i>E. coli</i>	126/100 mL

- ix. Section E.3.c.viii above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the confluence with Ballona Creek Reach 2; and Sepulveda Channel, calculated as defined in the revised TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
<i>E. coli</i>	126/100 mL

- x. Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

- xi. Section E.3.c.x above shall not be applicable upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL (Attachment A of Resolution No. R12-008). Upon the effective date of the revised Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1, calculated as defined in the revised TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

4. Ballona Creek Metals TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Final Water Quality-Based Effluent Limitations

- i. Permittees shall comply with the following dry weather²⁹ water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)	
	Ballona Creek	Sepulveda Channel
Copper	807.7	365.6
Lead	432.6	196.1
Selenium	169	76
Zinc	10,273.1	4,646.4

- ii. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather³⁰ no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

Constituent	Effluent Limitation Daily Maximum (µg/L)
Copper	24
Lead	13
Selenium	5
Zinc	304

- iii. Permittees shall comply with the following wet weather³¹ water quality-based effluent limitations no later than January 11, 2021, expressed as total recoverable metals discharged to Ballona Creek and its tributaries:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	1.70×10^{-5} x daily storm volume (L)
Lead	5.58×10^{-5} x daily storm volume (L)
Selenium	4.73×10^{-6} x daily storm volume (L)
Zinc	1.13×10^{-4} x daily storm volume (L)

²⁹ Dry weather is defined as any day when the maximum daily flow in Ballona Creek is less than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

³⁰ Ibid.

³¹ Wet weather is defined as any day when the maximum daily flow in Ballona Creek is equal to or greater than 40 cfs measured at Sawtelle Avenue.

- c. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to Ballona Creek and its tributaries, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)	
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2014	75	--
January 11, 2016	100	50
January 11, 2021	100	100

- 5. Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (*USEPA established*)
 - a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - b. Permittees shall comply with the following grouped³² WLA per the provisions in Part VI.E.3 for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual WLA ³³ (m ³ /yr)
Total Sediment (suspended sediment plus sediment bed load)	44,615

F. TMDLs in Marina del Rey Subwatershed

- 1. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
 - a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
 - b. Permittees shall comply with the following final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

³² The WLA is group-based and shared among all MS4 Permittees located within the drainage area.

³³ The WLA is applied as a 3-year average.

- c. Section F.1.b above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following daily maximum final water quality-based effluent limitations for discharges to Marina del Rey Harbor Beach and Back Basins D, E, and F during dry weather as of the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL and during wet weather no later than July 15, 2021. Permittees shall comply with the following geometric mean final water quality-based effluent limitations for each monitoring location, calculated as defined in the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, no later than July 15, 2021.

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

d. Receiving Water Limitations

- i. Permittees shall comply with the following grouped³⁴ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation implementation provision in the TMDL and identified in subpart iii. below, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2021.

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ³⁵ (Year-round)	17	3

- ii. Section F.1.d.i above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria

³⁴ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

³⁵ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

TMDL, Permittees shall comply with the following grouped³⁶ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation implementation provision in the TMDL and identified in subpart iv. below, during dry weather as of the effective date of the revised Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL and during wet weather no later than July 15, 2021.

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	9	2
Wet Weather ³⁷ (Year-round)	17	3

iii. Permittees shall comply with the following grouped³⁸ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation implementation provision in the TMDL as of the effective date of this Order:

		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station ID	Monitoring Location	Summer Dry-Weather (April 1 to October 31)		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-9	Basin F, center of basin	0	0	3	1	8	1

iv. Section F.1.d.iii above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following grouped³⁹ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation implementation provision in the TMDL as of the effective date of the revised Marina del Rey Harbor Mothers’ Beach and Back Basins Bacteria TMDL:

³⁶ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

³⁷ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

³⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

³⁹ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

		Annual Allowable Exceedance Days of the Single Sample Objective (days)					
Station ID	Monitoring Location	Summer Dry-Weather (April 1 to October 31)		Winter Dry Weather (November 1 – March 31)		Wet Weather (Year-round)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-9	Basin F, center of basin	0	0	9	2	8	1

- v. Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- vi. Section F.1.d.v above shall not be applicable upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL (Attachment B of Resolution No. R12-007). Upon the effective date of the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F, calculated as defined in the revised Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL, no later than July 15, 2021:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

2. Marina del Rey Harbor Toxic Pollutants TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-3.
- b. Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016⁴⁰, expressed as an annual loading of pollutants associated with total suspended solids (TSS) discharged to Marina del Rey Harbor Back Basins D, E, and F:

⁴⁰ If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented then the Permittees shall comply with the final water quality-based effluent limitations no later than March 22, 2021.

Constituent	Effluent Limitations	
	Annual	Units
Copper	2.01	kg/yr
Lead	2.75	kg/yr
Zinc	8.85	kg/yr
Chlordane	0.0295	g/yr
Total PCBs	1.34	g/yr

- c. Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2014	50
March 22, 2016	100

- d. If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the effluent limitations (%)
March 22, 2013	25
March 22, 2015	50
March 22, 2017	75
March 22, 2021	100

- e. Permittees shall be deemed in compliance with the water quality-based effluent limitations in Part F.2.b by demonstrating any one of the following:
- i. Final water quality-based effluent limitations for pollutants associated with TSS discharged to Marina del Rey Harbor Back Basins D, E, and F are met; or
 - ii. The sediment numeric targets as defined in the TMDL are met in bed sediments; or
 - iii. Pollutant concentrations associated with TSS discharged meet the numeric targets for sediment as defined in the TMDL.

**ATTACHMENT N. TMDLs IN DOMINGUEZ CHANNEL AND GREATER HARBOR WATERS
WATERSHED MANAGEMENT AREA**

A. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Receiving Water Limitations

- a. Permittees shall comply with the following final single sample bacteria receiving water limitations for the Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach as of the effective date of this Order:

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	3	1
Wet Weather ¹ (Year-round)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	15	3

- b. Section A.3.a above shall not be applicable upon the effective date of the revised Los Angeles Harbor Bacteria TMDL (Attachment C of Resolution No. R12-007). Upon the effective date of the revised Los Angeles Harbor Bacteria TMDL, Permittees shall comply with the following final single sample bacteria receiving water limitations for the Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach as of the effective date of the revised Los Angeles Harbor Bacteria TMDL:

¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	8	1
Wet Weather ² (Year-round)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	15	3

- c. Permittees shall comply with the following geometric mean receiving water limitations for the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order:

Constituent	Geometric Mean
Total coliform	1,000 MPN/100 mL
Fecal coliform	200 MPN/100 mL
<i>Enterococcus</i>	35 MPN/100 mL

B. Machado Lake Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Machado Lake no later than March 6, 2016, and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to Machado Lake, per the schedule below:

**Machado Lake Trash Water Quality-Based Effluent Limitations
(gallons of uncompressed trash per year)**

Permittees	Baseline ³	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ⁴ (0%)
		Annual Trash Discharge (gallons/yr)				
Carson	8141	6513	4885	3257	1628	0
Lomita	9393	7514	5636	3757	1879	0
City of Los Angeles	12331	9865	7399	4932	2466	0
Los Angeles County	8304	6643	4982	3322	1661	0

² Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

³ The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.

⁴ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

Los Angeles County Flood Control District	16	13	10	7	3	0
Palos Verdes Estates	1976	1581	1186	791	395	0
Rancho Palos Verdes	5227	4181	3136	2091	1045	0
Redondo Beach	18	15	11	7	4	0
Rolling Hills	7004	5603	4202	2801	1401	0
Rolling Hills Estates	14722	11777	8833	5889	2944	0
Torrance	34809	27847	20885	13924	6962	0

4. If a Permittee opts to derive a site specific trash generation rate through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation will be calculated by multiplying the point source area(s) by the derived trash generation rate(s).
5. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in B.2 and B.3 above per the provisions in Part VI.E.5.

C. Machado Lake Nutrient TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following interim and final water quality-based effluent limitations for discharges to Machado Lake:

Deadline	Interim and Final Effluent Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

3. Compliance Determination
 - a. Permittees may be deemed in compliance with the water quality-based effluent limitations by actively participating in a Lake Water Quality Management Plan (LWQMP) and attaining the receiving water limitations for Machado Lake. The City of Los Angeles has entered into a Memorandum of Agreement with the Regional Water Board to implement the LWQMP and reduce external nutrient loading to attain the following receiving water limitations:

Deadline	Interim and Final Receiving Water Limitations	
	Monthly Average Total Phosphorus (mg/L)	Monthly Average Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (mg/L)
As of the effective date of this Order	1.25	3.5
March 11, 2014	1.25	2.45
September 11, 2018	0.10	1.0

- b. Permittees may be deemed in compliance with water quality-based effluent limitations by demonstrating reduction of total nitrogen and total phosphorous on an annual mass basis measured at the storm drain outfall of the Permittee’s drainage area where approved by the Regional Water Board Executive Officer based on the results of a special study by the Permittee.⁵
- i. The County of Los Angeles submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations	
	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	887	1739
September 11, 2018	71	710

- ii. The City of Torrance submitted a special study work plan, which was approved by the Regional Water Board Executive Officer, and established the following annual mass-based water quality based effluent limitations:

Deadline	Interim and Final Effluent Limitations	
	Annual Load Total Phosphorus (kg)	Annual Load Total Nitrogen (TKN+NO ₃ -N+NO ₂ -N) (kg)
March 11, 2014	3,760	7,370
September 11, 2018	301	3008

D. Machado Lake Pesticides and PCBs TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-4.
2. Permittees shall comply with the following water quality-based effluent limitations for discharges of suspended sediments to Machado Lake, applied as a 3-year average no later than September 30, 2019:

Pollutant	Effluent Limitations for Suspended Sediment-Associated Contaminants (µg/kg dry weight)
Total PCBs	59.8
DDT (all congeners)	4.16
DDE (all congeners)	3.16
DDD (all congeners)	4.88
Total DDT	5.28
Chlordane	3.24
Dieldrin	1.9

⁵ The annual mass-based allocation shall be equivalent to a monthly average concentration of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions.

**E. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters
Toxic Pollutants TMDL**

1. Permittees subject to the provisions below are identified in Attachment K, Tables K-4 and K-13.
2. Permittees shall comply with the interim water quality-based effluent limitations listed below, as of the effective date of this Order:
 - a. Permittees shall comply with the following interim water quality-based effluent limitations for discharges to Dominguez Channel freshwater during wet weather:
 - i. The freshwater toxicity interim water quality-based effluent limitation is 2 TUc. The freshwater interim effluent limitation shall be implemented as a trigger requiring initiation and implementation of the TRE/TIE process as outlined in US EPA's "Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program" (2000).
 - ii. Permittees shall comply with the following interim metals water quality-based effluent limitations for discharges to the Dominguez Channel freshwater and Torrance Lateral during wet weather:

Metals	Interim Effluent Limitation Daily Maximum (µg/L)
Total Copper	207.51
Total Lead	122.88
Total Zinc	898.87

- b. Permittees shall comply with the following interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Interim Effluent Limitations Daily Maximum (mg/kg sediment)					
	Copper	Lead	Zinc	DDT	PAHs	PCBs
Dominguez Channel Estuary (below Vermont Avenue)	220.0	510.0	789.0	1.727	31.60	1.490
Long Beach Inner Harbor	142.3	50.4	240.6	0.070	4.58	0.060
Los Angeles Inner Harbor	154.1	145.5	362.0	0.341	90.30	2.107
Long Beach Outer Harbor (inside breakwater)	67.3	46.7	150	0.075	4.022	0.248
Los Angeles Outer Harbor (inside breakwater)	104.1	46.7	150	0.097	4.022	0.310
Los Angeles River Estuary	53.0	46.7	183.5	0.254	4.36	0.683
San Pedro Bay Near/Off Shore Zones	76.9	66.6	263.1	0.057	4.022	0.193
Los Angeles Harbor - Cabrillo Marina	367.6	72.6	281.8	0.186	36.12	0.199
Los Angeles Harbor - Consolidated Slip	1470.0	1100.0	1705.0	1.724	386.00	1.920
Los Angeles Harbor - Inner Cabrillo Beach Area	129.7	46.7	163.1	0.145	4.022	0.033
Fish Harbor	558.6	116.5	430.5	40.5	2102.7	36.6

3. Permittees shall comply with the final water quality-based effluent limitations as listed below no later than March 23, 2032, and every year thereafter:

a. Dominguez Channel Freshwater – Wet Weather

- i. Freshwater Toxicity Effluent Limitation shall not exceed the monthly median of 1 TUc.
- ii. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to Dominguez Channel and all upstream reaches and tributaries of Dominguez Channel above Vermont Avenue:

Metals	Water Column Mass-Based Final Effluent Limitation Daily Maximum ⁶ (g/day)
Total Copper	1,300.3
Total Lead	5,733.7
Total Zinc	9,355.5

b. Torrance Lateral Freshwater and Sediment – Wet Weather

- i. Permittees shall comply with the following final metals water quality-based effluent limitations for discharges to the Torrance Lateral:

Metals	Water Column Effluent Limitation Daily Maximum ⁷ (unfiltered, µg/L)
Total Copper	9.7
Total Lead	42.7
Total Zinc	69.7

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Torrance Lateral:

Metals	Concentration-Based Effluent Limitation Daily Maximum (mg/kg dry)
Total Copper	31.6
Total Lead	35.8
Total Zinc	121

⁶ Effluent limitations are based on a hardness of 50 mg/L, and 90th percentile of annual flow rates (62.7 cfs) in Dominguez Channel. Recalculated mass-based effluent limitations using ambient hardness and flow rate at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the California Toxics Rule (CTR) are achieved.

⁷ Effluent limitations are based on a hardness of 50 mg/L. Recalculated concentration-based effluent limitations using ambient hardness at the time of sampling are consistent with the assumptions and requirements of the TMDL. In addition to the effluent limitations above, samples collected during flow conditions less than the 90th percentile of annual flow rates must demonstrate that the acute and chronic hardness dependent water quality criteria provided in the CTR are achieved.

c. Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters

- i. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of pollutants in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (kg/yr)			
	Total Cu	Total Pb	Total Zn	Total PAHs
Dominguez Channel Estuary	22.4	54.2	271.8	0.134
Consolidated Slip	2.73	3.63	28.7	0.0058
Inner Harbor	1.7	34.0	115.9	0.088
Outer Harbor	0.91	26.1	81.5	0.105
Fish Harbor (POLA)	0.00017	0.54	1.62	0.007
Cabrillo Marina (POLA)	0.0196	0.289	0.74	0.00016
San Pedro Bay	20.3	54.7	213.1	1.76
LA River Estuary	35.3	65.7	242.0	2.31

- ii. Permittees shall comply with the following final concentration-based water quality-based effluent limitations for pollutant concentrations in the sediments discharged to the Dominguez Channel Estuary, Consolidated Slip, and Fish Harbor:

Water Body	Effluent Limitations Daily Maximum (mg/kg dry sediment)		
	Cadmium	Chromium	Mercury
Dominguez Channel Estuary	1.2	--	--
Consolidated Slip	1.2	81	0.15
Fish Harbor	--	--	0.15

- d. Permittees shall comply with the following final mass-based water quality-based effluent limitations, expressed as an annual loading of total DDT and total PCBs in the sediment deposited to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (g/yr)	
	Total DDTs	Total PCBs
Dominguez Channel Estuary	0.250	0.207
Consolidated Slip	0.009	0.004
Inner Harbor	0.051	0.059
Outer Harbor	0.005	0.020
Fish Harbor	0.0003	0.0019
Cabrillo Marina	0.000028	0.000025
Inner Cabrillo Beach	0.0001	0.0003
San Pedro Bay	0.049	0.44
LA River Estuary	0.100	0.324

4. Compliance Determination

- a. Permittees shall be deemed in compliance with the interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment as listed above in part E.2.b by meeting any one of the following methods:
 - i. Demonstrate that the sediment quality condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the Sediment Quality Objectives (SQO) Part 1, is met; or
 - ii. Meet the interim water quality-based effluent limitations in bed sediment over a three-year averaging period; or
 - iii. Meet the interim water quality-based effluent limitations in the discharge over a three-year averaging period.
- b. Permittees shall be deemed in compliance with the final fresh water metals water quality-based effluent limitations for discharges to Dominguez Channel and Torrance Lateral as listed above in parts E.3.a.ii and E.3.b.i by meeting any one of the following methods:
 - i. Final metals water quality-based effluent limitations are met; or
 - ii. CTR total metals criteria are met instream; or
 - iii. CTR total metals criteria are met in the discharge.
- c. Permittees shall be deemed in compliance with the final water quality-based effluent limitations for pollutants in the sediment as listed above in parts E.3.c.i and E.3.c.ii by meeting any one of the following methods:
 - i. Final water quality-based effluent limitations for pollutants in the sediment are met; or
 - ii. The qualitative sediment condition of *Unimpacted* or *Likely Unimpacted* via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met, with the exception of chromium, which is not included in the SQO Part 1; or
 - iii. Sediment numeric targets are met in bed sediments over a three-year averaging period.
- d. Permittees shall be deemed in compliance with the final water quality-based effluent limitations for total DDT and total PCBs in the sediment as listed above in part E.3.d by meeting any one of the following methods:
 - i. Fish tissue targets are met in species resident to the specified water bodies⁸; or
 - ii. Final water quality-based effluent limitations for pollutants in the sediment are met; or

⁸ A site-specific study to determine resident species shall be submitted to the Regional Water Board Executive Officer for approval.

- iii.** Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period; or
- iv.** Demonstrate that the sediment quality condition protective of fish tissue is achieved per the State Water Board's Statewide Enclosed Bays and Estuaries Plan.

ATTACHMENT O. TMDLs IN LOS ANGELES RIVER WATERSHED MANAGEMENT AREA**A. Los Angeles River Watershed Trash TMDL**

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to the Los Angeles River no later than September 30, 2016 and every year thereafter.
3. Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged to the Los Angeles River, per the schedule below:

**Los Angeles River Watershed Trash Effluent Limitations¹ per Storm Year²
(gallons of uncompressed trash)**

Permittees	Baseline	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ³ (0%)
Alhambra	39903	11971	7981	3990	1317	0
Arcadia	50108	15032	10022	5011	1654	0
Bell	16026	4808	3205	1603	529	0
Bell Gardens	13500	4050	2700	1350	446	0
Bradbury	4277	1283	855	428	141	0
Burbank	92590	27777	18518	9259	3055	0
Calabasas	22505	6752	4501	2251	743	0
Carson	6832	2050	1366	683	225	0
Commerce	58733	17620	11747	5873	1938	0
Compton	53191	15957	10638	5319	1755	0
Cudahy	5935	1781	1187	594	196	0
Downey	39063	11719	7813	3906	1289	0
Duarte	12210	3663	2442	1221	403	0
El Monte	42208	12662	8442	4221	1393	0
Glendale	140314	42094	28063	14031	4630	0
Hidden Hills	3663	1099	733	366	121	0
Huntington Park	19159	5748	3832	1916	632	0
Irwindale	12352	3706	2470	1235	408	0
La Cañada Flintridge	33496	10049	6699	3350	1105	0
Los Angeles	1374845	412454	274969	137485	45370	0
Los Angeles County	310223	93067	62045	31022	10237	0
Lynwood	28201	8460	5640	2820	931	0
Maywood	6129	1839	1226	613	202	0
Monrovia	46687	14006	9337	4669	1541	0
Montebello	50369	15111	10074	5037	1662	0
Monterey Park	38899	11670	7780	3890	1284	0
Paramount	27452	8236	5490	2745	906	0
Pasadena	111998	33599	22400	11200	3696	0
Pico Rivera	13953	4186	2791	1395	460	0
Rosemead	27305	8192	5461	2731	901	0
San Fernando	13947	4184	2789	1395	460	0
San Gabriel	20343	6103	4069	2034	671	0

¹ Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.

² Storm year is defined as October 1 to September 30 herein.

³ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

Permittees	Baseline	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ³ (0%)
San Marino	14391	4317	2878	1439	475	0
Santa Clarita	901	270	180	90	30	0
Sierra Madre	11611	3483	2322	1161	383	0
Signal Hill	9434	2830	1887	943	311	0
Simi Valley	137	41	27	14	5	0
South El Monte	15999	4800	3200	1600	528	0
South Gate	43904	13171	8781	4390	1449	0
South Pasadena	14907	4472	2981	1491	492	0
Temple City	17572	5272	3514	1757	580	0
Vernon	47203	14161	9441	4720	1558	0

Los Angeles River Watershed Trash Effluent Limitations⁴ per Storm Year⁵
(pounds of drip-dry trash)

Permittees	Baseline	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ⁶ (0%)
Alhambra	68761	20628	13752	6876	2269	0
Arcadia	93036	27911	18607	9304	3070	0
Bell	25337	7601	5067	2534	836	0
Bell Gardens	23371	7011	4674	2337	771	0
Bradbury	12160	3648	2432	1216	401	0
Burbank	170389	51117	34078	17039	5623	0
Calabasas	52230	15669	10446	5223	1724	0
Carson	10208	3062	2042	1021	337	0
Commerce	85481	25644	17096	8548	2821	0
Compton	86356	25907	17271	8636	2850	0
Cudahy	10061	3018	2012	1006	332	0
Downey	68507	20552	13701	6851	2261	0
Duarte	23687	7106	4737	2369	782	0
El Monte	68267	20480	13653	6827	2253	0
Glendale	293498	88049	58700	29350	9685	0
Hidden Hills	10821	3246	2164	1082	357	0
Huntington Park	30929	9279	6186	3093	1021	0
Irwindale	17911	5373	3582	1791	591	0
La Cañada Flintridge	73747	22124	14749	7375	2434	0
Los Angeles	2572500	771750	514500	257250	84893	0
Los Angeles County	651806	195542	130361	65181	21510	0
Lynwood	46467	13940	9293	4647	1533	0
Maywood	10549	3165	2110	1055	348	0
Monrovia	100988	30296	20198	10099	3333	0
Montebello	83707	25112	16741	8371	2762	0
Monterey Park	70456	21137	14091	7046	2325	0
Paramount	44490	13347	8898	4449	1468	0
Pasadena	207514	62254	41503	20751	6848	0
Pico Rivera	22549	6765	4510	2255	744	0
Rosemead	47378	14213	9476	4738	1563	0
San Fernando	23077	6923	4615	2308	762	0
San Gabriel	36437	10931	7287	3644	1202	0

⁴ Effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table 7-2.2 of the Basin Plan.

⁵ Storm year is defined as October 1 to September 30 herein.

⁶ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

Permittees	Baseline	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ⁶ (0%)
San Marino	29147	8744	5829	2915	962	0
Santa Clarita	2326	698	465	233	77	0
Sierra Madre	25192	7558	5038	2519	831	0
Signal Hill	14220	4266	2844	1422	469	0
Simi Valley	344	103	69	34	11	0
South El Monte	24319	7296	4864	2432	803	0
South Gate	72333	21700	14467	7233	2387	0
South Pasadena	28357	8507	5671	2836	936	0
Temple City	31819	9546	6364	3182	1050	0
Vernon	66814	20044	13363	6681	2205	0

- Permittees shall comply with the interim and final water quality-based effluent limitations for trash in A.2 and A.3 above per the provisions in Part VI.E.5.

B. Los Angeles River Nitrogen Compounds and Related Effects TMDL

- Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Water Body	NH ₃ -N (mg/L)		NO ₃ -N (mg/L)	NO ₂ -N (mg/L)	NO ₃ -N+NO ₂ -N (mg/L)
	One-hour Average	Thirty-day Average	Thirty-day Average	Thirty-day Average	Thirty-day Average
Los Angeles River above Los Angeles-Glendale WRP (LAG)	4.7	1.6	8.0	1.0	8.0
Los Angeles River below LAG	8.7	2.4	8.0	1.0	8.0
Los Angeles Tributaries	10.1	2.3	8.0	1.0	8.0

C. Los Angeles River and Tributaries Metals TMDL

- Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- Final Water Quality-Based Effluent Limitations
 - The watershed is divided into five jurisdictional groups based on the subwatersheds of the tributaries that drain to each reach of the river. Each jurisdictional group shall achieve compliance in prescribed percentages of its subwatershed(s). Jurisdictional groups can be reorganized or subdivided upon approval by the Regional Water Board Executive Officer.
 - Permittees shall comply with the following grouped⁷ dry weather⁸ water quality-based effluent limitations no later than January 11, 2024, expressed as total recoverable metals.⁹

⁷ The dry weather water quality-based effluent limitations are grouped-based and shared by the MS4 Permittees that are located within the drainage area.

⁸ Dry weather is defined as any day when the maximum daily flow in the Los Angeles River is less than 500 cfs measured at the Wardlow gage station.

⁹ Dry weather effluent limitations are equal to storm drain flows (critical flows minus median POTW flows minus median open space flows) multiplied by reach specific numeric targets, minus the contribution from direct air deposition.

Waterbody	Effluent Limitations Daily Maximum (kg/day)		
	Copper	Lead	Zinc
LA River Reach 6	WER ¹ x 0.53	WER ¹ x 0.33	---
LA River Reach 5	WER ¹ x 0.05	WER ¹ x 0.03	---
LA River Reach 4	WER ¹ x 0.32	WER ¹ x 0.12	---
LA River Reach 3	WER ¹ x 0.06	WER ¹ x 0.03	---
LA River Reach 2	WER ¹ x 0.13	WER ¹ x 0.07	---
LA River Reach 1	WER ¹ x 0.14	WER ¹ x 0.07	---
Bell Creek	WER ¹ x 0.06	WER ¹ x 0.04	---
Tujunga Wash	WER ¹ x 0.001	WER ¹ x 0.0002	---
Burbank Channel	WER ¹ x 0.15	WER ¹ x 0.07	---
Verdugo Wash	WER ¹ x 0.18	WER ¹ x 0.10	---
Arroyo Seco	WER ¹ x 0.01	WER ¹ x 0.01	---
Rio Hondo Reach 1	WER ¹ x 0.01	WER ¹ x 0.006	WER ¹ x 0.16
Compton Creek	WER ¹ x 0.04	WER ¹ x 0.02	---

¹WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

- c. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather no later than January 11, 2024, expressed as total recoverable metals:

Waterbody	Effluent Limitations Daily Maximum (µg total recoverable metals/L)		
	Copper	Lead	Zinc
LA River Reach 5, 6 and Bell Creek	WER ¹ x 30	WER ¹ x 19	---
LA River Reach 4	WER ¹ x 26	WER ¹ x 10	---
LA River Reach 3 above LA-Glendale WRP and Verdugo Wash	WER ¹ x 23	WER ¹ x 12	---
LA River Reach 3 below LA-Glendale WRP	WER ¹ x 26	WER ¹ x 12	---
Burbank Western Channel (above WRP)	WER ¹ x 26	WER ¹ x 14	---
Burbank Western Channel (below WRP)	WER ¹ x 19	WER ¹ x 9.1	---
LA River Reach 2 and Arroyo Seco	WER ¹ x 22	WER ¹ x 11	---
LA River Reach 1	WER ¹ x 23	WER ¹ x 12	---
Compton Creek	WER ¹ x 19	WER ¹ x 8.9	---
Rio Hondo Reach 1	WER ¹ x 13	WER ¹ x 5.0	WER ¹ x 131

¹ WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

- d. Permittees shall comply with the following grouped¹⁰ wet weather¹¹ water quality-based effluent limitations no later than January 11, 2028, expressed as total recoverable metals discharged to all reaches of the Los Angeles River and its tributaries.

Constituent	Effluent Limitation Daily Maximum (kg/day)
Cadmium	WER ¹ x 2.8 x 10 ⁻⁹ x daily volume (L) – 1.8
Copper	WER ¹ x 1.5 x 10 ⁻⁸ x daily volume (L) – 9.5
Lead	WER ¹ x 5.6 x 10 ⁻⁸ x daily volume (L) – 3.85
Zinc	WER ¹ x 1.4 x 10 ⁻⁷ x daily volume (L) – 83

¹ WER(s) have a default value of 1.0 unless site-specific WER(s) are approved via the Basin Plan Amendment process.

3. Permittees shall comply with interim and final water quality-based effluent limitations for metals discharged to the Los Angeles River and its tributaries, per the schedule below:

Deadline	Total Drainage Area Served by the MS4 required to meet the water quality-based effluent limitations (%)	
	Dry weather	Wet weather
January 11, 2012	50	25
January 11, 2020	75	--
January 11, 2024	100	50
January 11, 2028	100	100

D. Los Angeles River Watershed Bacteria TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
<i>E. coli</i>	235/100 mL	126/100 mL

¹⁰ The wet weather water quality-based effluent limitations are grouped-based and shared among all MS4 Permittees located within the drainage area.

¹¹ Wet weather is defined as any day when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cfs measured at the Wardlow gage station.

3. Permittees shall comply with the following grouped¹² interim dry weather single sample bacteria water quality-based effluent limitations for specific river segments and tributaries as listed in the table, below, according to the schedule in Table O-1:

River Segment or Tributary	Daily Maximum <i>E. coli</i> Load (10 ⁹ MPN/Day)
Los Angeles River Segment A (Willow to Rosecrans)	301
Los Angeles River Segment B (Rosecrans to Figueroa)	518
Los Angeles River Segment C (Figueroa to Tujunga)	463
Los Angeles River Segment D (Tujunga to Balboa)	454
Los Angeles River Segment E (Balboa to headwaters)	32
Aliso Canyon Wash	23
Arroyo Seco	24
Bell Creek	14
Bull Creek	9
Burbank Western Channel	86
Compton Creek	7
Dry Canyon	7
McCoy Canyon	7
Rio Hondo	2
Tujunga Wash	10
Verdugo Wash	51

- a. Unexpectedly high-loading outfalls may be excluded from interim compliance calculations under the following circumstances: If an outfall which was 1) loading *E. coli* at a rate less than the 25th percentile of outfalls during the monitoring events used to develop the “MS4 Load Reduction Strategy” (LRS), but, at the time of compliance monitoring, is 2) loading *E. coli* at a rate greater than the 90th percentile of outfalls, and 3) actions are taken prior to the end of the first phase (i.e. 10 years after the beginning of the segment or tributary specific phase) such that the outfall is returned to a loading less than the 50th percentile of the outfalls at compliance monitoring, then the 90th percentile data from the outfall can be excluded from the compliance loading calculations.
- b. Likewise, if an outfall which was 1) the subject of a dry weather diversion is found, at the time of compliance monitoring, to be 2) contributing greater than the

¹² The interim dry weather water quality-based effluent limitations are group-based and shared among all MS4 Permittees located within the drainage area. However, the interim dry weather water quality-based effluent limitations may be distributed based on proportional drainage area, upon approval of the Regional Water Board Executive Officer.

90th percentile loading rate, and 3) actions are taken such that the outfall is returned to a loading less than the 50th percentile of the outfalls at compliance monitoring, and a maintenance schedule for the diversion is submitted with the compliance report, then the 90th percentile data from the outfall can be excluded from the compliance loading calculations.

4. Receiving Water Limitations

- a. Permittees shall comply with the following grouped¹³ final single sample bacteria receiving water limitations for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Dry Weather	5	1
Non-HFS ¹⁴ Waterbodies Wet Weather	15	2
HFS Waterbodies Wet Weather	10 (not including HSF days)	2 (not including HSF days)

- b. Permittees shall comply with the following geometric mean receiving water limitation for discharges to the Los Angeles River and its tributaries during dry weather according to the schedule in Table O-1, and during wet weather no later than March 23, 2037:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

Table O-1. Los Angeles River Bacteria Implementation Schedule for Dry Weather

Italics in this Table refer to Permittees using an alternative compliance plan instead of an LRS.

Implementation Action	Responsible Parties	Deadline
SEGMENT B (upper and middle Reach 2 – Figueroa Street to Rosecrans Avenue)		
First phase – Segment B		
Submit a Load Reduction Strategy (LRS) for Segment B (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment B	September 23, 2014
Complete implementation of LRS	MS4 Permittees discharging to Segment B, if using LRS	March 23, 2019

¹³ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4, Long Beach MS4, and Caltrans.

¹⁴ HFS stands for high flow suspension as defined in Chapter 2 of the Basin Plan.

Implementation Action	Responsible Parties	Deadline
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment B, if using LRS	March 23, 2022
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment B, if using alternative compliance plan</i>	<i>March 23, 2022</i>
Second phase, if necessary – Segment B for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment B	March 23, 2023
Complete implementation of LRS	MS4 Permittees discharging to Segment B, if using LRS	September 23, 2026
Achieve final water quality-based effluent limitations in Segment B or demonstrate that non-compliance is only due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment B, if using LRS	September 23, 2028
SEGMENT B TRIBUTARIES (Rio Hondo and Arroyo Seco)		
First phase – Segment B Tributaries (Rio Hondo and Arroyo Seco)		
Submit a Load Reduction Strategy (LRS) for Segment B tributaries (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment B tributaries	March 23, 2016
Complete implementation of LRS	MS4 Permittees discharging to Segment B tributaries, if using LRS	September 23, 2020
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment B tributaries, if using LRS	September 23, 2023
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is only due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment B tributaries, if using alternative compliance plan</i>	<i>September 23, 2023</i>
Second phase, if necessary – Segment B Tributaries (Rio Hondo and Arroyo Seco) for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment B tributaries	September 23, 2024
Complete implementation of LRS	MS4 Permittees discharging to Segment B tributaries, if using LRS	March 23, 2028

Implementation Action	Responsible Parties	Deadline
Achieve final water quality-based effluent limitations Segment B tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment B tributaries, if using LRS	March 23, 2030
SEGMENT A (lower Reach 2 and Reach 1 – Rosecrans Avenue to Willow Street)		
First phase – Segment A		
Submit a Load Reduction Strategy (LRS) for Segment A (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment A	September 23, 2016
Complete implementation of LRS	MS4 Permittees discharging to Segment A, if using LRS	March 23, 2021
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment A, if using LRS	March 23, 2024
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment A, if using alternative compliance plan</i>	<i>March 23, 2024</i>
Second phase, if necessary – Segment A for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment A	March 23, 2025
Complete implementation of LRS	MS4 Permittees discharging to Segment A, if using LRS	September 23, 2029
Achieve final water quality-based effluent limitations in Segment A or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment A, if using LRS	September 23, 2031
SEGMENT A TRIBUTARY (Compton Creek)		
First phase – Segment A Tributary		
Submit a Load Reduction Strategy (LRS) for Segment A tributary (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment A tributary	March 23, 2018
Complete implementation of LRS	MS4 Permittees discharging to Segment A tributary if using LRS	September 23, 2022

Implementation Action	Responsible Parties	Deadline
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment A tributary if using LRS	September 23, 2025
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment A tributary, if using alternative compliance plan</i>	<i>September 23, 2025</i>
Second phase, if necessary – Segment A Tributary for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment A tributary	September 23, 2026
Complete implementation of LRS	MS4 Permittees discharging to Segment A tributary, if using LRS	March 23, 2030
Achieve final water quality-based effluent limitations in Segment A tributary or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment A tributary, if using LRS	March 23, 2032
SEGMENT E (Reach 6 – LA River headwaters [confluence with Bell Creek and Calabasas Creek] to Balboa Boulevard)		
First phase – Segment E		
Submit a Load Reduction Strategy (LRS) for Segment E (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment E	September 23, 2017
Complete implementation of LRS	MS4 Permittees discharging to Segment E, if using LRS	March 23, 2022
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment E, if using LRS	March 23, 2025
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment E, if using alternative compliance plan</i>	<i>March 23, 2025</i>
Second phase, if necessary –Segment E for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment E	March 23, 2026
Complete implementation of LRS	MS4 Permittees discharging to Segment E, if using LRS	September 23, 2029

Implementation Action	Responsible Parties	Deadline
Achieve final Water quality-based effluent limitations in Segment E or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment E, if using LRS	September 23, 2031
SEGMENT E TRIBUTARIES (Dry Canyon Creek, McCoy Creek, Bell Creek, and Aliso Canyon Wash)		
First phase – Segment E Tributaries		
Submit a Load Reduction Strategy (LRS) for Segment E tributaries (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment E tributaries	September 23, 2021
Complete implementation of LRS	MS4 Permittees discharging to Segment E tributaries if using LRS	March 23, 2026
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment E tributaries, if using LRS	March 23, 2029
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment E tributaries, if using alternative compliance plan</i>	<i>March 23, 2029</i>
Second phase, if necessary – Segment E Tributaries for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment E tributaries	March 23, 2030
Complete implementation of LRS	MS4 Permittees discharging to Segment E tributaries, if using LRS	September 23, 2033
Achieve final water quality-based effluent limitations in Segment E tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment E tributaries, if using LRS	September 23, 2035
SEGMENT C (lower Reach 4 and Reach 3 – Tujunga Avenue to Figueroa Street) SEGMENT C TRIBUTARIES (Tujunga Wash, Burbank Western Channel, and Verdugo Wash) SEGMENT D (Reach 5 and upper Reach 4 – Balboa Boulevard to Tujunga Avenue) SEGMENT D TRIBUTARIES (Bull Creek)		
First phase – Segment C, Segment C Tributaries, Segment D, Segment D tributaries		
Submit a Load Reduction Strategies (LRS) for Segment C, Segment C tributaries, Segment D, Segment D tributaries (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries	March 23, 2023

Implementation Action	Responsible Parties	Deadline
Complete implementation of LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS	September 23, 2027
Achieve interim (or final) water quality-based effluent limitations and submit report to Regional Water Board	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS	September 23, 2030
<i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board</i>	<i>MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using alternative compliance plan</i>	<i>September 23, 2030</i>
Second phase, if necessary - Segment C, Segment C Tributaries, Segment D, Segment D Tributaries for LRS approach only		
Submit a new LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries	September 23, 2031
Complete implementation of LRS	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS	March 23, 2035
Achieve final water quality-based effluent limitations in Segment C, Segment C tributaries, Segment D, Segment D tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to Regional Water Board	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS	March 23, 2037

5. Compliance

- a. Permittees may demonstrate compliance with the final dry weather limitations by demonstrating that final receiving water limitations are met in the receiving waters or by demonstrating one of the following conditions at outfalls to the receiving waters:
 - i. Flow-weighted concentration of *E. coli* in MS4 discharges during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge during dry weather.
- b. In addition, individual Permittees or subgroups of Permittees may differentiate their dry weather discharges from other dischargers or upstream contributions by demonstrating one of the following conditions at outfalls to the receiving waters or at segment, tributary or jurisdictional boundaries:

- i. The flow-weighted concentration of E. coli in a Permittee’s individual discharge or in a group of Permittees’ collective discharge during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge from a Permittee’s individual outfall(s) or from a group of Permittees’ outfall(s) during dry weather; or
 - iii. Demonstration that the MS4 loading of E. coli to the segment or tributary during dry weather is less than or equal to the calculated loading rate that would not cause or contribute to exceedances based on the loading capacity representative of conditions in the River at the time of compliance.
- c. The interim dry weather water quality-based effluent limitations are group-based, shared among all MS4 Permittees that drain to a segment or tributary. However, the interim dry weather water quality-based effluent limitations may be distributed based on proportional drainage area, upon approval of the Regional Water Board Executive Officer.

E. Legg Lake Trash TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Legg Lake no later than March 6, 2016, and every year thereafter.
3. Permittees that choose to comply via a full capture compliance strategy must demonstrate a phased implementation of full capture devices attaining interim effluent limitations over the following 8-year period until the final effluent limitation of zero is attained:

Deadline	Effluent Limitation
	Drainage Area covered by Full Capture Systems (%)
March 6, 2008	0
March 6, 2012	20
March 6, 2013	40
March 6, 2014	60
March 6, 2015	80
March 6, 2016	100

Legg Lake Trash Effluent Limitations¹⁵ (gallons of uncompressed trash per year)

Permittees	Baseline ¹⁶ (100%)	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ¹⁷ (0%)
Los Angeles County	2400.03	1920.02	1440.02	960.01	480.01	0
Los Angeles County Flood Control District	24.05	19.24	14.43	9.62	4.81	0
City of El Monte	509.48	407.58	305.69	203.79	101.90	0
City of South El Monte	3896.76	3117.41	2338.06	1558.70	779.35	0

4. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.2 and E.3 above per the provisions in Part VI.E.5.
5. If a Permittee opts to derive site specific trash generation rates through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation shall be calculated by multiplying the point source area(s) by the derived trash generation rate(s).
6. Permittees shall comply with the interim and final water quality-based effluent limitations for trash in E.2 and E.3 above per the provisions in Part VI.E.5.

F. Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
2. Permittees shall comply with the following final WLAs for discharges to the Los Angeles River Estuary per the provisions in Part VI.E.3:

Constituent	WLA (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

3. Receiving Water Limitations
 - a. Permittees shall comply with the following grouped¹⁸ final single sample bacteria WLAs for the Los Angeles River Estuary per the provisions in Part VI.E.3:

¹⁵ Water quality-based effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations.

¹⁶ The Regional Water Board calculated the baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year.

¹⁷ Permittees shall achieve their final effluent limitation of zero trash discharged for the year and every year thereafter.

¹⁸ The final receiving water limitations are group-based and shared among all MS4 Permittees located within the drainage area.

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	9	2
Wet Weather ¹⁹	17	3

- b. Permittees shall comply with the following geometric mean receiving water limitations for all monitoring stations in the Los Angeles River Estuary per the provisions in Part VI.E.3:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

4. Compliance Determination

- a. Permittees may demonstrate compliance with the final dry or weather WLAs by demonstrating that final WLAs expressed as allowable exceedance days are met in the receiving waters or by demonstrating one of the following conditions at outfalls to the receiving waters:
 - i. Flow-weighted concentration of bacterial indicators in MS4 discharges during dry or wet weather is less than or equal to the WLAs in part E.2 above, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge during dry weather.
- b. In addition, individual Permittees or subgroups of Permittees may differentiate their dry or wet weather discharges from other dischargers or upstream contributions by demonstrating one of the following conditions at outfalls to the receiving waters or at segment, tributary or jurisdictional boundaries:
 - i. The flow-weighted concentration of bacterial indicators in a Permittee’s individual discharge or in a group of Permittees’ collective discharge during dry or wet weather is less than or equal to the WLAs in part E.2 above, based on a weighted-average using flow rates from all measured outfalls; or
 - ii. Zero discharge from a Permittee’s individual outfall(s) or from a group of Permittees’ outfall(s) during dry weather.

G. Los Angeles Area Lakes TMDLs²⁰ (USEPA established)

1. Lake Calabasas Nutrient TMDL

¹⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁰ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
City of Calabasas	48.5	220

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.066 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.66 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
 - i. The Regional Water Board Executive Officer approves a request by the Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. The Permittee shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved and the chlorophyll a target of 20 µg/L measured as a summer average (May-September) and as an annual average is met.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, pH are achieved, and the chlorophyll a target is met, then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
City of Calabasas	0.1	1.0

Measured as in-lake concentration and applied as a summer average (May-September) and an annual average.

2. Echo Park Lake Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.

- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northern	City of Los Angeles	24.7	156
Southern	City of Los Angeles	7.129	49.69

Measured at the point of discharge using a three-year average. The mass-based allocations are equivalent to existing concentrations of 0.12 mg/L total phosphorus as a summer average (May-September) and annual average, and 1.2 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. In assessing compliance with WLAs, Permittees assigned both northern and southern subwatershed allocations may have their allocations combined.
 - e. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target of 20 µg/L as a summer average (May-September) and as an annual average is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.
3. Echo Park Lake PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (µg/kg dry weight)	Total PCBs in the Water Column (ng/L)
Northern	City of Los Angeles	1.77	0.17
Southern	City of Los Angeles	1.77	0.17

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Total PCBs in the Water Column (ng/L) ^{*,***}
Northern	City of Los Angeles	59.8	0.17
Southern	City of Los Angeles	59.8	0.17

*Measured at the point of discharge.
**Applied as a three-year average.
***Applied as an annual average.

4. Echo Park Lake Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (µg/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Northern	City of Los Angeles	2.10	0.59
Southern	City of Los Angeles	2.10	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Northern	City of Los Angeles	3.24	0.59
Southern	City of Los Angeles	3.24	0.59

*Measured at the point of discharge.
**Applied as a three-year average.
***Applied as an annual average.

5. Echo Park Lake Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.

- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (µg/kg dry weight)	Dieldrin in the Water Column (ng/L)
Northern	City of Los Angeles	0.80	0.14
Southern	City of Los Angeles	0.80	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (µg/kg dry weight) ^{**}	Dieldrin in the Water Column (ng/L) ^{***}
Northern	City of Los Angeles	1.90	0.14
Southern	City of Los Angeles	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

6. Echo Park Lake Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Parts VI.E.3 and VI.E.5.
- c. Permittees shall comply with the following WLA:

Permittee	Trash (Gal/year)
City of Los Angeles	0

7. Legg Lake System Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.

- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Flow (ac-ft/yr)	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northwestern	County of Los Angeles	33.5	53.6	148.7
Northwestern	South El Monte	308	526.3	1,500.6
Northeastern	El Monte	122	226.6	590.3
Northeastern	County of Los Angeles	8.18	12.8	39.2
Northeastern	South El Monte	287	498.7	1,394.8

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.065 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.65 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
- i. The Regional Water Board Executive Officer approves a request by a Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. Permittees shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll *a* target of 20 µg/L as a summer average (May-September) and an annual average is met, in the lake.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll *a* target is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

Subwatershed	Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
Northwestern	County of Los Angeles	0.1	1.0
Northwestern	South El Monte	0.1	1.0
Northeastern	El Monte	0.1	1.0
Northeastern	County of Los Angeles	0.1	1.0
Northeastern	South El Monte	0.1	1.0

Measured as an in-lake concentration. Applied as a summer average (May-September) and an annual average.

8. Peck Road Park Lake Nutrient TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.

- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Eastern	Arcadia	383	2,320
Eastern	Bradbury	497	3,223
Eastern	Duarte	1,540	9,616
Eastern	Irwindale	496	3,487
Eastern	County of Los Angles	924	5,532
Eastern	Monrovia	6,243	38,736
Near Lake	Arcadia	158	1,115
Near Lake	El Monte	96.2	602
Near Lake	Irwindale	28.2	207
Near Lake	County of Los Angeles	129	773
Near Lake	Monrovia	60.4	415
Western	Arcadia	2,840	16,334
Western	County of Los Angeles	467	2,818
Western	Monrovia	425	2,678
Western	Sierra Madre	695	4,254

Measured at the point of discharge using a three-year average. The mass-based allocations are equivalent to existing concentrations of 0.076 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.76 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll a target of 20 µg/L as a summer average (May-September) and as an annual average is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

9. Peck Road Park Lake PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (µg/kg dry weight)	Total PCBs in the Water Column (ng/L)
Eastern	Arcadia	1.29	0.17
Eastern	Bradbury	1.29	0.17
Eastern	Duarte	1.29	0.17
Eastern	Irwindale	1.29	0.17
Eastern	County of	1.29	0.17

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (µg/kg dry weight)	Total PCBs in the Water Column (ng/L)
	Los Angeles		
Eastern	Monrovia	1.29	0.17
Near Lake	Arcadia	1.29	0.17
Near Lake	El Monte	1.29	0.17
Near Lake	Irwindale	1.29	0.17
Near Lake	County of Los Angeles	1.29	0.17
Near Lake	Monrovia	1.29	0.17
Western	Arcadia	1.29	0.17
Western	County of Los Angeles	1.29	0.17
Western	Monrovia	1.29	0.17
Western	Sierra Madre	1.29	0.17

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Total PCBs in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	59.8	0.17
Eastern	Bradbury	59.8	0.17
Eastern	Duarte	59.8	0.17
Eastern	Irwindale	59.8	0.17
Eastern	County of Los Angeles	59.8	0.17
Eastern	Monrovia	59.8	0.17
Near Lake	Arcadia	59.8	0.17
Near Lake	El Monte	59.8	0.17
Near Lake	Irwindale	59.8	0.17
Near Lake	County of Los Angeles	59.8	0.17
Near Lake	Monrovia	59.8	0.17
Western	Arcadia	59.8	0.17
Western	County of Los Angeles	59.8	0.17
Western	Monrovia	59.8	0.17
Western	Sierra Madre	59.8	0.17

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

10. Peck Road Park Lake Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (µg/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Eastern	Arcadia	1.73	0.59
Eastern	Bradbury	1.73	0.59
Eastern	Duarte	1.73	0.59
Eastern	Irwindale	1.73	0.59
Eastern	County of Los Angeles	1.73	0.59
Eastern	Monrovia	1.73	0.59
Near Lake	Arcadia	1.73	0.59
Near Lake	El Monte	1.73	0.59
Near Lake	Irwindale	1.73	0.59
Near Lake	County of Los Angeles	1.73	0.59
Near Lake	Monrovia	1.73	0.59
Western	Arcadia	1.73	0.59
Western	County of Los Angeles	1.73	0.59
Western	Monrovia	1.73	0.59
Western	Sierra Madre	1.73	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	3.24	0.59
Eastern	Bradbury	3.24	0.59
Eastern	Duarte	3.24	0.59
Eastern	Irwindale	3.24	0.59
Eastern	County of Los Angeles	3.24	0.59
Eastern	Monrovia	3.24	0.59
Near Lake	Arcadia	3.24	0.59

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Near Lake	El Monte	3.24	0.59
Near Lake	Irwindale	3.24	0.59
Near Lake	County of Los Angeles	3.24	0.59
Near Lake	Monrovia	3.24	0.59
Western	Arcadia	3.24	0.59
Western	County of Los Angeles	3.24	0.59
Western	Monrovia	3.24	0.59
Western	Sierra Madre	3.24	0.59

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

11. Peck Road Park DDT TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (µg/kg dry weight)	4-4' DDT in the Water Column (ng/L)
Eastern	Arcadia	5.28	0.59
Eastern	Bradbury	5.28	0.59
Eastern	Duarte	5.28	0.59
Eastern	Irwindale	5.28	0.59
Eastern	County of Los Angeles	5.28	0.59
Eastern	Monrovia	5.28	0.59
Near Lake	Arcadia	5.28	0.59
Near Lake	El Monte	5.28	0.59
Near Lake	Irwindale	5.28	0.59
Near Lake	County of Los Angeles	5.28	0.59
Near Lake	Monrovia	5.28	0.59
Western	Arcadia	5.28	0.59
Western	County of Los Angeles	5.28	0.59
Western	Monrovia	5.28	0.59
Western	Sierra Madre	5.28	0.59

Measured at the point of discharge. Applied as an annual average.

12. Peck Road Park Lake Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.

- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (µg/kg dry weight)	Dieldrin in the Water Column (ng/L)
Eastern	Arcadia	0.43	0.14
Eastern	Bradbury	0.43	0.14
Eastern	Duarte	0.43	0.14
Eastern	Irwindale	0.43	0.14
Eastern	County of Los Angeles	0.43	0.14
Eastern	Monrovia	0.43	0.14
Near Lake	Arcadia	0.43	0.14
Near Lake	El Monte	0.43	0.14
Near Lake	Irwindale	0.43	0.14
Near Lake	County of Los Angeles	0.43	0.14
Near Lake	Monrovia	0.43	0.14
Western	Arcadia	0.43	0.14
Western	County of Los Angeles	0.43	0.14
Western	Monrovia	0.43	0.14
Western	Sierra Madre	0.43	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five largemouth bass each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
Eastern	Arcadia	1.90	0.14
Eastern	Bradbury	1.90	0.14
Eastern	Duarte	1.90	0.14
Eastern	Irwindale	1.90	0.14
Eastern	County of Los Angeles	1.90	0.14
Eastern	Monrovia	1.90	0.14
Near Lake	Arcadia	1.90	0.14
Near Lake	El Monte	1.90	0.14
Near Lake	Irwindale	1.90	0.14
Near Lake	County of	1.90	0.14

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
	Los Angeles		
Near Lake	Monrovia	1.90	0.14
Western	Arcadia	1.90	0.14
Western	County of Los Angeles	1.90	0.14
Western	Monrovia	1.90	0.14
Western	Sierra Madre	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

13. Peck Road Park Lake Trash TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-5.
- b. Permittees shall comply with the following WLAs per the provisions in Parts VI.E.3 and VI.E.5.
- c. Permittees shall comply with the following WLA:

Permittee	Trash (gal/year)
Arcadia	0
Bradbury	0
Duarte	0
El Monte	0
Irwindale	0
County of Los Angeles	0
Monrovia	0
Sierra Madre	0

ATTACHMENT P. TMDLs IN SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA

A. San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
2. Permittees shall comply with the following grouped¹ wet weather² WLAs, expressed as total recoverable metals discharged to all upstream reaches and tributaries of the San Gabriel River Reach 2 and Coyote Creek per the provisions in Part VI.E.3:

Water Body	WLA Daily Maximum (kg/day)		
	Copper	Lead	Zinc
San Gabriel Reach 2	---	81.34 µg/L x daily storm volume (L)	---
Coyote Creek	24.71 µg/L x daily storm volume (L)	96.99 µg/L x daily storm volume (L)	144.57 µg/L x daily storm volume (L)

3. Permittees shall comply with the following grouped¹ dry weather WLAs, expressed as total recoverable metals discharged to San Gabriel River Reach 1, Coyote Creek, San Gabriel River Estuary, and San Jose Creek Reach 1 and Reach 2 per the provisions in Part VI.E.3:

Water Body	WLA Daily Maximum	
	Copper	Selenium
San Gabriel Reach 1	18 µg/L	---
Coyote Creek	0.941 kg/day*	---
San Gabriel River Estuary	3.7 µg/L	---
San Jose Creek Reach 1 and 2	---	5 µg/L

*Calculated based upon the median flow at LACDPW Station F354-R of 19 cfs multiplied by the numeric target of 20 µg/L, minus direct air deposition of 0.002 kg/d.

4. Permittees may convert the grouped mass-based WLAs into individual WLAs based on the percentage of the watershed and land uses within the Permittee's jurisdiction, upon approval of the Regional Water Board Executive Officer.

B. Los Angeles Area Lakes TMDLs³ (USEPA established)

1. Puddingstone Reservoir Nutrient TMDL
 - a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
 - b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.

¹ The wet weather and dry weather water WLAs are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, the City of Long Beach, and Orange County MS4 Permittees located within the drainage area and Caltrans.

² In San Gabriel River Reach 2, wet weather TMDLs apply when the maximum daily flow of the river is equal to or greater than 260 cfs as measured at USGS station 11085000, located at the bottom of Reach 3 just above the Whittier Narrows Dam. In Coyote Creek, wet weather TMDLs apply when the maximum daily flow in the creek is equal to or greater than 156 cfs as measured at LACDPW flow gauge station F354-R, located at the bottom of the creek, just above the Long Beach WRP.

³ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

- c. Permittees shall comply with the following annual mass-based allocations based on current flow conditions:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr)	Total Nitrogen (lb-N/yr)
Northern	Claremont	169	829
Northern	County of Los Angeles	741	3,390
Northern	La Verne	2,772	11,766
Northern	Pomona	6.30	28.3
Northern	San Dimas	31.1	137

Measured at the point of discharge. The mass-based allocations are equivalent to existing concentrations of 0.071 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.71 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

- d. The following concentration-based WLAs shall apply during both wet and dry weather if:
- i. The Regional Water Board Executive Officer approves a request by a Permittee that the concentration-based WLAs apply, and the USEPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
 - ii. Permittees shall submit a request to both the Regional Water Board and USEPA and shall include as part of the request a Lake Management Plan, describing actions that will be implemented to ensure that the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved and the chlorophyll *a* target of 20 µg/L as a summer average (May-September) and an annual average is met, in the lake.
 - iii. If the applicable water quality objectives for ammonia, dissolved oxygen, and pH are achieved, and the chlorophyll *a* target is met, in the lake then the total phosphorus and total nitrogen concentration-based WLAs shall be considered attained.

Subwatershed	Permittee	Total Phosphorus (mg-P/L)	Total Nitrogen (mg-N/L)
Northern	Claremont	0.1	1.0
Northern	County of Los Angeles	0.1	1.0
Northern	La Verne	0.1	1.0
Northern	Pomona	0.1	1.0
Northern	San Dimas	0.1	1.0

Measured as an in-lake concentration. Applied as a summer average (May-September) and an annual average.

2. Puddingstone Reservoir Mercury TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.

- c. Permittees shall comply with the following WLAs during both wet and dry weather:

Subwatershed	Permittee	Total Mercury (g-Hg/yr)
Northern	Claremont	0.674
Northern	County of Los Angeles	2.79
Northern	La Verne	10.6
Northern	Pomona	0.026
Northern	San Dimas	0.109

Measured at the point of discharge.

3. Puddingstone Reservoir PCBs TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (µg/kg dry weight)	Total PCBs in the Water Column (ng/L)
Northern	Claremont	0.59	0.17
Northern	County of Los Angeles	0.59	0.17
Northern	La Verne	0.59	0.17
Northern	Pomona	0.59	0.17
Northern	San Dimas	0.59	0.17

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Total PCBs in the Water Column (ng/L) ^{*,***}
Northern	Claremont	59.8	0.17
Northern	County of Los Angeles	59.8	0.17
Northern	La Verne	59.8	0.17
Northern	Pomona	59.8	0.17
Northern	San Dimas	59.8	0.17

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

4. Puddingstone Reservoir Chlordane TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (µg/kg dry weight)	Total Chlordane in the Water Column (ng/L)
Northern	Claremont	0.75	0.57
Northern	County of Los Angeles	0.75	0.57
Northern	La Verne	0.75	0.57
Northern	Pomona	0.75	0.57
Northern	San Dimas	0.75	0.57

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Total Chlordane in the Water Column (ng/L) ^{*,***}
Northern	Claremont	3.24	0.57
Northern	County of Los Angeles	3.24	0.57
Northern	La Verne	3.24	0.57
Northern	Pomona	3.24	0.57
Northern	San Dimas	3.24	0.57

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

5. Puddingstone Reservoir Dieldrin TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (µg/kg dry weight)	Dieldrin in the Water Column (ng/L)
Northern	Claremont	0.22	0.14
Northern	County of Los Angeles	0.22	0.14
Northern	La Verne	0.22	0.14
Northern	Pomona	0.22	0.14
Northern	San Dimas	0.22	0.14

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	Dieldrin in the Water Column (ng/L) ^{*,***}
Northern	Claremont	1.90	0.14
Northern	County of Los Angeles	1.90	0.14
Northern	La Verne	1.90	0.14
Northern	Pomona	1.90	0.14
Northern	San Dimas	1.90	0.14

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

6. Puddingstone Reservoir DDT TMDL

- a. Permittees subject to the provisions below are identified in Attachment K, Table K-6.
- b. Permittees shall comply with the following WLAs per the provisions in Part VI.E.3.
- c. Permittees shall comply with the following WLAs:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (µg/kg dry weight)	4-4' DDT in the Water Column (ng/L)
Northern	Claremont	3.94	0.59
Northern	County of Los Angeles	3.94	0.59
Northern	La Verne	3.94	0.59
Northern	Pomona	3.94	0.59
Northern	San Dimas	3.94	0.59

Measured at the point of discharge. Applied as an annual average.

- d. Permittees may comply with the following alternative WLAs upon approval by the Regional Water Board Executive Officer based upon documentation that the fish tissue target of 21 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length. Documentation shall be submitted to the Regional Water Board and USEPA. Compliance may be demonstrated based on the alternative WLAs upon approval by the Executive Officer, so long as USEPA does not object within 60 days of receiving notice.

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (µg/kg dry weight) ^{*,**}	4-4' DDT in the Water Column (ng/L) ^{*,***}
Northern	Claremont	5.28	0.59
Northern	County of Los Angeles	5.28	0.59
Northern	La Verne	5.28	0.59
Northern	Pomona	5.28	0.59
Northern	San Dimas	5.28	0.59

*Measured at the point of discharge.

**Applied as a three-year average.

***Applied as an annual average.

**ATTACHMENT Q. TMDLs IN LOS CERRITOS CHANNEL AND ALAMITOS BAY
WATERSHED MANAGEMENT AREA**

A. Los Cerritos Channel Metals TMDL (USEPA established)

1. Permittees subject to the provisions below are identified in Attachment K, Table K-7.
2. Permittees shall comply with the following dry weather¹ WLAs, expressed as total recoverable metals discharged to Los Cerritos Channel, per the provisions in Part VI.E.3:

Constituent	WLA Daily Maximum (g/day)
Copper	67.2

3. Permittees shall comply with the following wet weather² WLA, expressed as total recoverable metals discharged to Los Cerritos Channel, per the provisions in Part VI.E.3:

Constituent	WLA Daily Maximum (g/day)
Copper	4.709×10^{-6} x daily storm volume (L)
Lead	26.852×10^{-6} x daily storm volume (L)
Zinc	46.027×10^{-6} x daily storm volume (L)

B. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

1. Permittees subject to the provisions below are identified in Attachment K, Table K-7.
2. Permittees shall comply with the following interim water quality-based effluent limitations as of the effective date of this Order, for sediments within Colorado Lagoon:

Constituent	Interim Concentration-based Effluent Limitations Monthly Average (µg/dry kg)
Chlordane	129.65
Dieldrin	26.20
Lead	399,500
Zinc	565,000
PAHs	4,022
PCBs	89.90
DDT	149.80

¹ Dry weather is defined as any day when the maximum daily flow in Los Cerritos Channel is less than 23 cubic feet per second (cfs) measured at Stearns Street Monitoring Station.

² Wet weather is defined as any day when the maximum daily flow in Los Cerritos Channel is equal to or greater than 23 cfs measured at Stearns Street Monitoring Station.

3. Permittees shall comply with the following final water quality-based effluent limitations no later than July 28, 2018, for sediments within Colorado Lagoon:

Constituent	Final Concentration Based Effluent Limitations Monthly Average (µg/dry kg)
Chlordane	0.50
Dieldrin	0.02
Lead	46,700
Zinc	150,000
PAHs	4,022
PCBs	22.70
DDT	1.58

4. The mass-based water quality-based effluent limitations are shared by the MS4 Permittees, which includes the LACFCD, City of Long Beach and Caltrans. Permittees shall comply with the following grouped final water quality-based effluent limitations no later than July 28, 2018, expressed as an annual discharge of sediment to Colorado Lagoon:

Constituent	Annual Mass-based Effluent Limitations (mg/yr)				
	Project 452	Line I	Termino Ave	Line K	Line M
Chlordane	5.10	3.65	12.15	1.94	0.73
Dieldrin	0.20	0.15	0.49	0.08	0.03
Lead	476,646.68	340,455.99	1,134,867.12	181,573.76	68,116.09
Zinc	1,530,985.05	1,093,541.72	3,645,183.47	583,213.37	218,788.29
PAHs	41,050.81	29,321.50	97,739.52	15,637.89	5,866.44
PCBs	231.69	165.49	551.64	88.26	33.11
DDT	16.13	11.52	38.40	6.14	2.30

5. Compliance with the concentration-based water quality-based effluent limitations shall be determined by pollutant concentrations in the sediment in Colorado Lagoon at points in the West Arm, North Arm and Central Arm that represent the cumulative inputs from the MS4 drainage to the lagoon.

**ATTACHMENT R. TMDLs IN THE MIDDLE SANTA ANA RIVER WATERSHED
MANAGEMENT AREA (SANTA ANA REGION TMDL)****A. Middle Santa Ana River Watershed Bacterial Indicator TMDLs**

1. Permittees subject to the provisions below are identified in Attachment K, Table K-8.
2. Permittees shall comply with the following final water quality-based effluent limitations for discharges to San Antonio Creek and Chino Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform¹: geometric mean less than 180 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 360 organisms/100 mL during any 30-day period.
 - b. *E. coli*: geometric mean less than 113 organisms/100 mL based on five or more samples during any 30-day period, and not more than 10% of the samples exceed 212 organisms/100 mL during any 30-day period.
3. Permittees shall comply with the following receiving water limitations for discharges to San Antonio Creek and Chino Creek during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - a. Fecal coliform²: geometric mean less than 200 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 400 organisms/100 mL during any 30-day period.
 - b. *E. coli*: geometric mean less than 126 organisms/100 mL based on 5 samples during any 30-day period, and not more than 10% of the samples exceed 235 organisms/100 mL during any 30-day period.

B. Section A of this Attachment R, and Parts V and VI.C of this Order, shall not be applicable to discharges of bacteria through MS4s of the Permittees identified in Attachment K, Table K-8, to receiving waters within the Middle Santa Ana River Watershed that are addressed by the Middle Santa Ana River Watershed Bacterial Indication TMDLs, Resolution No. R8-2005-0001, established by the Regional Water Quality Control Board, Santa Ana Region (Santa Ana Regional Board), during the effective dates of any NPDES permit that is issued by the Santa Ana Regional Board:

1. Pursuant to a valid and enforceable designation agreement between this Regional Water Board and the Santa Ana Regional Board under Water Code section 13228, that is applicable to MS4 discharges by the Permittees identified in Attachment K, Table K-8; and
2. The designation agreement delegates the Santa Ana Regional Board as the regulator of MS4 discharges by the Permittees identified in Attachment K, Table K-8, to ensure compliance with the Middle Santa Ana River Watershed Bacterial Indicator

¹ The fecal coliform water quality-based effluent limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

² The fecal coliform receiving water limitations become ineffective upon the replacement of the REC-1 fecal coliform water quality objectives with REC-1 *E. coli* water quality objectives in the Santa Ana Region Basin Plan.

MS4 Discharges within the
Coastal Watersheds of Los Angeles County

ORDER NO. R4-2012-0175
NPDES NO. CAS004001

TMDLs, Resolution No. R8-2005-0001, in satisfaction of the requirements of 40 CFR section 122.44(d)(1)(vii)(B).