



California Regional Water Quality Control Board Los Angeles Region

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Edmund G. Brown Jr.
Governor



Linda S. Adams
Acting Secretary for
Environmental Protection

TO: MS4 Permittees and Interested Persons

FROM: Renee Purdy, Section Chief *Renee A. Purdy*
Regional Programs

DATE: April 8, 2011

SUBJECT: **KICK-OFF MEETING FOR DEVELOPMENT OF UPDATED LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT**

As you know, the Regional Water Quality Control Board, Los Angeles Region (Regional Board) has canceled the previously scheduled hearing on April 14, 2011 to reissue a limited term Los Angeles County MS4 Permit based on Order No. 01-182. The Regional Board received many requests to cancel the hearing and instead begin work on an updated MS4 permit. This will allow time for Permittees to engage in a dialogue with each other and Regional Board staff regarding significant technical and policy issues surrounding permit development. Regional Board staff supports this exchange of ideas about an updated Los Angeles County MS4 Permit.

To kick-off MS4 permit development in Los Angeles County, Regional Board staff invites Permittees and interested persons to a public meeting.

Wednesday, May 25, 2011
1:00 - 3:00 PM
California Regional Water Quality Control Board
First Floor Carmel Room
320 W. 4th Street
Los Angeles, CA 90013

At the meeting, Regional Board staff will:

- Discuss the preliminary schedule for permit development, including other formal and informal opportunities for input by Permittees and interested persons;
- Identify potential alternative permit structures; and
- Outline some of the major technical and policy aspects of permit development.

Permittees and interested persons will have an opportunity to ask questions of Regional Board staff, raise concerns, and provide initial feedback.

Please contact me at (213) 576-6622 or rpurdy@waterboards.ca.gov or, alternatively, Mr. Ivar Ridgeway at (213) 620-2150 or iridgeway@waterboards.ca.gov with questions.

LYRIS MAILING

RB-AR428

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KICK OFF MEETING FOR THE LOS ANGELES MS4 PERMIT

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MAY 25, 2011 @ 1:00 PM

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KICK OFF MEETING FOR THE LOS ANGELES MS4 PERMIT

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

MAY 25, 2011 @ 1:00 PM

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KICK OFF MEETING FOR THE LOS ANGELES MS4 PERMIT

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
MAY 25, 2011 @ 1:00 PM

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LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

MAY 25, 2011 @ 1:00 PM

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KICK OFF MEETING FOR THE LOS ANGELES MS4 PERMIT

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
MAY 25, 2011 @ 1:00 PM

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LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

MAY 25, 2011 @ 1:00 PM

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LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
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KICK OFF MEETING FOR THE LOS ANGELES MS4 PERMIT

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
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KICK OFF MEETING FOR THE LOS ANGELES MS4 PERMIT

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
MAY 25, 2011 @ 1:00 PM

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Los Angeles MS4 Permit: Reissuance Kick-off Meeting

Los Angeles Regional Board

May 25, 2011

Outline

- Background
- Permit Structure
- Permit Requirements
 - Standard Provisions
 - Monitoring Program Considerations
 - Reporting Program Considerations
 - TMDL Provisions
- Tentative Schedule
 - Opportunities for input
- Q & A / Discussion

Background

- Last issued in 2001
- Reopened in 2006, 2007 and 2009 to incorporate TMDL provisions
- Amended in April 2011 to void and set aside 2006 provisions in response to writ of mandate
- Reissuance scheduled for 2012

Permit Structure: Background

- Single permit for 84 cities, LA County & LACFCD
 - Los Angeles County Flood Control District role (LA County Flood Control Act)
 - Highly interconnected system across jurisdictional boundaries
 - Commingled discharges to receiving waters
 - Opportunities for cooperation
 - Efficiencies gained in public outreach, monitoring & reporting

Permit Structure: Alternatives

- Single unified permit
 - Standard program requirements
 - Watershed-based (TMDL) requirements
- Watershed permits
- Other multiple-permit approaches
 - Individual permits
 - Permits based on 2006 ROWDs

Single Permit Alternative

- Continued/new opportunities for coordination
- Potential for more efficient monitoring, reporting & implementation of other requirements (TMDL, PIPP)
- Standard provisions applicable to all Permittees
- Watershed-based (TMDL) requirements in separate chapters
 - Regional Board Watershed Management Areas
 - AB 2554 watershed authority groups

Watershed Permits Alternative

- Options
 - Regional Board Watershed Management Areas
 - AB 2554 watershed authority groups
- Standard Provisions similar across permits
- Opportunities for coordination
- Potential for more efficient monitoring, reporting & implementation of other requirements (TMDL, PIPP)
- Some Permittees may be covered under multiple permits

Other Multiple Permit Alternatives

■ Individual Permits

- Fewer opportunities for coordination
- Less efficient program implementation
- Permittee retains exclusive control of permit implementation, but potentially more burdensome
 - Each Permittee solely responsible for implementation, public information, monitoring and reporting requirements

■ Other Grouped Permits

Standard Permit Provisions: Core Elements

- IC/IDE Program
- Construction Activities
- Industrial / Commercial Facilities
- Public Agency Activities
- Public Information & Participation
- New/Redevelopment

New Development/ Redevelopment Alternatives

- Ventura MS4 Requirements
- Modified current RB approach
 - Incorporation of elements of local LID ordinances
- Incorporation of other requirements
 - Other Regional Boards' LID approaches
 - Other states' approaches

New/Redevelopment: Key Areas for Discussion

- LID implementation metrics
 - Effective Impervious Area (EIA) limitation
 - Volume based on-site retention standard
- Biofiltration allowance
- Infeasibility criteria
- Offsite mitigation requirements
 - Location, mitigation ratios, project types
- Alternative post-construction regional plan
 - Substitutes for part or all of on-site post-construction BMPs
 - Possible revision of Ventura RPAMP requirements
- Existing local LID ordinances

Standard Permit Provisions: Other Key Requirements

- Discharge Prohibitions
 - Clear guidance for authorized non-stormwater discharges
 - Potential re-evaluation of some Category C exceptions
- Receiving Water Limitations
 - Standard Language from State Board Precedential Orders
- SQMP
 - Consistent With Permit Requirements
 - Continued Demonstration of Adequate Legal Authority

Monitoring Program Considerations

- Receiving water & outfall monitoring
- Watershed/subwatershed-based design
- Coordination with TMDL compliance monitoring requirements

Reporting Program Considerations

- Receiving Water Limitations compliance reporting criteria
 - Targeted, specific program revisions
 - Detailed implementation schedule
- BMP performance demonstrations
 - Collectively for outfall drainage
 - Individually
- CASQA Program Effectiveness Assessment Guidance
- USEPA MS4 program effectiveness guidance
- State Board MS4 program effectiveness guidance

TMDL Provisions: Background

- 23 TMDLs with MS4 WLAs in effect for LA County
 - 2007 & 2009 amendments
 - MDR Bacteria TMDL – Summer WLAs
 - LA River Watershed Trash TMDL WLAs
- 6 other TMDLs in approval process

TMDL Provisions: Considerations

- Provisions consistent with assumptions and requirements of WLAs
 - Focus on WLA deadlines within permit term
- Numeric water quality based effluent limitations (WQBELs) vs. BMP based requirements

TMDL Provisions: LA River Trash WLAs Example

■ BMP based requirements

- TMDL design/
performance standard
to achieve WLAs = full
capture systems
- Compliance measure =
% drainage area
addressed by full
capture systems

■ Numeric water quality based effluent limitations

- Equivalent to WLAs
- Compliance measure if
partial capture and/or
institutional strategies
are used
- Necessary absent “up-
front” demonstration
that controls will
achieve TMDL
design/performance
standard

TMDL Provisions: Considerations

- Not one-approach-fits-all
 - Stormwater vs. non-stormwater discharges
 - TMDL implementation plans
 - Other robust demonstrations that BMP performance will achieve WLAs

Tentative Schedule

- May 2011: Kick-off meeting
- Aug.-Oct.: 1-2 issue-based workshops
- Nov.-Jan.: 1-2 issue/general workshops
- Jan. 2012: Draft permit
- April 2012: Board hearing

Opportunities for Input

- Today's meeting
- Issue-based workshops
 - New / Redevelopment Provisions
 - TMDL Provisions
 - Monitoring & Reporting Program
 - Others?
- Watershed-based meetings upon request
- Individual meetings upon request

Questions?

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Stormwater Permitting Unit

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Draft Talking Points for Development of the MS4 Permit Strategy

(05/26/11)

These talking points have been prepared by Larry Walker Associates (LWA) for the City of Los Angeles, Watershed Protection Division (WPD). These talking points are for discussions with Sam Unger subsequent to the May 25th Regional Board meeting.

The first item (#1) bullets out what key elements are necessary for the overall permit structure. The second item (#2) is one approach in which those elements could be framed in a permit. The remaining items address core aspects of the permit approach (governance, reporting, monitoring, TMDLs).

1. Permit Structure - needs to create a structure that
 - Establishes baseline (core) stormwater management program requirements but also provides flexibility to direct resources to the relevant water quality issues of the community and watershed (e.g. direct inspections to prioritized issues/pollutants) and complements existing activities (e.g., Green Infrastructure Initiative, Low Impact Development)
 - Provides for individual permittee accountability but encourages programmatic consistency
 - Provides for coordination and efficient use of resources among municipalities (e.g. public outreach, monitoring, etc.)
 - Complements (and may substitute for) other ongoing regulatory programs and requirements (e.g. TMDLs)
 - Supports a program that addresses the critical water quality issues of the area/watershed
 - Above bullets can be achieved by a watershed based permit. This may be accomplished a number of ways from defining watershed specific requirements in the Permit (i.e. watershed specific sections) to establishing the framework in the Permit for developing a watershed program to protect water quality.
2. Watershed Based Permit¹ – needs to
 - Specify (or encourage?) development and content of a Watershed Plan (aka Water Quality Improvement Plan)
 - Support watershed specific activities (e.g., retrofit opportunities) that go beyond baseline requirements
 - Make the watershed-specific issues the driver for prioritizing program implementation efforts
 - Allow cross jurisdictional prioritization so that permittees in multiple watersheds have the flexibility to direct resources to the most important priorities
 - Allow the implementation of Watershed Plan to occur at the regional/county, watershed and/or jurisdictional levels. However, actual implementation responsibility and accountability will be at the permittee level
3. Governance – permit needs to
 - Support funding structure and implementation agreements being developed by the County Flood Control District and Copermittees in response to AB 2554.

¹ The term “watershed permit” refers to one permit (not 9 individual watershed permits). In the Permit Summary Tech Memo, reference the approach in the Michigan statewide permit for the general concepts.

- Provide for watershed leads or options for selecting leads while maintaining accountability and liability at the permittee level
4. Reporting – permit needs to provide
 - Streamlined reporting (e.g. one report per watershed per year and limited scope)
 - Based on watershed unit with defined permittee summaries
 - Full assessment provided on 5 year cycle (part of ROWD process)
 5. Monitoring
 - Oriented to watershed issues
 - Baseline monitoring program in the receiving waters for all permittees
 - Complement other mandatory monitoring efforts (e.g. TMDLs and wastewater)
 - Support stormwater management program decisions (use of action levels, southern California stormwater monitoring program guidelines)
 6. TMDLs (this really may be a function of what's in the already approved TMDLs)
 - Incorporate performance based adaptive management as the standard of compliance.
 - Allow the Watershed Plan to be equivalent to a TMDL implementation plan (existing TMDL implementation plans could be used to support Watershed Plans).



Matthew Rodriguez
Secretary for
Environmental Protection

California Regional Water Quality Control Board Los Angeles Region

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Edmund G. Brown Jr.
Governor

October 28, 2011

Permittees and Interested Persons:

WORKSHOP ON THE STATUS AND DEVELOPMENT OF THE UPDATED LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) NPDES PERMIT

The Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) will hold an informational public workshop on the current status and development of the updated Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit at its regularly scheduled board meeting on:

November 10, 2011 at 9:00 AM
The Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California

Los Angeles Water Board Staff will discuss: (1) its evaluation of, and recommendations regarding, permit structure; (2) preliminary recommendations regarding stormwater management program requirements; (3) the incorporation of TMDLs into the permit; and (4) other issues still under evaluation. Written materials in support of these topics are provided as attachments herein.

After the Staff presentation, Permittees and other interested persons will have the opportunity to make oral comments subject to time limits. Oral comments may be limited to 3 minutes each, at the discretion of the Chair, depending on the number of commenters wishing to be heard. Permittees and interested persons with similar comments or concerns are encouraged to choose one representative to speak on their behalf.

Permittees and interested persons may request additional time to make oral comments prior to the workshop. Requests for additional time must be sent to Ms. Ronji Moffett via e-mail at rmoffett@waterboards.ca.gov no later than Friday, November 4, 2011 by 5:00 PM to be considered by the Chair. Please indicate in the subject line "Request for Additional Time – November 10 MS4 Workshop."

Permittees and Interested Persons

- 2 -

October 28, 2011

The Los Angeles Water Board may provide general feedback to Staff on development of the permit; however, no action or voting will take place at this workshop.

For additional information, please contact Ivar Ridgeway at (213) 620-2150 or iridgeway@waterboards.ca.gov.

Sincerely,



Samuel Unger, P.E.
Executive Officer

Enclosures

LYRIS MAILING

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DATE MAILED:

10-28-11

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10/28/2009 14:20	rsoto@ci.vernon.ca.us	Rafael Soto
7/6/2009 13:49	rtahir@tecsenv.com	Ray Tahir
7/6/2009 13:17	rtorres@cityofmontebello.com	Richard Torres
3/4/2011 13:50	rtremblay@lacs.d.org	Raymond L Tremblay
7/6/2009 13:53	rvasquez@scsengineers.com	Ralph Vasquez
4/14/2010 11:46	rveiga@waterboards.ca.gov	Rebecca Veiga Nascimento
3/23/2011 11:22	rwang@dpw.lacounty.gov	Ruby Wang
4/8/2011 13:18	rwatson@rwaplanning.com	Richard A. Watson
8/6/2009 16:44	rwellington@willdan.com	Ray Wellington
7/6/2009 13:23	rwishner@ci.walnut.ca.us	Rob Wishner
2/15/2011 10:36	s.guldimann@gmail.com	Suzanne Guldimann
7/6/2009 13:49	sam.gutierrez@westcovina.org	Sam Gutierrez

7/6/2009 13:20 samw@ci.rolling-hills-estates.ca.us	Samuel R. Wise
7/6/2009 13:52 sarinamoraleschoate@santafesprings.org	Sarina Morales-Choate
8/3/2009 6:17 sbarankiewicz@ohslegal.com	Stan M. Barankiewicz II
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7/6/2009 13:38 shelvey@cityofwhittier.org	Stephen W. Helvey
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California Regional Water Quality Control Board

Los Angeles Region



Matt Rodriguez
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Edmund G. Brown Jr.
Governor

Notice of Public Meeting/Hearing

Thursday, November 10, 2011

9:00 a.m.

Meeting Location:

REVISED

Location Change:

State of California Building

(First Floor Carmel Room)

320 W. 4th Street

Los Angeles, California

Agenda

The Regional Board strives to conduct an accessible, orderly, and fair meeting. During the meeting, the Chair will conduct the meeting and establish appropriate rules and time limitations for each 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 Regional Board meeting procedures is included after the last agenda item.

To ensure a fair hearing and that the Regional 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 27, 2011. Please consult the agenda description for specific items, 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.** 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 October 6, 2011 Board meeting.**
[Ronji Moffett, (213) 576-6612]
4. **Adoption of tentative 2012 Board Meeting Schedule.**
5. **Board Member Communications.**
 - 5.a. **Ex Parte Disclosure.** Board Members will identify any discussions they may have had requiring disclosure pursuant to Government Code section 11430.40.
 - 5.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.

6. **Executive Officer's Report.**
[Sam Unger, (213) 576-6605]
7. **Enforcement Report** [Paula Rasmussen, (213) 576-6791]
8. **Update from State Board.** [Fran Spivy-Weber]
9. **Public Forum.** Any person may address the Board regarding any matter within the Board's jurisdiction provided the matter does not appear elsewhere on this agenda, has not been scheduled to appear on a future agenda, and is not expected to be imminently scheduled for the Board's consideration. Remarks will be limited to three (3) minutes, unless otherwise directed by the Chair. If a person intends to use a PowerPoint presentation or other visual aid, you must contact Ronji Moffett, (213) 576-6612, at the Regional Board at least 48 hours prior to the meeting to arrange for equipment use and be prepared to load any PowerPoint presentation on the computer prior to the meeting to assure the orderly conduct of the meeting.

UNCONTESTED 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. The Chair will determine the appropriate time to consider an item removed from the consent calendar.)

Waste Discharge Requirements that Serve as NPDES Permits

Renewal-

- *10. Lubricating Specialties Company, Pico Rivera Facility, Pico Rivera; NPDES No. CA0059013 (Comment submittal deadline was September 20, 2011) [Rebecca Christmann, (213) 576-6756]

Non-NPDES State Discharge Requirements

Renewal-

- *11. Consideration of Waste Discharge Requirements and a Cease and Desist Order (CDO) for Residential Fund 1347, LLC (Paradise Ranch Wastewater Treatment Plant), Castaic. (File No. 69-58) for discharges of domestic wastewater. (Comment submittal deadline was October 10, 2011) [Ann Chang, (213) 620-6122]

11.1 Waste Discharge Requirements

11.2 Cease and Desist Order

Revision-

- *12. United Rock Products Corporation (Pit No. 2 Inert Landfill and Mine Reclamation), Irwindale; (File No. 04-002) (Comment submittal deadline was October 14, 2011) [Wen Yang, (213) 620-2253]
- *13. Cerritos Bahia Marina (Maintenance Dredging), Long Beach; (File No. 09-164) (Comment submittal deadline was October 24, 2011) [Michael Lyons, (213) 576-6718]

ACTION ITEM

BASIN PLAN AMENDMENT

14. Consideration of a tentative Resolution amending to the Water Quality Control Plan (Basin Plan) to administratively update "Chapter 2: Beneficial Uses" by incorporating previously adopted amendments, and updated surface and groundwater maps and corresponding beneficial use tables. (Comment submittal deadline was October 3, 2011) [Dr. Ginachi Amah, (213) 576-6685; Thomas Siebels (213) 576-6671]

INFORMATION ITEM

15. Update on the State Water Board Groundwater Ambient Monitoring and Assessment (GAMA) Program, and overview of the GeoTracker GAMA groundwater information system. [John Borkovich, GAMA Program Manager (916) 341-5779]

WORKSHOP

16. Workshop on the Issuance of a new Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit. Staff will make a presentation on the status of permit development, including proposed permit structure and other key elements. Permittees and other interested persons will have the opportunity to make oral comments subject to time limits. *(The Board may provide general feedback to Staff on development of the permit; however, no action or voting will take place at this workshop.)* [Renee Purdy, (213) 576-6622; Ivar Ridgeway, (213) 620-2150]

CLOSED SESSION

17. As authorized by the 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; Sarah Olinger (SO), (916) 322-4142]
- 17.1 *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)
- 17.2 *In re Halaco Engineering Company*, United States Bankruptcy Court, Central District of California, Northern Division, No. ND-02-12255 RR [Regarding a CDO and CAO at the Oxnard Property]. (JF)
- 17.3 *In re: Los Angeles Region Water Permit- Ventura County*, Commission on State Mandate Test Claim No. 11-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)
- 17.4 *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)
- 17.5 *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)
- 17.6 *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)
- 17.7 *In re: Petition of Heal the Bay for Review of Order No. R4-2008-0011, SWRCB/OCC File A-1927(a)* [Challenging waste discharge requirements for the City of San Buenaventura, Ventura Water Reclamation Facility]. (JF)
- 17.8 *In re: Upper Santa Clara River Chloride Total Maximum Daily Load Requirements Imposed by the Los Angeles Regional Water Quality Control Board in Resolution R4-2008-0012*. 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)
- 17.9 *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)

- 17.10 *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]. (SO)
- 17.11 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;
 - (c) A matter which, based on existing facts and circumstances, the Regional Board is deciding whether to initiate litigation. (JF/FM/SO)
- 17.12 Consideration of the appointment, employment, or evaluation of performance about a public employee. (JF/FM/SO)
18. **Adjournment of Current Meeting.** The next meeting will be held on December 8, 2011 beginning at 9:00 a.m. at City of Glendale Council Chambers, 613 E. Broadway, Glendale, California.

NOTICE

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. If any other party demonstrates prejudice resulting 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.

Electronic Information and Updates: Our web site address is www.waterboards.ca.gov/losangeles/. The site can also be accessed through the State Water Resources Control Board's web site at www.waterboards.ca.gov/, then clicking on "Regional Boards". Information available online includes the Regional Board's meeting schedule, a list of the Regional Board members, past and present Executive Officer reports, program information, a list of staff and phone numbers arranged by their work unit, and links to the Santa Monica Bay Restoration Commission's home page and other governmental agencies. Last-minute changes to the agenda, such as the continuance of an item, will be posted electronically. If you need further information, please contact Jack Price at (213) 576-6669.

Pending Water Quality Certifications: A listing of pending water quality certification applications currently on public notice pursuant to Section 401 of the Federal Clean Water Act may be obtained by calling Valerie Carrillo at (213) 576-6759.

Settlement of Enforcement Actions: A listing of settlement enforcement actions can be accessed by the following link: <http://www.waterboards.ca.gov/enforcement/index.html>

LYRIS MAILING

RB-AR491

LIST NAME: MS4-LAcounty

DATE JOINED	EMAIL ADDR	DATE MAILED	FULL NAME
2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM	<u>11-2-11</u>	ADRIEN F. MADDALENO
6/22/2010 11:57	AEMiller@waterboards.ca.gov		Alan E. Miller
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com		Carlos Aguilar
7/6/2009 13:38	City_manager@ci.glendora.ca.us		Chris Jeffers
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10/5/2010 11:14	Gerhardt.Hubner@ventura.org		Gerhardt Hubner
3/22/2010 15:01	Hamid.Tadayon@lacity.org		Hamid Tadayon
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1/19/2010 11:06	Jeremy.Bock@Kiewit.com		Jeremy Bock
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7/28/2011 16:10	Joyntventr@aol.com		Jayne Staley
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7/6/2009 13:53	Kaden.Young@culvercity.org		Kaden Young
4/29/2010 14:00	LATOYACYRUS@CAAPROFESSIONALS.COM		Latoya Cyrus
4/5/2011 9:34	Leroy.Richards@msh.dmh.ca.gov		LeRoy Richards
8/25/2010 13:32	Lynn@MLMENG.com		Lynn Kubasek
6/8/2010 15:11	Nels@stemmdevelopment.com		Nels Stemm
10/22/2010 15:23	Ramon@calfran.net		Ramon Wagner
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4/25/2011 15:19	Robert.Vega@lacity.org		Robert Vega
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7/6/2009 13:08	szurn@ci.glendale.ca.us	Stephen M. Zurn
7/6/2009 13:04	tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57	tford@smbaykeeper.org	Tom Ford
7/6/2009 13:46	tmelendrez@cityofmontebello.com	Tom Melendrez
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
7/26/2010 10:25	tracyegoscue@paulhastings.com	Tracy Egoscue
7/6/2009 13:10	trobenson@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29	trodgers@waterboards.ca.gov	Theresa Rodgers
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
7/6/2009 13:53 vrollinger@carson.ca.us	Victor Rollinger
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03 vsinghal@baldwinpark.com	Vijay Singhal
2/18/2011 11:31 wade@grahamstudio.net	Wade Graham
3/9/2010 16:40 wblistserv@gmail.com	SWRCB Listserv
6/29/2011 9:59 wcaffrey@vandermostconsulting.com	wade caffrey
2/18/2011 10:21 willrolph@truxaw.com	William Rolph
7/6/2009 13:52 wrlindinc@aol.com	Wes Lind
8/17/2011 11:33 wynesta@earthlink.net	Wynesta Dale
11/10/2010 9:35 ychu@waterboards.ca.gov	yanjie chu
7/6/2009 13:35 ys@cityofrh.net	Yolanta Schwartz
12/6/2010 17:34 ysim@dpw.lacounty.gov	Youn Sim
9/17/2010 8:45 zora.baharians@lacity.org	Zora

ITEM SUMMARY**WORKSHOP****LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT
STATUS AND DEVELOPMENT****California Regional Water Quality Control Board
Los Angeles Region
November 10, 2011
551ST Board Meeting**

Item Number	16
Proposed Board Action	Board workshop; no formal action by the Board is required at this time.
Need for Item	<p>The Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit (“LA County MS4 Permit” or “Permit”) is one of the most important permits issued and administered by the Regional Board. The Permit regulates commingled discharges of stormwater and urban runoff from one of the nation’s largest municipal separate storm sewer systems, covering the jurisdictional areas of 86 permittees.</p> <p>Due to the large number of permittees regulated by this Permit and the significance of the discharges in terms of regional water quality impacts, the Regional Board’s practice has generally been to hold both staff level and Board workshops prior to bringing a tentative permit to the Board for consideration and adoption. The general purpose of a Board workshop is two-fold. First, it provides an opportunity for staff to inform the Board of the status of permit development and describe for the Board some of the key issues that are still under evaluation before proposing a tentative permit for Board consideration. Second, a Board workshop allows permittees and other stakeholders an opportunity to address the Board and staff with their preliminary comments.</p> <p>This Board workshop focuses on several key elements of the MS4 permit, namely permit governance structure, core stormwater management program requirements, and incorporation of TMDLs. For these elements, staff has formulated conceptual approaches that it will present to the Board for discussion and feedback. In other areas that are not the focus of this workshop, staff continues to formulate approaches that will be presented to stakeholders and the Regional Board at future meetings.</p>
Status and Development	See attached update, “Los Angeles County MS4 Permit Status and Development”.

LOS ANGELES COUNTY MS4 PERMIT STATUS AND DEVELOPMENT

The Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit (“LA County MS4 Permit” or “Permit”) is one of the most important permits issued and administered by the Regional Board. The Permit regulates commingled discharges of stormwater and urban runoff from one of the nation’s largest municipal separate storm sewer systems, covering the jurisdictional areas of 86 permittees.

The LA County MS4 Permit was last reissued in 2001. The Permit expired in 2006, but has been administratively extended pursuant to federal regulations. Permittees regulated by the 2001 LA County MS4 Permit include the Los Angeles County Flood Control District (“District”), Los Angeles County, and 84 incorporated cities within Los Angeles County.¹ The 2001 Permit was reopened by the Regional 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. In accordance with the Board’s responsibility to update NPDES permits, Board staff plans to bring an updated permit for Board’s consideration in late spring 2012. Updating the LA County MS4 Permit is one of the highest priorities of the Board. Board staff in the Stormwater Permitting Unit is being assisted by staff from other programs, as well as by contractor support provided by US Environmental Protection Agency (US EPA). The updated MS4 permit will reflect technical progress in stormwater quality control best management practices (BMPs) and the evolution of stormwater management and regulation regionally and nationally over the past two decades.

This update focuses on several key elements of the MS4 permit, namely permit governance structure, core stormwater management program requirements, and incorporation of TMDLs. For these elements, staff has formulated conceptual approaches that it will present to the Board for discussion and feedback. In other areas that are not the focus of this update, staff continues to formulate approaches that will be presented to stakeholders and the Regional Board at future meetings.

This update is organized under the following topics: Status of Permit Development; Permit Structure; Stormwater Management Program (“Minimum Control Measures”); TMDL Implementation Provisions; and Additional Issues.

STATUS OF PERMIT DEVELOPMENT

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

¹ The City of Long Beach has had a separate MS4 permit since 1991.

provide feedback. Subsequent to the kick-off meeting, staff has held several individual meetings upon request to discuss specifics with permittees, consultants representing permittees, and environmental organizations.

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®. (See Attachment A for the survey instrument.) 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. Survey results are discussed below under “Permit Structure.”

In addition, staff has also been conducting inspections of several program areas, including municipal oversight of construction and post-construction stormwater controls and control measures to detect and eliminate illicit discharges and illicit connections to the MS4. The results of these inspections will help inform permit development and determine areas of possible customization on a watershed or individual Permittee basis.

PERMIT STRUCTURE

The existing 2001 Permit regulates the discharges of stormwater and non-stormwater runoff from 84 cities, Los Angeles County, and the Los Angeles County Flood Control District. In the 2001 Permit, the District is also named as the “Principal Permittee” with additional requirements for monitoring, reporting and coordination on behalf of all permittees.

One of the fundamental issues for the forthcoming permit was a reconsideration of the basic permit structure. The current 2001 Permit is a single permit under which all the permittees are assigned uniform requirements with additional requirements for the Principal Permittee. The federal Clean Water Act (CWA) section 402(p) and implementing regulations at Title 40, Code of Federal Regulations (40 CFR) section 122.26(a)(1)(v) provide flexibility to 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) identifies 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 system that are similar in nature, or for individual discharges from MS4s.

In reevaluating the structure for the new permit, Board staff considered a number of factors:

- The nature of the LA County MS4, which is 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.
- The requirement to implement 28 largely watershed-based TMDLs in the new permit. (See Attachment B for a list of these TMDLs by Watershed Management Area (WMA), and Attachment C for a list of permittees by WMA.)
- The passage of Assembly Bill 2554 in 2010, which amended the Los Angeles County Flood Control Act. This statute allows the District to assess a parcel tax for stormwater 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 Attachment D for a draft list of permittees by “watershed authority group”.)
- Results of the on-line survey regarding permit structure. The results indicate 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. (See Attachment E for a summary of the survey results.)
- 2006 and 2010 reports of waste discharge (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 District has also requested that if the Board does not issue an individual permit to the District, that it is no longer designated as Principal Permittee and relieved of Principal Permittee responsibilities.

Staff Recommendation

Based on the considerations above, including the results of the on-line survey of Permittee preferences, Board staff plans to recommend a single permit with some sections devoted to universal requirements for all permittees and others devoted to requirements specific to each major Watershed Management Area (WMA), which would include TMDL Implementation Provisions. This structure is supported by the CWA section 402(p) and its implementing regulations at 40 CFR section 122.26, subdivisions (a)(1)(v) and (a)(3)(ii).

A single permit will ensure consistency and equitability in regulatory requirements within the county, while watershed-based sections within the single permit will provide flexibility to tailor permit provisions to address distinct watershed characteristics and water quality issues. Additionally, an internal watershed-based structure comports with the Regional Board's watershed-based TMDL requirements and the District's funding initiative passed in AB 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 stormwater and urban runoff pollution. Further, watershed-based sections may encourage collaboration among permittees to implement regional integrated water resources approaches such as stormwater capture and re-use to achieve multiple benefits.

Staff does not plan to recommend multiple permits or individual permits for Signal Hill, Downey, the five upper San Gabriel River cities, or the District. The information presented in the ROWDs does not reflect evolved program elements that have emerged over the past decade. Further, individually tailored permittee requirements can be provided in a single permit, where appropriate. In response to the request from the District to be relieved of its responsibilities as Principal Permittee, staff agrees with this request. Staff does not intend to recommend any permittee as Principal Permittee in the updated Permit. Staff will continue to evaluate appropriate requirements for the District in the permit.

STORMWATER MANAGEMENT PROGRAM (“MINIMUM CONTROL MEASURES”)

MS4 permits include provisions to ensure effective implementation of a Stormwater Management Program (SWMP). The required elements of a SWMP are described in 40 CFR section 122.26(d)(2)(iv). Historically, the SWMP has been the “bread and butter” of stormwater management programs. Permit provisions to implement a SWMP have been historically grouped into six categories of so-called “minimum control measures”:

- (1) programs to monitor and control pollutants in stormwater discharges from commercial areas and industrial facilities;
- (2) a program to maintain structural and non-structural best management practices (BMPs) to reduce pollutants in stormwater runoff from construction sites;
- (3) programs to detect and remove illicit discharges and improper disposal into the MS4;
- (4) public agency activities to reduce the impact of MS4 discharges to receiving waters, including impacts from residential areas;
- (5) planning procedures to reduce pollutants from areas of new development and significant redevelopment; and
- (6) a public information and participation program (PIPP) related to the above five areas.

A brief description of each of these minimum control measures is provided below, while Attachment F provides more detail on current staff recommendations regarding permit requirements in each of these areas. Staff has also identified some key issues that are being evaluated by staff during permit development. Staff is also focusing on identifying

opportunities for customized initiatives, on a watershed or individual Permittee basis, in these areas in order to develop and assist Permittees in implementing the most cost-effective measures to minimize discharge of pollutants to the receiving water.

(1) Minimum Control Measures for Commercial Areas and Industrial Facilities

Municipalities are ultimately responsible for discharges from the MS4; therefore, it is important for the municipalities to implement an inspection and enforcement program to control the contribution of pollutants from industrial/commercial facilities within a municipality to the MS4 from all potential high risk sources. This entails the implementation of structural and non-structural BMPs to reduce pollutants from selected industrial/commercial facilities (or require industry to implement them); and the inspection and monitoring of industrial facilities discharging stormwater and non-stormwater to the municipal systems to ensure these facilities are taking appropriate measures to control pollutants in their discharges.

Key Issues Being Evaluated:

- Identification of target facilities
- Identification of appropriate BMPs
- Level of Permittee effort
- Demonstration of required effort

(2) Minimum Control Measures for Construction Activities

The need for proper erosion and sediment controls is very apparent during, and immediately after, rains that occur in the Los Angeles Region. The environmental effects of erosion are well documented. Erosion can be prevented or reduced with the proper planning and implementation of appropriate BMPs. Increased sediment transport also loads some pollutants to waterbodies. The permit should require the implementation of adequately engineered and implemented structural or non-structural BMPs to minimize or eliminate detrimental environmental effects.

Key Issues Being Evaluated:

- Identification of target sites
- Identification and implementation of appropriate BMPs
- Level of Permittee effort
- Demonstration of required effort

(3) Minimum Control Measures for Illicit Connections and Illicit Discharges Elimination (Non-stormwater Discharges Oversight)

During dry weather, much of the discharges to and from the MS4 originate from non-stormwater sources. A significant amount of such discharges may be from illicit discharges and/or illicit connections. Illicit discharges can occur either through direct connections, such as deliberate or mistaken piping, or through indirect connections, such

as dumping, spillage, subsurface infiltration, and washdowns. The objective of a municipality's illicit connection/illicit discharge (IC/ID) elimination program should be to effectively prohibit non-stormwater discharges that may contain and/or convey pollutants to the receiving waters.

Key Issues Being Evaluated:

- Mechanisms for identification of the source of non-stormwater discharges
- Evaluation of categorical exceptions to prohibition on non-stormwater discharges
- Characterization of dry weather flows
- Demonstration of required effort

(4) Minimum Control Measures for Public Agency Activities

Permittees provide services that ultimately result in the enhancement of the lives of the residents. Some of these services include but are not limited to: sewage system operations; public construction activities; vehicle maintenance; material storage; street and road maintenance; landscaping; recreational facility management; parking facility management; public industrial activities; and many other activities. The objective of a municipality's public agency activities program should be to conduct all public agency activities using appropriate controls to eliminate or minimize pollutants being discharged through the MS4.

Key Issues Being Evaluated:

- Identification of target activities
- Identification and implementation of appropriate BMPs
- Demonstration of required effort

(5) Minimum Control Measures for New Development and Redevelopment

Effective BMP requirements on new development and redevelopment offer a cost-effective strategy to reduce pollutant loads to surface waters. Recent efforts have focused on the implementation of “low impact” controls that not only provide pollutant reduction/elimination but also treat water as a resource by augmenting groundwater supplies and reusing captured rainfall. The objective of the New Development/Redevelopment program should be to implement low impact site design principles and appropriate structural controls as part of a construction project to minimize or eliminate pollutants being discharged in stormwater and non-stormwater from the completed project. The American Society of Civil Engineers (ASCE) and the Water Environment Federation (WEF) have recommended a numerical BMP design standard for stormwater that is derived from a mathematical equation to maximize treatment of runoff volume for water quality based on rainfall/runoff statistics and which is economically sound. The maximized treatment volume is cut-off at the point of diminishing returns for rainfall/runoff frequency. The ASCE and WEF’s recommendation was incorporated in the water quality storm sizing for the Standard Urban Stormwater Mitigation Plan (SUSMP) in the 2001 LA County MS4 Permit. Staff also notes that the

Board approved a numeric criterion for low impact development (LID) in the 2010 Ventura County MS4 Permit.

Key Issues Being Evaluated:

- Volume capture metric for low impact development (LID) implementation
- Design storm event based on the 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, or 0.75 inch, *whichever is greater*.
- Hydromodification requirements
 - Matching pre- and post-development hydrographs
 - Capture of runoff generated from 95th percentile storm in natural systems (federal facility standard)
 - Demonstration of erosion potential of 1 or less
 - Identification of applicable project categories
 - Offsite mitigation requirements
 - Allowable technical infeasibility criteria

(6) Minimum Control Measures for Public Information and Participation Program (PIPP)

The purpose of the PIPP is to foster an informed and knowledgeable community by educating the public of the need to conduct everyday activities in a manner that reduces or prevents pollutants from being discharged in stormwater and non-stormwater, resulting in better compliance with the MS4 permit as a whole. The public should be educated about 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 where they live. Furthermore, the public can provide valuable input and assistance to a municipal stormwater management program.

Key Issues Being Evaluated:

- Target audience(s)
- Educational message(s) to be conveyed
- Level of Permittee effort
- Demonstration of required effort

TMDL IMPLEMENTATION PROVISIONS

Over the last decade, the Regional Board has adopted 28 TMDLs to remedy water quality impairments in various waterbodies within Los Angeles County. (See Attachment B for a list of TMDLs either in effect or undergoing the approval process by Watershed Management Area for Los Angeles County.) In most cases, these TMDLs identify MS4 discharges as a source of pollutants to these waterbodies and, as required, set wasteload allocations (WLAs) for MS4 discharges to reduce the amount of pollutants discharged to receiving waters. Federal regulations 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)). Therefore, as part of the update of the LA County MS4 Permit, Board staff will be developing numeric effluent limitations and other provisions to implement the TMDL WLAs assigned to permittees regulated by the LA County MS4 Permit.

The Regional Board has some flexibility when establishing permit provisions that are designed to determine compliance with the numeric effluent limitations derived from the TMDL WLAs. Broadly, this means that the Regional Board may either require a demonstration that permittees comply with the numeric effluent limitations through monitoring (such as outfall monitoring) or, alternatively, allow permittees to develop and implement control measures to achieve the numeric effluent limitations (referred to as an “action-based” compliance demonstration) where there is an adequate demonstration in the record that the selected control measures and schedule will achieve the numeric effluent limitations.

The Regional Board has previously established numeric effluent limitations when it reopened the LA County MS4 Permit 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. Staff is considering similar approaches for the 27 other TMDLs that have to be put into the permit, where appropriate.

ADDITIONAL ISSUES

Staff continues to work on the following key elements:

- Non-Stormwater Discharge Prohibition
- Receiving Water Limitations
- Water Quality Based Effluent Limitations

Non-stormwater Discharge Prohibition

As required by CWA section 402(p), the 2001 Permit, as well as all MS4 permits in California, contains a requirement for permittees to effectively prohibit discharges of non-stormwater into the MS4 and to watercourses. The 2001 Permit conditionally excepts certain types of discharges from the non-stormwater discharge prohibition, such as

natural flows, emergency firefighting flows, and flows incidental to urban activities so long as they are not a source of pollutants. However, the effect of individual and collective excepted discharges into the MS4 on the quality of non-stormwater discharged from the MS4 has not been well characterized. The 2001 Permit contains language that allows the Executive Officer to prohibit certain conditionally excepted non-stormwater discharges if they are deemed to be a source of pollutants or to comply with TMDL provisions. In addition to these conditionally excepted non-stormwater discharges to the MS4, the Regional Board has issued several general NPDES permits for site cleanup and potable water system testing, which allow discharges to the MS4. Unless the discharge meets all applicable water quality standards, these permits require treatment before discharge to the MS4.

Historically, the control measures required to achieve this effective prohibition have been those included in the illicit discharge/illicit connection elimination program of the SWMP. However, recent inspections of Permittees' IC/IDE program have indicated that while Permittees have conducted screening of their MS4 as required by the Permit, non-stormwater discharges from to the MS4 and watercourses continue, often resulting in exceedances of water quality standards. Staff continues to evaluate options to improve the effectiveness of this section of the Permit.

Receiving Water Limitations

Per 40 CFR section 122.44(d)(1), the Receiving Water Limitations section of the 2001 Permit, as well as all MS4 Permits in California, contains a requirement that prohibits discharges from the MS4 that cause or contribute to violations of Water Quality Objectives or Standards.

This section of the 2001 Permit also contains provisions that establish an "iterative process" whereby certain actions are required when exceedances of Water Quality Objectives or Standards occur. This iterative process includes submitting a Receiving Water Limitations Compliance Report; revising the SWMP and its components to include modified BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised SWMP.

Many Permittees believe that if they fully comply with the iterative process in response to exceedances of Water Quality Objectives or Standards, then those Permittees should not be in violation, and thus not be subject to enforcement, of the discharge prohibitions in the Receiving Water Limitations section of the permit. The Regional Board has held that compliance with the iterative process as outlined in the 2001 Permit is not a "safe harbor" for compliance with Water Quality Standards or Objectives, and that the discharge prohibitions are independently and separately enforceable provisions of the 2001 Permit. The Regional Board's interpretation was recently upheld in July 2011 by the United States Court of Appeal for the Ninth Circuit in the *Natural Resources Defense Council (NRDC) v. County of Los Angeles* case. The Court ruled that that the discharge prohibitions are independently enforceable requirements, separate and distinct from the iterative process requirements.

In evaluating the iterative process for the updated permit, Staff have looked to see how other regional boards are dealing with this issue. Some regional boards have issued permits that contain not just receiving water monitoring, but also outfall monitoring paired with “action levels” that, if exceeded, trigger requirements to submit and implement a plan to enhance or implement additional BMPs to eliminate the exceedances of Water Quality Objectives or Standards. In the Regional Board’s deliberations on the Ventura County MS4 Permit, the Regional Board supported outfall monitoring, but rejected the use of action levels as proposed. Staff continues to evaluate options that will allow for an iterative process of SWMP and BMP implementation, while ensuring accountability for taking appropriate, timely, and effective actions toward achieving Receiving Water Limitations.

WQBELs

Water Quality Based Effluent Limitations (WQBELs) are effluent limitations established to achieve compliance with applicable water quality standards. Numeric WQBELs are derived from water quality standards, or WLAs established to achieve water quality standards. Numeric WQBELs are routinely used in NPDES permits for publicly owned treatment works (POTWs) and industrial facilities. To date, the Regional Board has only established numeric WQBELs to implement the Los Angeles River Watershed Trash TMDL WLAs. As discussed above under the TMDL Implementation Provisions section, NPDES permits must contain effluent limits consistent with the assumptions and requirements of all available WLAs. Since the WLAs are expressed numerically, numeric WQBELs in MS4 permits are appropriate. Recently, US EPA revised its guidance on this issue, recommending that, “NPDES permitting authorities use numeric effluent limitations where feasible as these types of effluent limitations create objective and accountable means for controlling stormwater discharges.” In discussions with several Permittees to date, there is no clear consensus on this issue, and staff continues to vet various options for regarding numeric WQBELs.

SUMMARY

In summary, Board staff has made meaningful progress on development of the updated Los Angeles County MS4 Permit. However, there are a number of areas in which staff has not fully identified and evaluated options for Board discussion at this workshop. With this workshop, staff intends to formally introduce key issues to the Board, and continue the dialogue among the Regional Board, Permittees and other stakeholders begun at the May 2011 kick-off meeting in order to meet a tentative schedule for Board consideration of the permit by May 2012. Additional staff level or Board workshops will be held prior to the Board’s consideration of the permit.

Attachment A – SurveyMonkey® on-line survey

Attachment B – TMDLs by Watershed Management Area

Attachment C – Permittees by Watershed Management Area

Attachment D – Permittees by AB 2554-defined Watershed Authority Group - DRAFT

Attachment E – Summary on-line survey results

Attachment F – Preliminary recommendations regarding SWMP permit requirements

LA County MS4 Permit Structure

The Los Angeles Regional Water Quality Control Board (Regional Board) has begun the process of updating the Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit, which was last issued in 2001. The 2001 Permit regulates discharges of stormwater and non-stormwater from the MS4 to Waters of the State and U.S. The MS4 discharges from 84 cities, Los Angeles County, and Los Angeles County Flood Control District are regulated by the Regional Board under this single permit.

The Regional Board held a Kick-off Meeting with Permittees and stakeholders on May 25, 2011 to begin permit development. At the meeting, Regional Board staff discussed a number of alternative permit structures. (The PowerPoint presentation from the May 25th meeting can be downloaded from the Regional Board's website at http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/la_ms4/LAMS4PermitKickoffMeetingPresentation.pdf)

This survey is intended to solicit Permittees' preferences regarding permit structure and will be used by Regional Board staff, along with other information, in developing for Regional Board consideration the appropriate permit structure for regulating MS4 discharges within the Los Angeles County Flood Control District, Los Angeles County, and the incorporated cities therein.

Please respond to the questions below, indicating your city's preferences regarding permit structure and briefly explaining your rationale for preferring this structure.

PLEASE SUBMIT ONLY ONE RESPONSE PER PERMITTEE.

Responses are requested by June 24, 2011. For questions, please contact Mr. Ivar Ridgeway, Chief, Stormwater Permitting Unit, at (213) 620-2150.

* 1. Which permit structure does your city prefer for an updated MS4 Permit?

- Single MS4 Permit for Los Angeles County
- Six watershed-based MS4 Permits using Regional Board Watershed Management Areas
- Nine watershed-based MS4 Permits per AB 2554 Watershed Authority Groups
- Per 2006 Reports of Waste Discharge (ROWDs)
- Individual MS4 Permits for each Permittee
- Other (please specify)

2. If you selected "Other" in Q1, please provide a description of your city's preferred permit structure. If a group permit is preferred, please identify the other Permittees who would be included in the group.

3. Please provide an explanation of your city's reason(s) for preferring the permit structure selected in Q1 above.

LA County MS4 Permit Structure

4. If your city prefers a single permit for Los Angeles County, which of the following internal structures would you prefer for incorporating TMDL requirements?

- Watershed-based chapters per AB 2554 Watershed Authority Groups
- Watershed-based chapters per Regional Board Watershed Management Areas
- Individual permittee chapters
- Other (please specify)

5. Please select the top 3 issues that your city would like to have a workshop on during permit development.

- Incorporation of TMDL wasteload allocations into the permit
- New development/redevelopment permit provisions, including LID
- Monitoring program design
- Reporting program design
- Regulation of non-stormwater discharges to/from the MS4
- Other (please specify workshop topic(s))

***6. Please list the City's primary contact for continued communication regarding the Los Angeles County MS4 permit development.**

Name:	<input type="text"/>
Title:	<input type="text"/>
City Department:	<input type="text"/>
Address:	<input type="text"/>
City:	<input type="text"/>
State:	<input type="text"/>
ZIP:	<input type="text"/>
Country:	<input type="text"/>
Email Address:	<input type="text"/>
Phone Number:	<input type="text"/>

LA County MS4 Permit Structure

7. Please provide a secondary contact for continued communication regarding the Los Angeles County MS4 Permit development below.

Name:	<input type="text"/>
Title:	<input type="text"/>
Dept./Co.:	<input type="text"/>
Address:	<input type="text"/>
City:	<input type="text"/>
State:	<input type="text"/>
ZIP:	<input type="text"/>
Country:	<input type="text"/>
Email Address:	<input type="text"/>
Phone Number:	<input type="text"/>

ATTACHMENT B

TOTAL MAXIMUM DAILY LOADS (TMDL) BY WATERSHED MANAGEMENT AREA (WMA)

- A. Santa Clara River Watershed Management Area
 - 1. Santa Clara River Nitrogen Compounds TMDL
 - 2. Upper Santa Clara River Chloride TMDL
 - 3. Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL
 - 4. Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL

- B. Santa Monica Bay Watershed Management Area
 - 1. Santa Monica Bay Beaches Bacteria TMDL
 - 2. Santa Monica Bay Nearshore and Offshore Debris TMDL

 - 3. Malibu Creek Subwatershed
 - a. Malibu Creek and Lagoon Bacteria TMDL
 - b. Malibu Creek Watershed Trash TMDL
 - c. Malibu Creek Watershed Nutrients TMDL (*USEPA established*)

 - 4. Ballona Creek Subwatershed
 - a. Ballona Creek Trash TMDL
 - b. Ballona Creek Estuary Toxic Pollutants TMDL
 - c. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL
 - d. Ballona Creek Metals TMDL

 - 5. Marina del Rey Subwatershed
 - a. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
 - b. Marina del Rey Harbor Toxic Pollutants TMDL

- C. Dominguez Channel and Greater Harbors Watershed Management Area
 - 1. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)
 - 2. Machado Lake Trash TMDL
 - 3. Machado Lake Nutrient TMDL
 - 4. Machado Lake Pesticides and PCBs TMDL
 - 5. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

- D. Los Angeles River Watershed Management Area
 - 1. Los Angeles River Watershed Trash TMDL
 - 2. Los Angeles River Nitrogen Compounds and Related Effects TMDL
 - 3. Los Angeles River and Tributaries Metals TMDL
 - 4. Los Angeles River Watershed Bacteria TMDL

- E. San Gabriel River Watershed Management Area
 - 1. San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (*USEPA established*)
 - 2. Legg Lake Trash TMDL

- F. Los Cerritos Channel and Alamitos Bay Watershed Management Area
 - 1. Los Cerritos Channel Metals TMDL (*USEPA established*)
 - 2. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

Attachment C: Permittees' Area by Regional Board Watershed Management Areas (square km)

RB-AR517

Permittees	Dominguez Channel Watershed	Los Angeles River Watershed	Los Cerritos Channel Watershed	San Gabriel River Watershed	Santa Clara River Watershed	Santa Monica Bay WMA
Agoura Hills						20.953983
Alhambra		19.70298959				
Arcadia		28.25107529		0.49105106		
Artesia				4.190631393		
Azusa				23.19617709		
Baldwin Park				17.4242435		
Bell		7.101958132				
Bell Gardens		6.438648603				
Bellflower			11.32796246	4.514247635		
Beverly Hills						14.69195438
Bradbury		1.973549281		2.356742138		
Burbank		44.96177604				
Calabasas		15.87692821				18.06900251
Carson	48.39728214	0.72513122				
Cerritos			0.17488613	23.07137257		
Claremont				23.55028705		
Commerce		17.00239216				
Compton	2.034680642	24.48033641				
Covina				18.06094185		
Cudahy		2.905824335				
Culver City						13.25839727
Diamond Bar				37.4196882		
Downey		14.65150577	0.922940419	17.09057297		
Duarte		4.09413569		9.615591902		
El Monte		18.55320153		6.553931855		
El Segundo	5.286262578					9.070110382
Gardena	14.42099055					
Glendale		79.31803931				
Glendora				38.73167068		
Hawaiian Gardens				2.568770807		
Hawthorne	15.60419162					
Hermosa Beach						3.623263576
Hidden Hills		3.769152813				0.414216376
Huntington Park		7.852800435				
Industry				30.41742056		
Inglewood	15.74070254	0.014148937				7.817266072
Irwindale		3.906435698		20.68040663		
La Canada Flintridge		22.2185917				
La Habra Heights				16.45600679		
La Mirada				20.38945904		
La Puente				9.03754608		
La Verne				19.98681394		
Lakewood		0.280927406	19.6155898	4.64870926		
Lawndale	5.119611245					
Lomita	4.913983099					
Long Beach	12.28956141	53.06954574	56.36592072	9.76755552		
Los Angeles	74.0079562	732.9325888				364.471466
Los Angeles County	33.64436273	204.6705051	0.380534566	188.5878855	778.3684787	222.4010747
Lynwood		12.58026987				
Malibu						46.35752649
Manhattan Beach	1.436718051					8.715986706
Maywood		3.077459042				

Attachment C: Permittees' Area by Regional Board Watershed Management Areas (square km)

Permittees	Dominguez Channel Watershed	Los Angeles River Watershed	Los Cerritos Channel Watershed	San Gabriel River Watershed	Santa Clara River Watershed	Santa Monica Bay WMA
Monrovia		26.22431754		2.346520394		
Montebello		21.67101893				
Monterey Park		19.85516306				
Norwalk				25.47707759		
Palos Verdes Estates	1.008251637					11.33227782
Paramount		7.916772575	4.500497153			
Pasadena		58.80509308				
Pico Rivera		6.388827893		15.42245295		
Pomona				31.11653084		
Rancho Palos Verdes	10.75487643					24.18081137
Redondo Beach	5.002684821					10.99102176
Rolling Hills	6.099746185					1.808393352
Rolling Hills Estates	7.993310534					1.218085617
Rosemead		13.31809594				
San Dimas				35.05319579		
San Fernando		6.257896114				
San Gabriel		10.68334509				
San Marino		9.750854735				
Santa Clarita		0.294438382			112.0433725	
Santa Fe Springs				22.70849492		
Santa Monica						20.9835539
Sierra Madre		7.762995737				
Signal Hill		3.096132269	2.659593655			
South El Monte		6.5504523		0.977430809		
South Gate		19.38283139				
South Pasadena		8.883495508				
Temple City		10.40531327				
Torrance	44.37626833					8.728897117
Vernon		13.17346438				
Walnut				22.9435657		
West Covina				42.06116484		
West Hollywood						4.862148373
Westlake Village						14.32554601
Whittier				32.53401337		
LACFCO	X	X	X	X	X	X

ATTACHMENT D

Permittees by AB 2554 Watershed Authority Group - DRAFT

Permittees	Ballona Creek	Dominguez Channel	Upper LAR	Lower LAR	Rio Hondo	Upper SGR	Lower SGR	Santa Clara River	Santa Monica Bay
Hidden Hills									
Huntington Park				X					
Industry						X			
Inglewood	X	X							
Irwindale					X	X			
La Canada Flintridge			X						
La Habra Heights									
La Mirada							X		
La Puente						X			
La Verne						X			
Lakewood							X		
Lawndale		X							
Lomita		X							
Los Angeles (City of)	X	X	X	X					X
Los Angeles County	X	X	X	X	X	X	X	X	X
LACFCD	X	X	X	X	X	X	X	X	X
Lynwood				X					
Malibu									X
Manhattan Beach									X
Maywood				X					
Monrovia					X				
Montebello				X					
Monterey Park			X		X				
Norwalk							X		
Palos Verdes Estates									X
Paramount				X			X		
Pasadena			X		X				
Pico Rivera				X			X		
Pomona						X			
Rancho Palos Verdes									X
Redondo Beach		X							X
Rolling Hills		X							
Rolling Hills Estates		X							X

ATTACHMENT D

Permittees by AB 2554 Watershed Authority Group - DRAFT

Permittees	Ballona Creek	Dominguez Channel	Upper LAR	Lower LAR	Rio Hondo	Upper SGR	Lower SGR	Santa Clara River	Santa Monica Bay
Rosemead									
San Dimas						X			
San Fernando			X						
San Gabriel					X				
San Marino					X				
Santa Clarita								X	
Santa Fe Springs							X		
Santa Monica									X
Sierra Madre					X				
Signal Hill				X			X		
South El Monte					X				
South Gate				X					
South Pasadena			X						
Temple City					X				
Torrance									X
Vernon			X	X					
Walnut						X			
West Covina						X			
West Hollywood	X								
Westlake Village									X
Whittier							X		

LA County MS4 Permit Structure



Which permit structure does your city prefer for an updated MS4 Permit?

		Response Percent	Response Count
Single MS4 Permit for Los Angeles County		51.9%	27
Six watershed-based MS4 Permits using Regional Board Watershed Management Areas		13.5%	7
Nine watershed-based MS4 Permits per AB 2554 Watershed Authority Groups		9.6%	5
Per 2006 Reports of Waste Discharge (ROWDs)		5.8%	3
Individual MS4 Permits for each Permittee		7.7%	4
Other (please specify)		21.2%	11
		answered question	52
		skipped question	0

Q1. Which permit structure does your city prefer for an updated MS4 Permit?

1	If a single MS4 permit for Los Angeles County is used, the City of Rancho Palos Verdes would like to incorporate the TMDL requirements as described below in response to question #3.	Jun 30, 2011 9:03 AM
2	If the single permit is not implemented, we would like a permit which would include the four cities on the Palos Verdes Peninsula - us, RPV, RHE, and RH. We have worked very well together on TMDLs and have a unique situation in the County with our rural development and limited commercial/industrial land use.	Jun 29, 2011 8:44 AM
3	We prefer a single permit for LA County in order to minimize costs associated with administering the permit, but if multiple permits are going to be issued, then our preferred structure is a Palos Verdes Peninsula group permit for the Cities of Rolling Hills, Rolling Hills Estates, Rancho Palos Verdes and Palos Verdes	Jun 28, 2011 1:48 PM

Q1. Which permit structure does your city prefer for an updated MS4 Permit?

	Estates.	
4	Single MS4 Permit for Los Angeles County (including cities and unincorporated County areas) but excluding the Los Angeles County Flood Control District. Preference is for a single Permit only if no permittee is held responsible for another permittee's discharges. Otherwise, preference is for an individual Permit for the unincorporated County areas, such as was issued to the City of Long Beach.	Jun 27, 2011 4:57 PM
5	Individual MS4 Permit for the Los Angeles County Flood Control District (LACFCD), per its November 2010 Report of Waste Discharge. No preference for other permittees.	Jun 27, 2011 4:22 PM
6	The city of Carson prefers a sub-watershed based group permit.	Jun 27, 2011 2:54 PM
7	Watershed-based Permit	Jun 27, 2011 11:47 AM
8	Group permit to include all South Bay Council of Governments (SBCOG) member cities (15 cities)	Jun 22, 2011 3:25 PM
9	Group Permit Based on Watershed Assignment	Jun 22, 2011 1:57 PM
10	A single LA County wide MS4 Permit that is watershed-based, i.e. nine watershed-based chapters in addition to all chapters for model programs, etc.. There will be general requirements (universal terms) for all cities and specific requirements (below the line terms) for each municipality based upon their location, or WQ conditions. It also provides flexibility for model programs to prioritize them in such way to take advantage of years of data and experience that we have collected and analyzed on them.	Jun 17, 2011 6:59 AM
11	The City of Torrance requests the Dominguez and South Santa Monica Bay watersheds from the AB 2554 be combined for a South Bay watershed based permit, because 9 out of 15 cities in the South Bay have areas in both those sub-watersheds.	Jun 16, 2011 2:26 PM

LA County MS4 Permit Structure



If you selected "Other" in Q1, please provide a description of your city's preferred permit structure. If a group permit is preferred, please identify the other Permittees who would be included in the group.

	Response Count
	15
answered question	15
skipped question	37

Q1. If you selected "Other" in Q1, please provide a description of your city's preferred permit structure. If a group permit is preferred, please identify the other Permittees who would be included in the group.

1	N/A	Jul 11, 2011 3:30 PM
2	As a second option, the City of Rancho Palos Verdes would opt for a joint permit of the Palos Verdes Peninsula cities (Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates, and Palos Verdes Estates).	Jun 30, 2011 9:03 AM
3	As stated above.	Jun 29, 2011 8:44 AM
4	As stated above, if multiple permits are going to be issued, then our preferred structure is a Palos Verdes Peninsula group permit for the Cities of Rolling Hills, Rolling Hills Estates, Rancho Palos Verdes and Palos Verdes Estates.	Jun 28, 2011 1:48 PM
5	In November 2010, the LACFCD submitted an ROWD as an application for an individual permit. This ROWD contains a description of the LACFCD's preferred permit structure.	Jun 27, 2011 4:22 PM
6	At this point in time, the cities of Inglewood, Lawndale, Lomita and Gardena have agreed to participate in a watershed/subwatershed based group permit with the city of Carson. Other cities in the subwatershed such as Hawthorne and Torrance would be welcomed participants.	Jun 27, 2011 2:54 PM
7	N/A	Jun 27, 2011 2:27 PM
8	Watershed-based Permit - WMA or WAG	Jun 27, 2011 11:47 AM
9	N/A.	Jun 24, 2011 10:08 AM
10	cities include: El Segundo, Manhattan Beach, Hermosa Beach, Redondo Beach, Torrance, Lawndale, Inglewood, Hawthorne, Gardena, Carson, Lomita, Rancho Palos Verde, Rancho Verde Estates, Rolling Hills, Rolling Hills Estates.	Jun 22, 2011 3:25 PM

Q1. If you selected "Other" in Q1, please provide a description of your city's preferred permit structure. If a group permit is preferred, please identify the other Permittees who would be included in the group.

11	Already specified above. We cannot identify the permittees at this time as they are in the process of obtaining City Council approval.	Jun 22, 2011 1:57 PM
12	NA	Jun 20, 2011 2:53 PM
13	N/A	Jun 20, 2011 2:52 PM
14	Please see above explanation.	Jun 17, 2011 6:59 AM
15	Our request is based on combining the South Santa Monica Bay and the Dominguez Channel watersheds from the AB 2554 Watershed Authority Groups. The cities include the following: El Segundo, Hawthorne, Gardena, Manhattan Beach, Hermosa Beach, portions of Los Angeles County, portions of City of Los Angeles, Redondo Beach, Torrance, Carson, Lomita, Lawndale, Palos Verdes Estates, Rolling Hills Estates, Rolling Hills and Rancho Palos Verdes	Jun 16, 2011 2:26 PM

LA County MS4 Permit Structure



Please provide an explanation of your city's reason(s) for preferring the permit structure selected in Q1 above.

	Response Count
	44
answered question	44
skipped question	8

Q1. Please provide an explanation of your city's reason(s) for preferring the permit structure selected in Q1 above.

1	N/A	Jul 11, 2011 3:30 PM
2	<p>The City would be fine with an individual permit first, and a WMA based second. Individual permits would better address the individual characteristics of the permittee. Technically, when the first NPDES permits for MS4s were established in Region 4, the City of Malibu if not the entire WMA would have fallen under the Phase II criteria for combined population and total mileage of MS4, not to mention the entire area is in the range of 80% undeveloped land. As such, it is considerably different and less connected to the urban setting of the greater Los Angeles Region and would need slightly more tailored requirements for an effective implementation strategy. The City has effective relationships and collaborates well with other area permittees, but does not feel it is necessary to be linked to them. The City could still collaborate with its partners on a regional basis, but should not necessarily be required to. In light of the City's second preferred option, the subregions established by the WMAs best exemplify shared characteristics and regulatory requirements (such as TMDLs). In particular, "Malibu Creek and Rural Santa Monica Bay WMA has distinctly different topography, commercial/industrial uses levels, residential densities, and infrastructure/facilities than most of the other WMAs. Having more tailored permits may allow the Board staff to work more effectively and efficiently with permittees to achieve WQ goals and compliance.</p>	Jul 7, 2011 11:53 AM
3	<p>The City of Rancho Palos Verdes would prefer a consistent Los Angeles County permit. The City would like provisions in the permit to account for the unique geographical characteristics of the Palos Verdes Peninsula (upon which the City of Rancho Palos Verdes is located).</p>	Jun 30, 2011 9:03 AM
4	<p>The City of Rolling Hills Estates prefers a single permit for LA County, but if multiple permits are issued, then our second choice would be for a Palos Verdes Peninsula group permit for the cities of Rolling Hills Estates, Rolling Hills, Palos Verdes Estates and Rancho Palos Verdes.</p>	Jun 29, 2011 10:19 AM
5	<p>Having one permit minimizes costs for staff time and allows cities to spend our</p>	Jun 29, 2011 8:44 AM

Q1. Please provide an explanation of your city's reason(s) for preferring the permit structure selected in Q1 above.

	limited funding on implementation and not additional paperwork.	
6	Since the County is unwilling to be lead, the watershed approach would be most effective for Pomona.	Jun 28, 2011 3:11 PM
7	Rolling Hills is a very small strictly residential city which is, by design, a low impact development. A permit that is responsive to the unique characteristics of the City while minimizing administrative and reporting costs would allow the City to focus its limited resources in protecting water quality.	Jun 28, 2011 1:48 PM
8	A single permit with watershed "chapters" would still allow for economies of scale and uniformity of message for activities and programs that are best administered in a regional manner. For example, given economies of scale and coordination of message and effort, the public outreach component of the MS4 permit is best managed by a single entity at the regional level. Similarly, given the infrastructure and expertise of the LACFCD, monitoring should continue to be conducted by this entity to provide consistency. The LACFCD has expressed that it will continue to provide monitoring, but it may pass down costs to cities or watershed for more specific monitoring. Even under a single permit, the Regional Board envisions watershed "chapters" that contain permit components required to meet the specific needs of each watershed.	Jun 28, 2011 10:43 AM
9	The County of LA DPW/FCD has provided limited MS4P guidance, unless paid for their services. This makes a poor foundation for building a single Countywide permit as many cities will be unable to afford the needed support and there will be no mechanism to make the changes necessary to achieve water quality objectives, potentially leading to regional enforcement efforts or redistribution of resources among permittees. Like many cities, the City of Downey touches multiple watersheds and reaches within a single watershed. So watershed based permits would require the City to incorporate multiple potentially conflicting permits. Authority based permits, might be rational if funding was forthcoming. Unfortunately, we are looking at Spring of 2013, then likely litigation, then initiation of taxation, then distribution of resources, then project selection (assuming recent litigation allows regional BMPs, which is questionable). It appears questionable that the authorities will be funded during the term of this MS4 permit. In 2006 and recently, the City of Downey requested an individual permit, while cooperating/participating with fair regional monitoring efforts and studies to assess priority pollution sources and areas.	Jun 27, 2011 6:08 PM
10	Because County unincorporated areas exist in all watersheds, the County prefers a single permit over participating in multiple permits. The administration of multiple permits would impose an unreasonable and unnecessary burden on the County. If watershed-based permits or other type of multiple permits are proposed for the city permittees, the County prefers an individual permit for itself, similar to the City of Long Beach permit.	Jun 27, 2011 4:57 PM
11	To leverage limited resources, the City wishes to continue with the current Countywide/Regional permit structure, with new chapters to address subregional requirements based on the AB 2554 Watershed Groups which have been widely vetted and negotiated among permittees.	Jun 27, 2011 4:43 PM
12	The LACFCD is not a municipality but is a special district that requires its own individual and unique permit requirements. As a flood control agency, the LACFCD conveys stormwater runoff but has no land use jurisdiction over the sources of the stormwater runoff that enters its system.	Jun 27, 2011 4:22 PM

Q1. Please provide an explanation of your city's reason(s) for preferring the permit structure selected in Q1 above.

13	It considers choices previously made by other cities that submitted separate ROWDs but keeps the LACFCD as the principal permittee which is important in order to achieve Bacteria TMDLs. LACFCD owns and operates the major storm drains, flood control basins with large pumps as well as the low flow diversions and the way the system is operated and maintained has a significant impact on Bacteria TMDL compliance. In addition if LACFCD is going to collect and manage AB2554 storm water quality funds, it only makes sense that they be involved in the joint permit.	Jun 27, 2011 4:02 PM
14	We value LA County as the Principal Permittee and the benefits of their leadership and guidance. We understand that the County will manage the AB 2554 funds if approved by the voters. By keeping the County as Principal Permittee, we'll be able to maintain a level of consistency especially in the annual reporting process.	Jun 27, 2011 3:02 PM
15	The subwatershed based group permit provides the best opportunity to maximize coordination among a small group of cities and agencies that have the same TMDL responsibilities.	Jun 27, 2011 2:54 PM
16	Existing TMDL's have been developed on a watershed basis. Given that the permit will include provisions and incorporate TMDLs for all permittees to comply with combined with the Los Angeles County Flood Control District no longer being the principal permittee, it is best to issue watershed permits. However, provisions should be written in which an exceedance/violation of a watershed TMDL or permit requirement will not punish all permittees within that watershed, but rather the private party and/or permittee at fault (i.e., the need to compare monitoring data may be required to determine the location of the exceedance/violation).	Jun 27, 2011 2:27 PM
17	More localized management	Jun 27, 2011 11:47 AM
18	It honors the preferences of other cities who submitted separate ROWDs, and includes LACFCD as principal permittee whose participation is essential in meeting Bacteria TMDLs. The condition, maintenance and operation of major storm drains, flood control basins/sumps and low flow diversions are critical for Bacteria TMDL compliance. LACFCD participation in a joint permit is also important and logical if they will be collecting and managing AB2554 stormwater quality funds.	Jun 27, 2011 11:42 AM
19	If LACFCD is released as Principal Permittee, West Hollywood would prefer watershed-based permits. The City has a good working relationship with both the Santa Monica Bay watershed and the Ballona Creek Watershed jurisdictions and would be amenable to either group. West Hollywood would also be amenable to a Single MS4 Permit (with all agencies or per the 2006 ROWDS) if LACFCD remains principal permittee or based on an alternative lead agency arrangement.	Jun 27, 2011 11:29 AM
20	TO MINIMIZE THE CITY WORK	Jun 27, 2011 11:04 AM
21	Believe a single county-wide permit would be the most consistant and least administratively burdensome	Jun 27, 2011 8:08 AM
22	Considering our knowledge of the current permit, compared to the otehr options, we feel the Single MS4 Permit is the best format.	Jun 24, 2011 4:26 PM

Q1. Please provide an explanation of your city's reason(s) for preferring the permit structure selected in Q1 above.

23	The City would like to see LA County continue to function as principal permittee, particularly if their funding initiative is passed.	Jun 24, 2011 2:35 PM
24	We are the smallest city in LA County and up against the foothills, WAGs make more sense to our City, Council and residents when it comes to cleaner water.	Jun 24, 2011 11:06 AM
25	The City of Hidden Hills (City) believes the Single MS4 Permit for Los Angeles County is the best possible permit structure because it maintains existing and established structures and relationships developed over the last three permit terms. We support this structure because of the interconnected network of County storm drains and similarity of common development methods and practices. Like a number of other Los Angeles County cities, the City is located in two watersheds, the Los Angeles River Watershed and the Malibu Creek Watershed. Although less than 1% of the City is located within the Malibu Creek Watershed, the City must still develop and implement Permit required activities for both watersheds. The City is concerned that if the Single MS4 Permit is changed, the City could likely be responsible for: 1) two or more State NPDES Permit fees; 2) submittal of two or more annual reports; and 3) differing development standards for each watershed's Stormwater Quality Management Plan or "SQMP."	Jun 24, 2011 10:08 AM
26	Economy of scale and continuity of the permit that has been in effect since the 90's	Jun 24, 2011 8:43 AM
27	In Los Angeles County the large number of small Cities with limited staff make the common permit with a Principal Permittee the most efficient way to approach this effort. The large technical issues can be led by the Principal permittee with support from the cities. I understand that Los Angeles County Flood Control does not want to be the Principal Permittee and I think that their concerns can be addressed with a Permit Mandated Memorandum of Understanding that defines the Cities minimum support level for programs like Public Education, Monitoring and Annual Report coordination.	Jun 24, 2011 8:38 AM
28	Our City believes that it makes the most sense for the County to be the Principal Permittee and implementing all stormwater programs with the City possibly paying a fee to the County each year to finance the program. They have the expertise and the staff to implement such programs where many cities don't.	Jun 23, 2011 4:45 PM
29	Agencies will be focused because we have to meet the same goals and this would seem to be the best way to address TMDL issues.	Jun 23, 2011 3:44 PM
30	Implementation and resource focus has shifted towards TMDL planning and implementation which are watershed based.	Jun 23, 2011 3:33 PM
31	1. The SBCOG cities principally drain to two watersheds. Dominguez Channel and Santa Monica Bay. 2. Only small areas of two cities (Inglewood - Ballona Creek and Carson - LA River) drain to another waters. 3. Eight cities drain to both watersheds. 4. Only one city (Hermosa Beach) doesn't drain to Dominguez Channel watershed. 5. The SBCOG has an organizational and financing structure that could coordinate joint activities like PIPP and Monitoring. 6. A group permit could allow a more focused development of LID standards that meet local conditions. 7. The SBCOG cities have a history of working cooperatively together on many cross jurisdictional transportation issues which will reduce the learning curve for implementing the NPDES Permit. 8. The SBCOG provides an immediate framework for implements projects and programs that would be fund	Jun 22, 2011 3:25 PM

Q1. Please provide an explanation of your city's reason(s) for preferring the permit structure selected in Q1 above.

	via the LA Flood Control District Stormwater Quality Funding Initiative.	
32	To better manage TMDLs and to propose reasonable MS4 Permit requirements.	Jun 22, 2011 1:57 PM
33	The Watershed Approach may provide a more tailored permit that reflects the differences in watershed areas and the specific challenges in addressing TMDLs.	Jun 22, 2011 10:59 AM
34	Consistent with needs and requirements of our City within the Upper San Gabriel Valley Watershed and provides the ability of effective monitoring and ease of enforcement and effective management within a smaller group with similar interests.	Jun 21, 2011 4:13 PM
35	There were no issues in the previous years when there was a single permit for Los Angeles County, therefore, the City of Inglewood (City) prefers no changes to the permit structure. The City believes that the public education and outreach portion of the permit is more effective on a Countywide approach. In addition to the public education and outreach part of the permit, the City also believes the monitoring portion of the permit is more effective on a Countywide approach.	Jun 21, 2011 9:18 AM
36	We would prefer to maintain the County as the principle permit holder since the County has that role now.	Jun 20, 2011 2:53 PM
37	The City of Bell Gardens would like to see the County maintain its role as Principle Permittee for the new MS4 Permit.	Jun 20, 2011 2:52 PM
38	The nine Watershed Authority Group areas provide a permit at a local level without going all the way down to a permit per city. The Watershed Authority Groups will, hopefully, place cities together that are facing similar sources of storm water pollution and will be able to work on them from a logically based regional level.	Jun 20, 2011 2:50 PM
39	City has limited resources - a unified permit will allow permittees to collaborate on permit requirements and compliance issues.	Jun 20, 2011 12:00 PM
40	A County permit will maintain and ensure County-wide consistency in monitoring, reporting, and public education efforts, and will increase regional collaboration in BMP implementation and development.	Jun 20, 2011 10:30 AM
41	1. it is consistent with County funding initiative negotiated in AB2554. 2. it promotes watershed wide solutions (coordination, innovation, collaboration, and leveraging resources) to address WQ problems (which is badly needed). 3. It is the most cost effective manner to deal with stormwater runoff pollution. 4. It is consistent with most people sense of fairness that they are being treated equitably, because they are all under one permit with similar requirements and dissimilar provisions when warranted . 5. WQ pollution does not recognize jurisdictional boundaries, it is in the watershed and it ought to be dealt with on watershed wide basis (regional projects, local projects, and institutional measures). 6. it should also provide for model programs flexibility, we have years of data that would help guide many of these model programs the much needed priority that they deserve to improve WQ.	Jun 17, 2011 6:59 AM
42	This structure would allow the South Bay cities to utilize the South Bay Cities Council of Governments to be the AB 2554 Watershed Authority Group and the South Bay already has media outlets (Daily Breeze) and a	Jun 16, 2011 2:26 PM

Q1. Please provide an explanation of your city's reason(s) for preferring the permit structure selected in Q1 above.

southbaystormwaterprogram website to use for public outreach. Additionally, using the proposed AB 2554 watersheds would split 9 out of 15 cities.

43	Provide for cost sharing	Jun 16, 2011 1:55 PM
44	The County includes several drainage areas but collectively it is one jurisdiction. Splitting drainage areas into multiple permits may cause many problems.	Jun 16, 2011 1:50 PM

LA County MS4 Permit Structure



If your city prefers a single permit for Los Angeles County, which of the following internal structures would you prefer for incorporating TMDL requirements?

		Response Percent	Response Count
Watershed-based chapters per AB 2554 Watershed Authority Groups		36.6%	15
Watershed-based chapters per Regional Board Watershed Management Areas		34.1%	14
Individual permittee chapters		12.2%	5
Other (please specify)		29.3%	12
answered question			41
skipped question			11

Q1. If your city prefers a single permit for Los Angeles County, which of the following internal structures would you prefer for incorporating TMDL requirements?

1	The city does not prefer a unified permit, but if that is the route taken, chapters should be based on WMA not AB 2554.	Jul 7, 2011 11:53 AM
2	A Palos Verdes Peninsula wide TMDL implementation chapter with separate Low Impact Development (LID) requirements. LID requirements will support TMDL activities and the unique geographical characteristics of the area justify separate LID and TMDL requirements.	Jun 30, 2011 9:03 AM
3	Our preference would be for a single permit for LA County with a separate chapter for both TMDL and Low Impact Development requirements for the Palos Verdes Peninsula cities listed in Question 3. This approach would support our joint TMDL monitoring and implementation planning efforts and address the unique geology, topography and development characteristics of the Peninsula.	Jun 29, 2011 10:19 AM
4	A peninsula group as we have done in the past with ourselves, RHE, RPV, and RH.	Jun 29, 2011 8:44 AM
5	If a single permit is issued for LA County, we would like a separate chapter to address both TMDL and Low Impact Development requirements for the Palos	Jun 28, 2011 1:48 PM

Q1. If your city prefers a single permit for Los Angeles County, which of the following internal structures would you prefer for incorporating TMDL requirements?

	Verdes Peninsula cities listed in Question 2. This approach would support our joint TMDL monitoring and implementation planning efforts and address the unique geology, topography and development characteristics of the Peninsula.	
6	It is our understanding that the Individual permittee chapters option entails a single permit containing a set of core requirements applicable to all permittees plus TMDL chapters specific to each permittee.	Jun 27, 2011 4:57 PM
7	Individual permit chapters for TMDL Implementation PLUS Low Impact Development which is an important tool for TMDL compliance and should be tailored to characteristics of the City and TMDL objectives. This also allows agencies who have already developed an LID ordinance to work within that model rather than starting over with a one-LID-fits-all-cities approach.	Jun 27, 2011 4:02 PM
8	N/A	Jun 27, 2011 2:27 PM
9	Individual permit chapters for TMDL Implementation PLUS Low Impact Development which is an essential tool for TMDL compliance and should be tailored to the characteristics of the City as well as TMDL objectives.	Jun 27, 2011 11:42 AM
10	This issue is of great concern. The city feels further discussions and workshops are necessary before this question can be answered definitively.	Jun 24, 2011 4:26 PM
11	Chapter including neighboring agencies (to be determined) located within the upper reach of the LA River	Jun 24, 2011 2:35 PM
12	Please note that this is only preferred if the funding is passed and if the funding is not passed than something completely different would need to take place as the City would not have the resources to implement these programs. Additionally, the WAGs wouldn't make sense without the funding being passed by voters.	Jun 23, 2011 4:45 PM

DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues

Minimum Control Measure – Industrial/Commercial Storm Water Sources

Primary Objectives:	<ul style="list-style-type: none"> Identify and track industrial/commercial facilities which may be critical sources of storm water pollution to the MS4. Educate and raise storm water awareness of industrial/commercial facility employees to ultimately change behaviors that will reduce pollutant discharges to the MS4. Ensure the implementation of BMPs at industrial/commercial facilities to reduce the contribution of pollutants to storm water from industrial/commercial activities and materials storage. Increase the detection of illicit discharges and connections to the MS4 from industrial/commercial facilities. Minimize the occurrence of illicit discharges and connections to the MS4 from industrial/commercial facilities.
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Legal Authorities:	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)(A) and (C)) Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B))
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Category	Description of Requirement	Origin of Requirement	Notes
General	Ensure implementation of pollutant reduction and control measures at industrial and commercial facilities, with the objective of reducing pollutants in storm water.	Draft April 2011 LA County and Ventura County MS4 Permits	
Track	Maintain an updated watershed-based inventory or database of all industrial and commercial facilities within the jurisdiction that are critical sources of storm water pollution. Incorporate this information into GIS.	Draft April 2011 LA County and Ventura County MS4 Permits	
Track	This permit requirement lists the specific information which must be included in the inventory or database of critical sources.	Draft April 2011 LA County and Ventura County MS4 Permits	
Track	Update the inventory or database of critical sources at least annually.	Draft April 2011 LA County and Ventura County MS4 Permits	
Inspect	Inspect all commercial facilities identified by the Permit twice during the 5-year term of the Order, with the first mandatory compliance inspection within 2 years after Order adoption date. This permit requirement includes subsections that detail inspection and BMP requirements for different types of facilities, such as, (1)	Ventura County MS4 Permit	

	restaurants, (2) automotive service facilities, (3) retail gasoline outlets and automobile dealerships, and (4) commercial nurseries and nursery centers.		
Inspect	Conduct compliance inspections at industrial facilities identified by the Permit. Initial inspection must be within 2 years after Order adoption date. Conduct follow-up inspections at 20 percent of no-exposure facilities each year after the initial inspections are complete.	Ventura County MS4 Permit	
Inspect	During each inspection, confirm that each operator has a current WDID number, has a No Exposure Certification, if applicable, and is effectively implementing BMPs for the reduction of pollutants in storm water discharges from the facility or maintaining a condition of no exposure of industrial activities to storm water, if applicable.	Ventura County MS4 Permit	
Ensure Compliance	Ensure BMP implementation of the source control BMPs identified in the <i>CASQA Industrial and Commercial BMP Handbook</i> .	Ventura County MS4 Permit	
Ensure Compliance	Ensure implementation of additional pollutant-specific controls for critical sources that discharge to MS4s that directly discharge to ESAs or to CWA § 303(d) listed impaired waterbodies.	Ventura County MS4 Permit	
Ensure Compliance	Implement a progressive enforcement policy to ensure that facilities are brought into compliance with all storm water requirements within a reasonable time period, as specified in the Permit.	Draft April 2011 LA County and Ventura County MS4 Permits	
Interagency Coordination	A Permittee may refer a violation(s) of its municipal storm water ordinances and California Water Code § 13260 by Industrial and Commercial facilities to the Regional Water Board provided that the Permittee has conducted and documented at least two follow-up inspections and two warning letters or notices of violation.	Draft April 2011 LA County and Ventura County MS4 Permits	
Interagency Coordination	For facilities in violation of municipal storm water ordinances and subject to the Industrial Activities Storm Water General Permit (IASGP), 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.	Draft April 2011 LA County and Ventura County MS4 Permits	
Interagency Coordination	Initiate, within one business day of complaint transmittal by the Regional Water Board, investigation of complaints (other than non-storm water discharges to the MS4) from facilities.	Draft April 2011 LA County and Ventura County MS4 Permits	
Interagency Coordination	Provide assistance to the Regional Water Board for enforcement actions, as directed by the Regional Water Board Executive Officer.	Draft April 2011 LA County and Ventura	

		County MS4 Permits	
Interagency Coordination	Participate in an enforcement task force with the Regional Water Board and other public agencies.	Draft April 2011 LA County and Ventura County MS4 Permits	

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DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues

Minimum Control Measure – Development Construction Program

Primary Objectives:	<ul style="list-style-type: none"> • Prevent illicit construction-related discharges of pollutants into the MS4. • Ensure that structural and non-structural BMPs are implemented and maintained. • Reduce discharge of pollutants from construction sites to the MEP. • Minimize the potential for sediment discharges from construction activities to impact sensitive receiving waterbodies. • Minimize soil compaction during construction activities to preserve the highest potential for infiltration of post-construction storm water.
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Legal Authority:	<ul style="list-style-type: none"> • Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)(D)) • Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B))
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Category	Description of Requirement	Origin of Requirement	Notes
Purpose	Each Permittee shall implement a construction program that prevents illicit construction-related discharges of pollutants into the MS4, implements and maintains structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites, reduces construction site discharges of pollutants from the MS4 to the MEP, and prevents construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.	Ventura County MS4 Permit	
Applicability	Applies 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).	Contractor, with language from the State Water Board Construction General Permit (CGP)	
Inventory/Electronic Tracking System	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	Venura County MS4 Permit SWRCB’s Draft Small MS4s General Permit	

Category	Description of Requirement	Origin of Requirement	Notes
	<p>requirement, the use of a database or GIS system is encouraged, but not required.</p> <p>The tracking system shall contain the following information:</p> <ul style="list-style-type: none"> (a) Relevant contact information for each project (e.g., name, address, phone, email, etc. for the owner and contractor), (b) The basic site information including location, status, size of the project and area of disturbance, (c) 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, (d) Significant threat to water quality status, based on consideration of factors listed in Appendix 1 to the State Water Board’s Constructin General Permit (CGP), (e) Current construction phase. (f) The required inspection frequency, (g) The project start and anticipated completion dates, (h) Whether the project has coverage under the State Water Board’s CGP, (i) The date the Permittee approved the erosion and sediment control plan (j) Post-Construction Structural BMPs subject to Operation and Maintenance Requirements. 	<p>Contractor recommends the addition of Post-Construction BMPs to the tracking system for continuity between Construction and Post-Construction Phases.</p>	
<p>Plan Review and Approval Procedures</p>	<p>Prior to issuance of a grading or building permit, the operator shall submit the Erosion and Sediment Control Plan (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.</p>	<p>SWRCB’s Draft Small MS4s General Permit</p>	
<p>Criteria for Review</p>	<p>The ESCP must include the elements of a Storm Water Pollution Prevention Plan (SWPPP). Controls must be consistent with the applicable California Stormwater Quality Association (CASQA) Best Management Practices Handbooks (or Caltrans Handbooks for public transportation related construction projects) and tailored to the risks posed by the project. Projects are ranked from Low Risk</p>	<p>Ventura County MS4 Permit</p> <p>SWRCB’s Draft Small MS4s General Permit and the CGP</p>	

Category	Description of Requirement	Origin of Requirement	Notes
	<p>(Risk 1) to High Risk (Risk 3). Project risks are calculated based on the potential for erosion from the site and the sensitivity of the receiving waterbody. Receiving waterbodies that are listed on the Clean Water Act (CWA)Section 303(d) list for sediment or siltation are considered high risk. Likewise, waterbodies with designated beneficial uses of SPWN, COLD, and MIGRATORY are also considered to be high risk. The combined (sediment/receiving water) site risk may be calculated using the methods provided in Attachment 1 of the StateWater Board’s CGP.</p> <p>Applicable BMP controls for projects of different sizes are referenced in Tables VI.C.10-A, B, and C of this order.</p> <p>Applicable BMPs for enhanced requirements for high-risk sites are referenced in Table VI.C.10-D. of this order.</p> <p>Applicable BMPs for paving projects are described in Table VI.C.10-E. of this order.</p>		
<p>Required Elements of the ESCP/SWPPP</p>	<p>At a minimum, the ESCP/SWPPP must address the following elements:</p> <ul style="list-style-type: none"> • Scheduling--soil disturbance activities shall be scheduled for completion during the dry weather season to the extent feasible, • Methods to minimize the footprint of the disturbed area and to prevent soil compaction outside of the disturbed area, • Methods used to protect native vegetation and trees, • Sediment/Erosion Control, • Controls to prevent tracking on and off the site, • Non-storm water controls (e.g., vehicle washing, dewatering, etc.), • Materials Management (delivery and storage), • Spill Prevention and Control • Waste Management (e.g., concrete washout/waste 	<p>Ventura County MS4 Permit</p> <p>SWRCB’s Draft Small MS4s General Permit and CGP</p> <p>Contractor recommends limitations on soil disturbance during wet weather, miminizing footprint of the disturbed area and protection of native vegetation and trees.</p>	

Category	Description of Requirement	Origin of Requirement	Notes
	management; sanitary waste management), <ul style="list-style-type: none"> • Rain Event Action Plan (REAP) when soil disturbance activities will be conducted during the wet-weather season. 		
Rationale for Selection and Design of BMPs	The ESCP/SWPPP must include the rationale for the selection and design of the proposed BMPs including quantifying the expected soil loss from different BMPs.	Ventura County MS4 Permit and the SWRCB's Draft Small MS4s General Permit	
Certification	(A) Each Permittee shall require that for projects disturbing 1 acre or more, the ESCP/SWPPP is developed and certified by a <i>Qualified SWPPP Developer (QSD)</i> . (B) <i>Each Permittee shall require that all structural BMPs be designed by a California licensed engineer.</i> (C) Each Permittee shall require that for all projects, the landowner or the landowner's agent sign a statement on the Local ESCP/SWPPP to the effect: <i>"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 Local SWPPP to reflect current conditions, or failing to properly and/or adequately implement the ESCP/ SWPPP may result in revocation of grading and/or other permits or other sanctions provided by law."</i>	State Water Board CGP Ventura County MS4 Permit	
Confirming Coverage under Other Permits	Prior to issuing a grading or building permit, the Permittee shall verify that the construction site operators have existing coverage under applicable permits, including, but not limited to the State Water Board's CGP, State Water Board 401 Water Quality Certification, U.S. Army Corp 404 permit, and California Department	SWRCB's Draft Small MS4s General Permit	

Category	Description of Requirement	Origin of Requirement	Notes
	of Fish and Game 1600 Agreement.		
ESCP/SWPPP Plan Review Checklist	The Permittee shall develop a checklist to be used to conduct and document review of each ESCP/SWPPP.	SWRCB's Draft Small MS4s General Permit	
Inspection Authority	the Permittee shall use legal authority to implement procedures for inspecting public and private projects and conducting enforcement if necessary.	SWRCB's Draft Small MS4s General Permit	
Inspection Frequency	<p>The Permittee shall inspect all phases of construction as follows:</p> <p>(1) Prior to Land Disturbance: Prior to allowing an operator to commence land disturbance, the 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.</p> <p>(2) Grading and Land Development: During grading and land development activities, conduct inspections in accordance with the frequencies specified in Section VI.C.10-F of this Order.</p> <p>(3) Streets and Utilities: During street and utilities activities, conduct inspections in accordance with the frequencies specified in Table VI.C.10-F of this Order.</p> <p>(4) Vertical Construction: During vertical construction activities, conduct inspections in accordance with the frequencies specified in Table VI.C.10- F of this Order.</p> <p>(5) Final Landscaping and Site Stabilization: At the conclusion of the project, the Permittee shall inspect 10% of all projects 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.</p>	SWRCB's Draft Small MS4s General Permit	
Inspection Procedures	<p>The Permittee shall develop, implement, and revise as necessary, standard operating procedures that identify the inspection and enforcement procedures the Permittee will follow.</p> <p>Inspections of construction sites, and the standard operating procedures, shall include, but are not limited to:</p> <p>(1) Verification of active coverage under the State Water Board's CGP for projects disturbing 1 acre or more, or are part of a</p>	<p>SWRCB's Draft Small MS4s General Permit</p> <p>Contractor recommends sampling and analysis of storm</p>	

Category	Description of Requirement	Origin of Requirement	Notes
	<p>planned development that will disturb 1 acre or more.</p> <p>(2) Review of the applicable ESCP/SWPPP and inspection of the construction site to determine whether all BMPs have been selected, installed, implemented, and maintained according to the approved plan.</p> <p>(3) Assessment of the appropriateness of the planned BMPs and their effectiveness.</p> <p>(4) Visual observation and record keeping of non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff.</p> <p>(6) Sampling and analysis of storm water runoff discharges from the property when visual observation indicates turbidity in the storm water discharge.</p> <p>(7) Development of a written or electronic inspection report generated from an inspection checklist used in the field</p> <p>(8) 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 VI.C.10-F of this Order.</p>	<p>water discharge from the property when visual observation indicates turbidity.</p>	
<p>Enforcement Procedures</p>	<p>(1) Take all necessary follow-up actions (e.g., re-inspection, enforcement) to ensure compliance in accordance with the Permittee’s Legal Authority and Enforcement Response Plan. At a minimum, follow-up inspections shall be conducted within 2 weeks after for inspected sites that have not adequately implemented their ESCP/SWPPP.</p> <p>(2) The Permittee shall track and report these follow-up inspections and enforcement actions.</p> <p>(3) Each Permittee shall take additional enforcement actions to achieve compliance as specified in municipal codes, if compliance with municipal codes, ordinances, or permits has not been attained.</p> <p>(4) Each Permittee can refer sites to the Regional Water Board for joint enforcement actions for violation of municipal storm water ordinances and the CGP, after conducting a minimum of 2 site inspections and issuing a minimum of two written notices to the operator regarding the violation (copied to the</p>	<p>Ventura County MS4 Permit</p>	

Category	Description of Requirement	Origin of Requirement	Notes
Certificate of Occupancy	<p>Regional Water Board).</p> <p>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.</p>	Ventura County MS4 Permit	
Training of Permittee Staff	<p>Task Description – The Permittee shall ensure that all staff whose primary job duties are related to implementing the construction storm water program are adequately trained.</p> <p>Implementation Level – The Permittee may conduct in-house training or contract with consultants. Training shall be provided to the following staff positions of the MS4:</p> <p>(a) 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 plans and the key objectives of the State Water Board Qualified SWPPP Developer (QSD) program. Permittees may provide internal training to staff or require staff to obtain QSD certification.</p> <p>(b) Erosion Sediment Control/Storm Water Inspectors - The Permittee shall ensure that its inspectors are knowledgeable in inspection procedures consistent with the State Water Board sponsored program <i>QSD</i> or a Qualified SWPPP Practitioner (QSP) or ensure that a designated person on staff who has been trained in the key objectives of the QSD/QSP programs supervise inspection operations . Permittees may provide internal training to staff or require staff to obtain QSD/QSP certification.</p> <p>(c) Third-Party Plan Reviewers, Permitting Staff, and Inspectors - If the Permittee utilizes outside parties to conduct inspections and/or review plans, the Permittee shall ensure these staff are trained per the requirements listed above.</p>	SWRCB’s Draft Small MS4s General Permit and collaboration between the Regional Water Board staff and the contractor.	
Education Outreach to Development Community	<p>The Permittee shall develop and distribute educational materials to construction site operators. The Permittee shall do the following:</p> <p>(a) Each year, provide information on training opportunities for</p>	SWRCB’s Draft Small MS4s General Permit	

Category	Description of Requirement	Origin of Requirement	Notes
	<p>construction operators on BMP selection, installation, implementation, and maintenance as well as overall program compliance</p> <p>(b) Develop or utilize existing outreach tools (i.e. brochures, posters, etc.) aimed at educating construction operators on appropriate selection, installation, implementation, and maintenance of storm water BMPs, as well as overall program compliance.</p> <p>(c) Distribute appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. The Permittee's contact information and website shall be included in these materials.</p> <p>(d) Update the existing website to include information on appropriate selection, installation, implementation, and maintenance of BMPs, as well as overall program compliance.</p>		

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Table VI.C.10-A. Minimum Set of BMPs for All Construction Sites

Minimum Set of BMPs for All Construction Sites	CASQA Handbook	Caltrans Handbook ¹
Erosion Controls		
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
Sediment Controls		
Silt Fence	SE-1	SC-1
Sand Bag Barrier	SE-8	SC-8
Stabilized Construction Site Entrance/Exit	TC-1	TC-1
Non-Storm Water Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations	NS-2	NS-2
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-2
Spill Prevention and Control	WM-4	WM-4
Solid Waste Management	WM-5	WM-5
Concrete Waste Management	WM-8	WM-8
Sanitary/Septic Waste Management	WM-9	WM-9

¹ Applies to public roadway projects.

Table VI.C.10-B. Additional BMPs Applicable to Construction Sites Disturbing 1 Acre or More but Less Than 5 Acres

BMPs	CASQA Handbook	Caltrans Handbook ¹
Erosion Controls		
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
Sediment Controls		
Fiber Rolls	SE-5	SC-5
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/ or Vacuum	SE-7	SC-7
Storm Drain Inlet Protection	SE-10	SC-10
Additional Controls		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Entrance/ Exit	TC-1	TC-1
Stabilized Construction Roadway	TC-2	TC-2
Entrance/ Exit Tire Wash	TC-3	TC-3
Non-Storm Water Management		
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9

¹ Applies to public roadway projects.

Table VI.C.10-C. Additional BMPs Applicable to Construction Sites Disturbing 5 Acres or More

BMPs	CASQA Handbook	Caltrans Handbook ¹
Sediment Controls		
Scheduling	EC-1	SS-1
Check Dam	SE-4	SC-4
Tracking Control BMPs		
Stabilized Construction Entrance/ Exit	TR-1	TC-1
Non-Storm Water Management		
Vehicle and Equipment Maintenance	NS-10	NS-10
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Spill Prevention and Control	WM-4	WM-4

¹ Applies to public roadway projects.

Table VI.C.10-D. Additional Enhanced BMPs for High Risk Projects

BMPs	CASQA Handbook	Caltrans Handbook ¹
Erosion Controls		
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
Slope Drains	EC-11	SS-11
Sediment Controls		
Silt Fence	SE-1	SC-1
Fiber Rolls	SE-5	SC-5
Sediment Basin	SE-2	SC-2
Check Dam	SE-4	SC-4
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/or Vacuum	SE-7	SC-7
Sand Bag Barrier	SE-8	SC-8
Storm Drain Inlet Protection	SE-10	SC-10
Additional Controls		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Entrance/Exit	TC-1	TC-1
Stabilized Construction Roadway	TC-2	TC-2
Entrance/Exit Tire Wash	TC-3	TC-3
Advanced Treatment Systems ¹		
Non-Storm Water Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering only under NPDES Permit No. CAG994004)	NS-2	NS-2
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9
Vehicle and Equipment Maintenance	NS-10	NS-10
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-2
Spill Prevention and Control	WM-4	WM-4
Solid Waste Management	WM-5	WM-5

¹ Applies to public roadway projects.

Table VI.C.10-E-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.

Table IV.C.10-F. Inspection Frequencies

Site Risks	Inspection Frequency
a. All sites one (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 ¹ and 2) within 48 hours of a ½-inch rain event and at least once every two weeks
b. Other sites one (1) acre or more determined to be a significant threat to water quality.	At least monthly
c. All other construction sites with one (1) acre or more of soil disturbance not meeting the criteria above	As needed based on the evaluation of the factors that are a threat to water quality
d. Construction sites less than one (1) acre in size	As needed based on the evaluation of the factors that have not adequately implemented
A follow-up inspection shall take place within two weeks for inspected sites that have not adequately implemented the ESCP/SWPPP.	
*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.	

¹ www.srh.noaa.gov/forecast

DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues

Minimum Control Measure – Illicit Connections and Illicit Discharges Detection and Elimination Program (IC/ID)

Primary Objectives:	<ul style="list-style-type: none"> Gain an understanding of the MS4 and possible sources of pollution to the MS4 through mapping activities and to provide a tool to track or trace illicit discharges. Minimize the occurrence of illicit discharges and connections to the MS4. Increase the detection of illicit discharges and connections to the MS4 which do occur and eliminate them as needed. Document sufficient information to demonstrate the effectiveness of the IC/ID program.
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Regulatory Authority:	<ul style="list-style-type: none"> Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B))
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Category	Description of Requirement	Origin of Requirement	Notes
General	Continue to implement an IC/ID Program to detect, investigate, and eliminate IC/IDs to the storm drain system.	Draft April 2011 LA County and Ventura County MS4 Permits	
General	Ensure that the Permittee has adequate legal authority to prohibit IC/IDs to the storm drain system and enable enforcement capabilities to eliminate the source of IC/IDs.	Draft April 2011 LA County and Ventura County MS4 Permits	
General	<p>The IC/ID Program must consist of at least the following major components:</p> <ol style="list-style-type: none"> (1) An up-to-date storm sewer system map (see Part X) (2) Procedures for identifying priority areas within the MS4 likely to have IC/IDs, and a list of all such areas identified in the system (see Part X) (3) Procedures for field screening to detect IC/IDs (see part X) (4) Procedures for conducting source investigations for IC/IDs (see Part X) (5) Procedures for eliminating the source of IC/IDs (see Part X) (6) Spill response plan (see Part X) (7) IC/ID education and training for Permittee staff (see Part X) 	Draft April 2011 LA County and Ventura County MS4 Permits and SWRCB’s Draft Small MS4s General Permit and EPA Permit Improvement Guide	

Category	Description of Requirement	Origin of Requirement	Notes
Mapping	<p>Develop and maintain an up-to-date, accurate map of the MS4. If possible, the map should be maintained in GIS. The map must include at least, the following:</p> <ol style="list-style-type: none"> (1) MS4 outfalls (2) Drainage areas contributing to those outfalls (3) The location and length of underground storm drain pipes 18 inches and greater in diameter (4) The location and length of open stormwater channels (5) Priority areas (6) Receiving waters (7) Field screening stations (8) Dry weather diversions 	Draft April 2011 LA County and Ventura County MS4 Permits and SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Priority Areas	Identify priority areas in the MS4 and include them on the MS4 map. The Permit defines specific types of areas which must be identified as priority areas and requires that at least 20 percent of the system be identified as a priority area. The list of priority areas must be evaluated yearly to determine whether areas should be added or removed from the list.	Draft April 2011 LA County and Ventura County MS4 Permits and SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Develop and implement a Dry Weather Field Screening and Analytical Monitoring Program to detect and eliminate IC/IDs.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Document how the Dry Weather Field Screening and Analytical Monitoring Program will be implemented with written procedures. Procedures must be updated to reflect current program.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Identify a minimum of [specify number] stations within the priority areas it identified in Part X at which field observations, field screening monitoring and analytical monitoring will take place. This list should be updated annually in concert with the evaluation of priority areas.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Conduct dry weather field observations and field screening	SWRCB's Draft Small	

Category	Description of Requirement	Origin of Requirement	Notes
	monitoring at each station identified above at least once per year.	MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Field Observations - Visually observe each identified station and document the observations in either hardcopy and/or electronic format.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Field Screening Monitoring Requirements - Conduct a field screening analysis for the following constituents: XX, XX, XX, XX, and XX. Samples must be collected and analyzed consistent with the procedures required by 40 CFR Part 136	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Conduct sampling of flow or ponded runoff if observed at a field screening station and there has been at least seventy-two (72) hours of dry weather prior to the observation.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Conduct an annual evaluation of the Dry Weather Field Screening and Analytical Monitoring Program to determine whether changes or updates are needed. Make changes as necessary.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Illicit Discharge Investigation & Elimination	Develop written procedures for conducting investigations to identify the source of all illicit discharges, including procedures to eliminate the discharge once the source is located.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Illicit Discharge Investigation & Elimination	Conduct an investigation(s) to identify and locate the source of any continuous or intermittent non-stormwater discharge within 48 hours of becoming aware of the illicit discharge. Part VI.C.12.e.iii specifies conditions which must be met for conducting the investigations.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Illicit Discharge Investigation & Elimination	Corrective Action to Eliminate Illicit Discharges – Once the source of the illicit discharge has been determined, the Permittee must immediately notify the responsible party of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 48 hours of notification. The Permittee must formally verify and document	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	

Category	Description of Requirement	Origin of Requirement	Notes
	that the illicit discharge has been eliminated.		
Illicit Connection Investigation & Elimination	Conduct screening for illicit connections to the MS4. The Permit outlines an implementation schedule for this activity.	Ventura County MS4 Permit	
Illicit Connection Investigation & Elimination	Maintain a list containing all connections under investigation for possible illicit connection and their current status.	Ventura County MS4 Permit	
Illicit Connection Investigation & Elimination	Upon discovery or upon receiving a report of a suspected illicit connection, complete an investigation within 21 days.	Ventura County MS4 Permit	
Illicit Connection Investigation & Elimination	Upon confirmation of an illicit storm drain connection, ensure that the connection is eliminated within 180 days of completion of the investigation, using its formal enforcement authority, if necessary, to eliminate the illicit connection.	Ventura County MS4 Permit	
Illicit Connection Investigation & Elimination	Formal records must be maintained for all illicit connection investigations and the formal enforcement taken to eliminate illicit connections.	Ventura County MS4 Permit	
Public Reporting	Promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into	Ventura County MS4 Permit and	

Category	Description of Requirement	Origin of Requirement	Notes
	or from MS4s through a central contact point, including phone numbers and an internet site for complaints and spill reporting.	collaboration between contractor and Regional Board	
Public Reporting	Develop and maintain written procedures that document how complaint calls are received, documented, and tracked to ensure that all complaints are adequately addressed. Evaluate procedures annually and make changes as necessary.	EPA Permit Improvement Guide	
Public Reporting	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.	Draft April 2011 LA County and Ventura County MS4 Permits and EPA Permit Improvement Guide	
Spill Response	Develop a written spill/dumping response procedure, and a flow chart or phone tree, or similar list for internal use, that shows the procedures for responding to public notices of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response, even if it is a different entity other than the Permittee.	EPA Permit Improvement Guide	
Education & Training	Continue to implement a training program regarding the identification of IC/IDs for all municipal field staff and contractors, 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 storm sewer system. Training program documents must be available for review by the permitting authority.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Education & Training	Training program should address, at a minimum, the following: (1) IC/ID identification, (2) investigation, (3) elimination, (4) cleanup, (5) reporting, and (6) documentation.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Education & Training	Create a list of applicable staff which require IC/ID training and ensure that training is provided at least annually. Maintain documentation of the training activities.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	

Category	Description of Requirement	Origin of Requirement	Notes
Education & Training	New Permittee staff members must be provided with IC/ID training within six months of starting employment.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	

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DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues

Minimum Control Measure – Public Agency Activities Program

Primary Objectives:	<ul style="list-style-type: none"> Minimize storm water pollution impacts from permittee owned or operated facilities and activities. Develop, deploy, and ensure ongoing operation and maintenance of BMPs for facilities, activities, and staff. Train public employees on the need for, use, and maintenance of BMPs.
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Legal Authority:	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)) Regulations addressing structural and source control measures to reduce pollutants from runoff (40 CFR §122.26(d)(2)(i)(A)(1),(3),(5),and(6)) Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B))
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Category	Description of Requirement	Origin of Requirement	Notes
General	Implement a Public Agency Activities Program to minimize storm water pollution impacts from Permittee-owned or operated facilities and activities.	Ventura County MS4 Permit	
Public Construction Activities Management	Implement and comply with the Planning and Land Development Program requirements in Part X of this Order.	Ventura County MS4 Permit	
Public Construction Activities Management	Implement and comply with the appropriate Development Construction Program requirements in Part X of this Order.	Ventura County MS4 Permit	
Public Construction Activities Management	Projects that disturb less than one acre of soil shall require the development and implementation of a Storm Water Pollution Control Plan (SWPCP).	Ventura County MS4 Permit	
Public Construction Activities Management	Obtain separate coverage under the CASGP or Small LUP General Permit for all Permittee-owned or operated construction sites that require coverage.	Ventura County MS4 Permit	
Public Facility Inventory	Maintain an updated watershed-based inventory and map of all Permittee-owned or operated facilities within its jurisdiction that are potential sources of storm water pollution. The incorporation of facility information into a Geographical Information System (GIS) is required.	SWRCB’s Draft Small MS4s General Permit and EPA Permit Improvement Guide	

Category	Description of Requirement	Origin of Requirement	Notes
Public Facility Inventory	Include the following minimum fields of information for each Permittee-owned or operated facility in its watershed-based inventory and map.	Ventura County MS4 Permit	
Public Facility Inventory	Update its inventory and map at least annually.	Ventura County MS4 Permit	
Public Agency Facility and Activity Management	Obtain separate coverage under the IASGP for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the IASGP.	Ventura County MS4 Permit	
Public Agency Facility and Activity Management	Implement and maintain the general and activity specific BMPs listed in Table X (BMPs for Public Agency Facilities and Activities) when such activities occur at Permittee-owned or operated facilities and field activities or that have the potential to discharge pollutants in storm water.	Ventura County MS4 Permit	
Public Agency Facility and Activity Management	Any contractors hired by the Permittee to conduct Public Agency Activities (e.g., municipal maintenance) shall be contractually required to implement and maintain the general and activity specific BMPs listed in Table X (BMPs for Public Agency Facilities and Activities). Conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.	Ventura County MS4 Permit and EPA Permit Improvement Guide (for inclusion of contractors)	
Vehicle and Equipment Washing	Implement and maintain the activity specific BMPs listed in Table X (BMPs for Public Agency Facilities and Activities) for all vehicle and equipment washing.	Ventura County MS4 Permit	
Vehicle and Equipment Washing	Eliminate all existing discharges of wash waters from vehicle and equipment washing.	Ventura County MS4 Permit	
Vehicle and Equipment Washing	Ensure that any municipal facilities constructed, redeveloped, or replaced shall prohibit discharges to the MS4 for all vehicle and equipment wash areas.	Ventura County MS4 Permit	
Landscape, Park, and Recreational Facilities Management	Implement and maintain the activity specific BMPs listed in Table x (BMPs for Public Agency Facilities and Activities) for all landscape, park, and recreational facilities and activities.	Ventura County MS4 Permit	
Landscape, Park, and Recreational Facilities Management	Implement Integrated Pest Management (IPM) Program.	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
Landscape, Park, and Recreational Facilities Management	Implement additional the following requirements: 1. Comply with the provisions and the monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2004-0008-DWQ) (Vector Control) and Order No. 2004-0009-DWQ (Weed Control). 2. Consistency with the State Board’s guidelines and monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2001-12 DWQ). 3. Use a standardized protocol for the routine and non-routine application of pesticides and fertilizers. 4. Ensure there is no application of pesticides or fertilizers immediately prior to, during, or immediately after a rain event, or when water is flowing off the area where the application is to occur. 5. Ensure that no banned or unregistered pesticides are stored or applied. 6. 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. 7. Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs 8. Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.	Ventura County MS4 Permit and Inclusion of Aquatic Pesticide Orders and Guidance	
Storm Drain Operation and Maintenance (General)	1. Implement and maintain the activity specific BMPs listed in Table X (BMPs for Public Agency Facilities and Activities) for storm drain operation and maintenance. 2. Ensure that all material removed from the storm drain system does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with approved measures.	Ventura County MS4 Permit and EPA Permit Improvement Guide for Item 2	

Category	Description of Requirement	Origin of Requirement	Notes
Storm Drain Operation and Maintenance (Catch Basin Prioritization)	<p>Designate catch basin inlets within its jurisdiction as one of the following:</p> <p><u>Priority A</u>: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris.</p> <p><u>Priority B</u>: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.</p> <p><u>Priority C</u>: Catch basins that are designated as generating low volumes of trash and/or debris.</p> <p>Submit a map or list of Catch Basins with their GPS coordinates and their priority designations. The map or list shall contain the rationale or data to support designations.</p>	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Catch Basin Inspection and Cleaning)	<p>In areas that are not subject to a trash TMDL, inspect catch basins according to the following schedule:</p> <p><u>Priority A</u>: A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.</p> <p><u>Priority B</u>: A minimum of once during the wet season and once during the dry season every year.</p> <p><u>Priority C</u>: A minimum of once per year.</p> <p>Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. Maintain inspection and cleaning records for Regional Water Board review.</p>	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Catch Basin Inspection and Cleaning)	<p>In areas that are subject to a trash TMDL, continue to implement the requirements listed below until trash TMDL implementation measures are adopted. Thereafter, implement programs in conformance with the TMDL implementation schedule, which shall include an effective combination of measures such as street sweeping, catch basin cleaning, installation of treatment devices and trash receptacles, or other BMPs. Default requirements include:</p>	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
	<ol style="list-style-type: none"> 1. Inspection and cleaning of all catch basins a minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year; 2. For any catch basin that is found to be $\geq 40\%$ full of trash and/or debris during an inspection; the inspection and cleaning frequency shall be increased to 4 times during the wet season and once during the dry season every year; 3. Record keeping of catch basins cleaned, demonstrating that all required catch basin cleaning has been conducted; and 4. Recording of the overall quantity of catch basin waste collected. 		
Storm Drain Operation and Maintenance (Trash Management at Public Events)	<p>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:</p> <ol style="list-style-type: none"> 1. Proper management of trash and litter generated; <u>and</u> 2. Arrangement for temporary screens to be placed on catch basins; <u>or</u> 3. Provide clean out of catch basins, trash receptacles, and grounds in the event area within 24 hours subsequent to the event. 	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Trash Receptacles)	<ol style="list-style-type: none"> 1. Install trash receptacles, or equivalent trash capturing devices in areas that are subject to a trash TMDL, and all other areas subject to high trash generation within its jurisdiction. 2. Ensure that all trash receptacles are cleaned out and maintained as necessary to prevent trash overflow. 	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Catch Basin Labels)	<ol style="list-style-type: none"> 1. Inspect the legibility of the stencil or label nearest each inlet prior to the wet season every year. 2. Record all catch basins with illegible stencils and re-stencil or re-label within 15 days of inspection. 	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Additional Trash	Install trash excluders, or equivalent devices on or in catch basins or outfalls to prevent the discharge of trash to the storm drain system or receiving water in areas defined as Priority A or B. Criteria and	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
Management)	corresponding exceptions for flooding and alternatives BMPs are included.		
Storm Drain Operation and Maintenance (Storm Drain Maintenance)	Implement a program for Storm Drain Maintenance includes the following: <ol style="list-style-type: none"> 1. Visual monitoring of Permittee-owned open channels and other drainage structures for debris at least annually. 2. Remove trash and debris from open channel storm drains a minimum of once per year before the wet season. 3. Eliminate the discharge of contaminants during MS4 maintenance and clean outs. 4. Quantify the amount of materials removed using techniques appropriate for quantifying solid waste and ensure the materials are properly disposed of. 	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Spill Response)	Each Permittee which owns and /or operates a sanitary sewer system that requires coverage under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ), shall comply with the provisions and the monitoring requirements associated with this Order.	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Permittee Owned Treatment Control BMPs)	<ol style="list-style-type: none"> 1. Implement an inspection and maintenance program for all Permittee owned treatment control BMPs, including post-construction treatment control BMPs. 2. Ensure proper operation of all treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs. 3. Implement BMPs for all residual water produced by a treatment control BMP and not being internal to the BMP performance. 	Ventura County MS4 Permit	
Streets, Roads, and Parking Facilities Maintenance (Prioritization)	Designate streets and/or street segments within its jurisdiction as one of the following: <u>Priority A:</u> Streets and/or street segments that are designated as consistently generating the highest volumes of trash and/or debris. <u>Priority B:</u> Streets and/or street segments that are designated as consistently generating moderate volumes of trash and/or debris. <u>Priority C:</u> Streets and/or street segments that are designated as	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
	generating low volumes of trash and/or debris.		
Streets, Roads, and Parking Facilities Maintenance (Street Sweeping)	Perform street sweeping of curbed streets according to the following schedule: <u>Priority A</u> : Streets and/or street segments that are designated as Priority A shall be swept at least two times per month. <u>Priority B</u> : Streets and/or street segments that are designated as Priority B shall be swept at least once per month. <u>Priority C</u> : 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.	Ventura County MS4 Permit	
Streets, Roads, and Parking Facilities Maintenance (Road Reconstruction)	Require that for any project that includes roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces, that the BMPs in X (BMPs for Public Agency Facilities and Activities) and as specified in Part X (Development Construction Program) be implemented for each project.	Ventura County MS4 Permit	
Streets, Roads, and Parking Facilities Maintenance (Parking Facilities Maintenance)	Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned using street sweeping equipment no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a Permittee-owned parking lot be cleaned less than once a month.	Ventura County MS4 Permit	
Emergency Procedures	Each Permittee may conduct repairs of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order as follows: 1. Providing 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. 2. Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than one day) are not subject to the notification provisions.	Ventura County MS4 Permit	
Municipal Employee and Contractor Training	Train all of their employees and contractors in targeted positions on the requirements of the overall storm water management program	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
	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.		
Municipal Employee and Contractor Training	Annually train all of their employees and contractors who use or have the potential to use pesticides or fertilizers to 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.	Ventura County MS4 Permit	

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DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues

Minimum Control Measure – Planning and Land Development Program

Primary Objectives:	<ul style="list-style-type: none"> Lessen the impacts of development and significant re-development projects on water quality and hydrology by designing projects to minimize the impervious area footprint and employing Low Impact Development (LID) design principles to mimic pre-development water balance through infiltration, evapotranspiration and re-use. Minimize pollutant loadings through the use of properly designed, technically appropriate BMPs (including source control BMPs), LID strategies, and treatment control BMPs. Minimize the adverse impacts from storm water runoff on the biological integrity of natural drainage systems and the beneficial uses of waterbodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21100). 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, safeguarding of environmentally sensitive areas, mixing of land uses (e.g., homes, offices, and shops), transit accessibility, and better pedestrian and bicycle amenities.
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Legal Authority:	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)) Regulations addressing post-construction controls for new development and significant re-development (40 CFR §122.26(d)(2)(iv)(A)(2)) Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B)) Regulations addressing discharges by implementing and maintaining structural and non-structural best management practices to reduce pollutants in storm water runoff (40 CFR §122.26(d)(2)(iv)(D))
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Category	Description of Requirement	Origin of Requirement	Notes
Purpose	<ul style="list-style-type: none"> Lessen the impact of new development and significant re-development on pollutant loading to receiving waterbodies. Minimize the hydromodification impacts on natural drainage systems. Provide criteria to ensure the effective design, operation and maintenance of LID and hydromodification control BMPs. 	Ventura County MS4 Permit with modifications based on collaboration between the contractor, Regional Board staff and EPA.	
Applicability	Define new development and re-development projects that are subject to the requirements of Part X.	Ventura County MS4 Permit	
Performance Criteria	Except as provided for under Part X or X, new development and re-development projects must retain on-site the storm water runoff	Collaboration between the contractor,	

	<p>volume resulting from the 85th percentile, 24-hour storm or the 0.75 inch 24-hour storm, whichever is greater.</p> <p>If it is not technically feasible to retain on-site the entire storm water runoff volume, the project must be designed and operated to biofiltrate 1.5 times the storm water runoff volume that cannot be retained on-site.</p> <p><u>Note:</u> The draft permit language does not restrict the percent effective impervious area (EIA). The draft permit encourages designs that minimize impervious surfaces because the storm water runoff volume is related to the amount of impervious surface.</p>	<p>Regional Board staff and EPA. The 85th percentile, 24-hour storm is the design storm used in recently-issued California MS4 permits.* A minimum requirement based on the 0.75 inch 24-hour storm is required in this permit to prevent backsliding from the previous permit.</p> <p>*The following permits include requirements to retain on-site the runoff volume from the 85th percentile design storm:</p> <ul style="list-style-type: none"> • San Bernardino County MS4 Permit (Order No. R8-2010-0036) • Riverside County in San Diego Region (Order No. R9-2010-0016). 	
<p>Performance Criteria for Infiltration</p>	<p>The Infiltration rate of soils decrease as the moisture content increases-- to the point of saturation. When calculating the infiltration rates of underlying soils, the Permittees will account for the infiltration loss considering the impact of increasing soil moisture using Horton's Equation or other means approved by the Executive Officer of the Los Angeles Regional Water Quality Control Board. Alternatively, the Permittee may assume that the soil is</p>	<p>Horton's Equation is referenced in the Energy Independence and Security Act (EISA) Technical Guidance Manual.</p> <p>The State Water</p>	

	<p>saturated and the minimum infiltration rate applies.</p>	<p>Resources Control Board developed a Post-Construction Water Balance Calculator spreadsheet for estimating the performance of LID elements. The calculator input assumes wet soil conditions and the minimum infiltration rate for the specified soil classification.</p>	
<p>Design Criteria for Biofiltration</p>	<p>Bio-filtration BMPs shall be designed to accommodate the design flow at a surface loading rate no greater than 5 inches per hour and shall have a total volume, including pore spaces and pre-filter, detention volume, no less than the runoff volume generated by the design storm depth times 0.75.</p> <p>[Note: These design criteria are under review based on more recent information.]</p>	<p>Collaboration with the contractor, Regional Board staff and EPA.</p> <p>Similar to provisions in the San Diego Regional Board MS4 Permit for South Orange County (Order No. R9-2009-002).</p>	
<p>Performance Criteria for Harvest and Re-use</p>	<p>If rainwater harvested for use in irrigation is to be credited toward the total volume of storm water runoff retained on-site, the Permittees must require that the project applicant to conduct a conservative (assuming reasonable worst-case scenarios) assessment of water demand during the wet 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 re-use in irrigation may not exceed the reliable estimated irrigation demand during the wet season.</p>	<p>Collaboration with the contractor, Regional Board staff and EPA.</p>	
<p>Alternative Compliance for Technical Infeasibility</p>	<p>Technical site constraints may preclude the use of infiltration LID measures and limit the ability to meet the Integrated Water Quality/Flow Reduction/Resources Management Criteria in Part X.</p> <p>The Permittees may allow projects that are unable to meet the</p>	<p>Ventura County MS4 Permit</p>	

	<p>Integrated Water Quality/Flow Reduction/Resources Management Criteria in Part X to comply with this Order through the alternative compliance measures described in this section to encourage smart growth and infill development of existing urban centers where on-site compliance with post-construction requirements may be technically infeasible.</p>		
<p>Technical Infeasibility</p>	<p>Technical infeasibility may result from conditions including the following:</p> <ol style="list-style-type: none"> (1) Locations where seasonal high groundwater is within <u>5 to 10</u> feet of the surface (2) Locations within 100 feet of a groundwater well used for drinking water (3) Brownfield development sites or other locations where pollutant mobilization is a documented concern (4) Locations with potential geotechnical hazards (5) 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. 	<p>Ventura County MS4 Permit with modifications to be consistent with municipal LID manuals. References to a Technical Guidance Manual have been deleted. The draft permit does not require the Permittees to develop a Technical Guidance Manual.</p>	
<p>Alternative Compliance Measures</p>	<p>When a Permittee finds that the project applicant has demonstrated technical infeasibility, after confirming that the project design minimizes the impervious area to the extent allowed by local zoning regulations and the project design incorporates all applicable LID BMPs including green roofs and rainfall harvest and re-use, and considering recommended protective buffers for riparian areas and environmentally sensitive areas, the Permittee shall require the applicant to provide off-site mitigation.</p> <p>The required off-site mitigation volume will be equal to 1.5 times the storm water volume runoff that cannot be retained on-site. The project applicant must perform off-site mitigation or provide sufficient funding for public or private off-site mitigation to achieve equivalent mitigation storm water volume reduction through infiltration, reuse, and/or evapotranspiration.</p> <p>The Permittees must develop a prioritized list of off-site mitigation projects, and when feasible, the mitigation must be directed to the highest priority mitigation project within the same drainage area as,</p>	<p>Ventura County MS4 Permit and collaboration between the contractor, the Regional Board staff and EPA.</p>	

	<p>or the nearest downstream drainage from the proposed development or re-development.</p> <p>Off-site mitigation 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 off-site mitigation project, unless a longer period is authorized by the Executive Officer of the Los Angeles Regional Water Quality Control Board.</p>		
Water Quality Mitigation Criteria	<p>Applies when the project applicant has successfully demonstrated technical infeasibility to retain on-site the required storm water runoff volume. In addition to providing off-site mitigation, the project applicant must provide for effective treatment of the runoff from the project site.</p> <p>In addition to the requirements for controlling pollutant discharges as described above, the Permittee will ensure that the new development or re-development project will not cause the Permittee to exceed applicable wasteload allocations (WLA) or fail to comply with Total Maximum Daily Load (TMDL) implementation plan requirements.</p>	Ventura County MS4 Permit and collaboration between the contractor, the Regional Board and EPA.	
Hydromodification	<p>Applies to natural drainage systems (to be defined). The goal of the hydromodification provisions is to preserve pre-development hydrology. The draft permit will provide Interim hydromodification requirements. Final hydromodification requirements will be developed by the Permittees based on pending studies to be approved by the SWRCB.</p>	Ventura County MS4 Permit and collaboration with the contractor, Regional Board staff and EPA.	
Hydromodification Projects Disturbing Less than 50 Acres	<ul style="list-style-type: none"> The project is designed to retain on-site, through infiltration, evapotranspiration, and/or harvest and reuse, the stormwater volume from the runoff of the 95th percentile, 24-hour storm, or 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. 	<ul style="list-style-type: none"> Federal Energy Independence and Security Act (EISA), Technical Guidance Document¹ Other recently issued California 	

¹ U.S. Environmental Protection Agency. December 9, 2009. *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* <<http://www.epa.gov/owow/NPS/lid/section438/>>. Accessed October 20, 2011.

	<p>This condition may be substantiated by simple screening models or</p> <ul style="list-style-type: none"> The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment X. <p>Note: These requirements are intended to offer less expensive options than the requirements for larger projects.</p>	<p>MS4 permits. These requirements are similar to provisions in the Orange County MS4 permit (Order No. R8-2009-0030) and the Riverside County MS4 Permit (Order No. R9-2010-0016).</p> <ul style="list-style-type: none"> The Erosion Potential method is from the Ventura County MS4 Permit. 	
Hydromodification Projects Disturbing 50 Acres or More	<ul style="list-style-type: none"> The project infiltrates on-site at least the runoff from a 2-year, 24-hour storm event, or 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 Permittee, or The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment X. 	<ul style="list-style-type: none"> Other recently issued California MS4 permits. These requirements are similar to provisions in the Orange County MS4 Permit (Order No. R8-2009-0030) and the Riverside County MS4 Permit (Order No. R9-2010-0016). The Erosion Potential method is from the Ventura County MS4 Permit. 	
Implementation	Maintenance Agreement and Transfer of Responsibility to operate and maintain post-development BMPs.	Ventura County MS4 Permit	
Maintenance Agreement	Prior to issuing approval for occupancy, the Permittee will require new development and redevelopment projects to provide a plan and financial assurance for continued operation and maintenance of LID practices, treatment control BMPs, and hydromodification control BMPs.	Ventura County MS4 Permit	

Tracking, Inspection and Enforcement of Post-Construction BMPs	Each Permittee will implement a tracking system and an inspection and enforcement program for new development and re-development post-construction storm water BMPs.	Ventura County MS4 Permit	
Alternative Post-Construction Storm Water Mitigation Programs	A Permittee or coalition of Permittees may apply to the Regional Water Board for approval of a Redevelopment Project Area Master Plan (RPAMP) for re-development within Re-development Project Areas, in consideration of exceptional site constraints that inhibit site-by-site or project-by-project implementation of post-construction requirements.	Ventura County MS4 Permit	
Developer Technical Guidelines	Note: The Draft Permit does not require the Permittees to develop a Technical Guidance Document. This section is to be used to provide general technical guidelines relating to site development, recommended riparian buffer widths, etc.	Collaboration between the contractor, the Regional Board staff and EPA.	

DRAFT

DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues

Minimum Control Measure – Public Information and Participation Program (PIPP)

Primary Objectives:	<ul style="list-style-type: none"> 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. To measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging the implementation of appropriate solutions. To involve and engage socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.
----------------------------	---

Legal Authorities:	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)(A)(6)) Regulations addressing public information and participation programs (40 CFR §122.26(d)(2)(iv)(B)(6))
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Category	Description of Requirement	Origin of Requirement	Notes
General	<p>The Permittees shall implement a Public Information and Participation Program (PIPP) that includes, but is not limited to, the requirements listed in this part.</p> <p>The Permittees shall be responsible for developing and implementing the PIPP, and implementing specific PIPP requirements.</p>	Draft April 2011 LA County and Ventura County MS4 Permits	
Advisory Committee	<p>The Permittees shall consider developing an advisory committee to provide input and assistance in meeting the goals and objectives of the public education campaign.</p> <p>The advisory committee shall be consulted during the process of developing the PIPP campaign, and shall provide comments and advice during the process of preparing a Request For Proposal for a storm water public education contractor.</p> <p>The committee may participate as a part of a working group that</p>	Draft April 2011 LA County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
	<p>evaluates contractor proposals and other tasks as appropriate.</p> <p>The committee shall be comprised of representatives of the environmental community, Permittees, Regional Water Board staff, and experts in the fields of public education and marketing.</p> <p>The committee shall meet at least once a year.</p>		
<p>Residential Program – No Dumping Message</p>	<p>Each Permittee shall label all storm drain inlets that they own with a legible “no dumping” message.</p> <p>Signs with prohibitive language discouraging illegal dumping shall be posted at designated public access points to creeks, other relevant waterbodies, and channels.</p> <p>Signage and storm drain messages shall be legible and maintained as necessary during the term of the permit.</p>	<p>Draft April 2011 LA County MS4 Permit</p>	
<p>Residential Program – Countywide Hotline</p>	<p>Permittees will develop and implement, or continue to implement, a watershed-wide reporting hotline to serve as the general public reporting contact for reporting illicit discharges/dumping, faded or lack of catch basin labels, and general storm water management information. Each Permittee may establish its own hotline if preferred.</p> <p>Permittees shall include this information, updated when necessary, in public information, and the government pages of the telephone book, as they are developed or published.</p> <p>The Permittees shall compile a list of the general public reporting contacts submitted by all Permittees and make this information available on the Permittee’s websites and upon request.</p>	<p>Draft April 2011 LA County MS4 Permit</p>	

Category	Description of Requirement	Origin of Requirement	Notes
	Each Permittee is responsible for providing current, updated information to the Principal Permittee.		
Outreach and Education	<p>The Permittees shall implement the following activities:</p> <ol style="list-style-type: none"> (1) Conduct a storm water pollution prevention advertising campaign (2) Conduct storm water pollution prevention public service announcements (3) Consider distributing storm water pollution prevention public education materials to potential pollutant contributing entities, such as automotive parts stores, home improvement centers / lumber yards / hardware stores, and pet shops / feed stores (4) Public education materials shall include the topics specified at Permit Part X (5) Consider working with existing local watershed groups or organizing watershed Citizen Advisory Groups/ Committees to develop effective methods to educate the public about storm water pollution (6) Organize events targeted to residents and population subgroups (7) Maintain the countywide storm water website (www.888CleanLA.com), which shall include educational material listed in Part X. 	Draft April 2011 LA County MS4 Permit and Ventura County MS4 Permit	
Outreach and Education	The Permittees shall develop a strategy to educate ethnic communities through culturally effective methods.	Draft April 2011 LA County MS4 Permit	
Outreach and Education	Requirement regarding quantity of storm water quality "impressions" on the general public - To be developed.	Draft April 2011 LA County MS4 Permit	
Outreach and Education	The Permittees shall provide schools within each School District in the county with materials, including, but not limited to, videos, live presentations, and other information necessary to educate a minimum of 50 percent of all school children (K-12) every 2 years	Draft April 2011 LA County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
	on storm water pollution.		
Pollutant-specific Outreach	The Permittees shall coordinate to develop outreach programs that focus on the watershed-specific pollutants listed in Table1.	Draft April 2011 LA County MS4 Permit	
Pollutant-specific Outreach	Each Permittee shall make outreach materials available to the general public and target audiences, such as schools, community groups, contractors and developers, and at appropriate public counters and events. Outreach material shall include information on pollutants of concern, sources, and source abatement measures.	Draft April 2011 LA County MS4 Permit	
Corporate Business Outreach	The Permittees shall consider working with other regional or statewide agencies and, associations such as the California Storm Water Quality Association (CASQA), to develop and implement a Corporate Outreach program to educate and inform corporate franchise operators and/or local facility managers about storm water regulations and BMPs.	Ventura County MS4 Permit	
Corporate Business Outreach	Once developed, the program shall consider targeting Retail Gasoline Outlets (RGO) franchisers, retail automotive parts franchisers, home improvement center franchisers and restaurant franchisers.	Ventura County MS4 Permit	
Business Assistance Program	The Permittees shall consider implementing a Business Assistance Program to provide technical information to small businesses to facilitate their efforts to reduce the discharge of pollutants in storm water. The Permit specifies required components of the program.	Draft April 2011 LA County and Ventura County MS4 Permits	

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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
ANTHONY ARZEVALO	CITY OF LONG BEACH, PUBLIC WORKS STORM WATER MANAGEMENT	ANTHONY.ARZEVALO@ LONGBEACH.CA.GOV	✓
Rachel McPherson	Port of Los Angeles	rmperson@portla.org	✓
Wes Gunter	PG Environmental, LLC	wes.gunter@pgenv.com	
Claudia Goytia	Assembly member Roger Hernandez 100 N. Barranca St. Suite 875 West Covina, CA 91791	claudia.goytia@asm-ca.gov	✓
JASON WEAU	City of Downey	JWEAU@DOWNEY.CA.GOV	
Nora Garrison	NRDC	ngarrison@NRDC.org	✓
ANGELA GEORGE	Los Angeles County Flood Control	ageorge@pdpo.lacounty.gov	✓
Lauren Langs	Jenkins attorney	Llangers@ecologylaw.com	✓



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RB-AR574

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
MIRIAM SYKES	GLENDALE W & P 141 N. GLENDALE AVE 4TH FLOOR GLENDALE, CA 91206	msykes@a-glendale-ca.us	✓
Pew Beck	ProMas 555 S. Flower St. Ste 4100 Pasadena, CA 91105	A.Pew.Beck@ProMas.com	
Susie Santilena	Heal the Bay	ssantilena@healthebay.org	
Patricia Elkins	City of Carson 701 E. Carson St. CARSON 90745	Pelkins@carson.ca.us	✓
Donald Tom	LACSD 1955 Workman Mill Rd CITY OF CALABASAS	dton@talacsd.org	✓
DAVID PAULCAD	CITY OF CALABASAS	DRANKAUE.CITYOF-CALABASAS	✓
DANIEL S. WALL	CITY OF WHITTIER	DWALL@CITYOFWHITTIER.CA.GOV	✓
Katharine King	L.A. County Dept. of Beaches & Harbors	kking@beach-lacounty.gov	✓

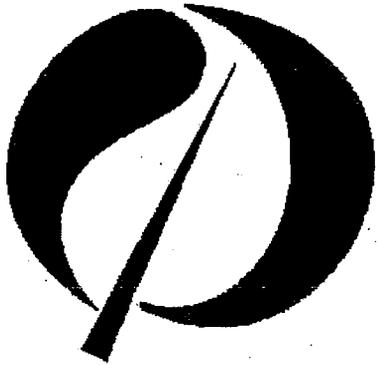
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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
John Beshay	City of West Covina	John.Beshay@westcovina.org	
BLAKE WHITTINGTON	Council for Watershed Health 700 N. Alameda St, LA 90012	blake@watershealth.org	✓
Gladis Deras	City of Pico Rivera	gderasepico-rivera.org	✓
RENE GUERRERO	CITY OF PICO RIVERA	rguerrero@pico-rivera.org	✓
CODY HAWING	RICK CONSULTING GROUP	chowling@rickgroup.com	✓
Mark Pombod	City of Oxnard	mark.pombod@ci.oxnard.ca.us	
Charlene Arreola	City of Vernon	CarleneArreola@ci.vernon.ca.us	✓
JERRICK TORRES	CITY OF VERNON	JTORRES@ci.vernon.ca.us	✓



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Gina Nirk	City of Commerce	gna@ci.commerce.ca.us	
Steve Miller	Lubricating Spec Co	smiller@lubspecialties.com	
Joseph Descafto	City of Buena Vista Hills	310-285-2490	
William Castro	Covina	Vcastro@covinaca.gov	
Lisa Bugnova	San Dimas	lbugnova@ci.san-dimas.ca.us	
SEAN SULLIVAN	CITY OF ROSEMEAD	626/569-2169	
Julie Carver	City of Pomona	909-620-3628	
John Hunter	ILHA	562 802 7880	



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
David Doughton	CITY OF ANIMSBET	delo@hmc.cityofanimsbet.org	Yes
Tom Davis	Davis Consulting Services	tdavis@davisconsulting.co	Yes
Ken Baricek	United Rock Products	KADEN.YOUNG@CULVERCITY.ORG	YES
KADEN YOUNG	CITY OF CULVER CITY	310/253-6445	YES
DANIEL BOBADILLA	CITY OF AZUSA	dbobadilla@ci.azusa.ca.us (626) 512-5204	YES
Stan Chen	Stetson Engineers	stanc@stetsonengineers.com (626) 967-6202	Y
NASEH SAID	LA County DPW	nsaid@dpuw.lacounty.gov	
GEREMEW AMENU	LA COUNTY DPW	gamenue@dpuw.lacounty.gov	Y

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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Heather Maloney	hmaloney@ci.monrovia.ca.us Monrovia		✓
Julie Hegvold	jhegrod@lawndalecity.org Lawndale	210-973-3263	✓
Gary Aldebraud	820 S Fremont Ave Alhambra, CA 91803	ghildebr@alpo.lacounty.gov	✓
Wendy LA	725 N. HEZUS AVE, AZUSA, CA.	Wendy.La@watermaster.org	✓
Tom Tait	city of Arcadia		
Vanessa Fleener	City of Arcadia	vfleener@ci.arcadia.ca.us	✓
Brittany Chow		bchow143@ucla.edu	
Kirstin James	Heal the Bay	kjames@healthebay.org	



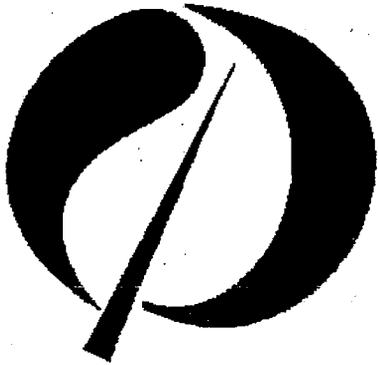
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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Corey Harpaz	Newkirk Land	CHARP05@NEWKIRK	YES
Brian Selogaj	Baykeeper	brian_selogaj@baykeeper.org	N
James Enriquez	City of El Monte	jennriquez@elmontecity.org	Yes
Jami Striegel	EKI	jstriegel@ekiconsult.com	Y
Carlos Alora	CITY OF ARTESIA		
Jose Espinoza	CITY OF GARDENA	JESPINOZA@CITYOFGARDENA.CA.GOV	Y
Ken Reich	Suburban Water Systems	KREICH@SWWC.COM	Y
AMES CARLSON	C/O SERRA MARIE	jcarlson@calyellsresources.com	N

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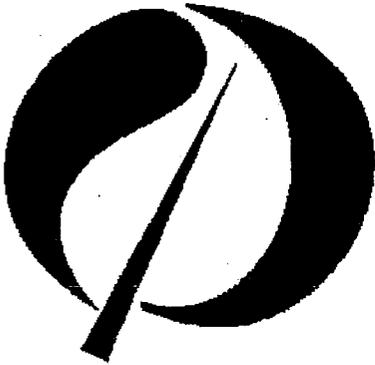


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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Donna Chen	City Los Angeles 1149 S. Broadway	213-485-3928	
Sarina Morales-Chate	City of Santa Fe Springs	(562) 868 0511	
Ruby Wang	County of Los Angeles Flood Control District	626 458-4343	
Jenna L. Huses	County of CA.	(26) 458-4362	JLHuses@spw.lacounty.gov
Teresa Benjerna	City of Duarte	626 3577931	terbenjerna@accessdata.com
YOUN SIM	900 S. Fremont Alhambra CA 91803	626 488 4319	YSIM@CALASSOCIATION.COM
Randal Curtis	2714 City of CA BOS WRP	randal.curtis@city-ca.org	
JOHN DIMARIO	CITY OF CA PUENTE	jdimario@lapuente.org (626) 855-1517	jdimario@lapuente.org

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RB-AR581

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
MARK WIMBOS	LA COUNTY FLOOD CONTROL DISTRICT	MARKWIMBOS@DPW.LACOUNTY.CA.GOV	SOL
Christ Kirikion	Department of Public Works Wastewater Protection Division	C.Kirikion@gmail.com	yes
KATHLEEN MCGOWAN	CONSULT ANT	KATHLEEN.ENVE@VERIZON.NET	ON IT ALREADY
Karen Cowan	Lanny Walker Assoc.	KarenC@lwa.com	yes
Oliver Cramer	City of Santa Clarita	OCramer@santa-clarita.com	✓
Chau Vu	City of Bell Gardens	cmv@bellgardens.org	
Daniel Apt	RBF	Dapt@rbf.com	Yes
Weixing Tang	LA WQCCB	wtang@waterboards.ca.gov	



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Joe Bellomo	Chris & Agoura Hills & Westlake Village	bellomo@willow.com 8052796850	✓
MATT CARPENTER	NEWMAN LAND - Valencia CA 25104 Springfield Ct, 300	mcarpenter@newhall.com	✓
LIZ CROSSON	Santa Monica Baykeeper	liz@sbaykeeper.org	
Tony Umphenour	City of Burbank	umphenour@ci.burbank.ca.us	✓
LATOYA BYRUS	LATOYA BYRUS CONSULTANTS - COM	CITY OF HIDDEN HILLS	✓
PATRICIA MARATKA	CITY OF INGLEWOOD	brac@cityofinglewood.org	✓
Lauren Arimoto	CITY INGLEWOOD	laramimoto@cityofinglewood.org	✓
SHIRLEY PAK	OALTRANS	shirley.pak@dot.ca.gov	✓

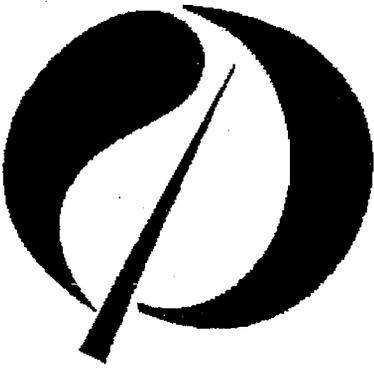


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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
ED SUHER	AEI-CASC, REP. CITY OF INDUSTRY	310-291-1150	
Williams Ili	1415 SANTA ANITA AVE S.O. MOUNTAIN 91733	(626) 652-8801	
Heather Mercedes	City of Santa Clarita 73550 Valencia Blvd. 91355	661 280 4098	yes
Aracely Lasso	LACDPW 180 9005 Fremont Ave Alhambra	(626) 458-7146	yes
Ann Heil	LACSD		
FRANK WU	LACDPW	626 458-4358	Yes
Miguel Salas	LACDPW	626 458-7163	Yes
VANESSA ALLEN	CONTECH	310-950-1736	yes



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RB-AR584

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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Sheila Kennedy	Entact Solutions	skennedy@entact.net	
Kosta Kaporis	City of Los Angeles	kosta.kaporis@city.org	✓
John Pette	City Torrance	jdpette@torranceca.gov	
Guangyu Wang	SMRC		
Nina David	415 S. Swan, 11 Compton CA, Ujima Village 90201	Nina 12319@aol.com	✓
Steve Pedersen	City of LA WPD	Steven.Pedersen@lacity.org	—
Elaine Jeng	Redondo Beach	elaine.jeng@redondo.org	✓
Aparna Okeja	WCR/ACA	advortega@me.com	✓

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RB-AR585

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
ERIC MOSOLGO	BROWN + CALDWELL 9665 Chesapeake Dr, Suite 201 San Diego, CA 92123	emolgo@brownandcaldwell.com emolgo@brownandcaldwell.com	y
Bernardo F. Miguez	City of Bellflower 16608 Civic Center Drive, Bellflower, CA 90706	b.f.miguez@bellflower.org	✓
DAREN GRILLEY	CITY OF SAN GABRIEL 425 S. MISSION SAN GABRIEL 91776	dgrilley@sgch.org	y
Dwight Jimbrando	Pasadena Waters & Power 150 S. Los Pobles 91101	cityofpasadena.net dkimbrando@pasadena	y
Randy Schoel/erman	San Gabriel Basin WRA 1720 W. Cameron Ave. #100 West Covina CA 91790	RANDY@WRA.COM	✓
Daniel Rynn	150 N. THIRD ST. BURBANK, CA 91510	drynn@ci.burbank.ca.us	✓
Jeff Carter	United Water Services, Inc 740 N. Lake St Burbank CA 91502	jeff.carter@unitedwater.com	Yes
ALVIN CRUZ	150 N. THIRD ST. BURBANK 91502	acruc@ci.burbank.ca.us	YES

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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Jennifer Brown	22825 Skart Ranch Rd, Malibu City of Malibu	jbrown@malibucity.org	
Mack Walker	707 4th Suite 200 Davis, CA 95616	Mackw@lwa.com	
Robert Vega	1140 S. Broadway, LA CA 90015 LA City Public-Works Sanitation	Robert.Vega@lacity.org	
Susan Rojas	100 S. Vincent Ave. Ste 401 West Covina, CA 91790	Susan.Rejesse@ca.gov	✓
Sue Ann Fries	600 W Temple St, room 648, LA 90012	713-974-1023	
			marked

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SPEAKER REQUEST CARD

Date: 11/10/11

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
- 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: William I.
 Representing Self
 Representing: CITY OF SOUTH EL MONTE

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

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SPEAKER REQUEST CARD

Date: 11/10

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
- 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 Fel Hernandez

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

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SPEAKER REQUEST CARD

Date: 11/10/11

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
- 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: DAREN GRILLEY
 Representing Self
 Representing: CITY OF SAN GABRIEL

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: 11-10-11

I wish to speak during the Board Meeting:

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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: JOSE ESPINOZA
 Representing Self
 Representing: CITY OF GARDENA

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: Nov. 10, 2011

I wish to speak during the Board Meeting:

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- 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: Shawn HagerTY
 Representing Self
 Representing: CITY of CLERMONT

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

SPEAKER REQUEST CARD

Date: 11/10/11

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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 Oskowi
 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: 11/10/11

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- 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. 16
- I oppose Agenda Item No. 16

look forward to a process beneficial to both sides but *feel the time*

Name: SARINA Morales-Choate

- Representing Self
- Representing: City of Santa Fe Springs!

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

you are proposing is too short. Please reconsider this.

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

SPEAKER REQUEST CARD

Date: _____

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. 16 *NEED TO EXTEND TIME TO DECEMBER 2011*

Name: C. ALBA

- Representing Self
- Representing: MTES

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

15 minutes

RB-AR591

Rep. Signal Hill

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

SPEAKER REQUEST CARD

Date: 11/10

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- 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 MYRTER
 Representing Self
 Representing: CITY OF SIGNAL HILL

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

(15 minutes)

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

SPEAKER REQUEST CARD

Date: 11/10/11

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
- 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:

ITEM #16 REQUEST DELAY FROM MARCH 2012 TO DECEMBER 2012
 I support Agenda Item No. _____
 I oppose Agenda Item No. _____

Name: DANIEL WALL
 Representing Self
 Representing: CITY OF WHITTIER

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

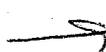
State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 11/10/11

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. 16 REQUEST THAT THE BOARD
EXTEND THE ADOPTION DATE FOR MS4 PERMIT TO DEC. 2012

Name: JOHN DIMARCO
 Representing Self
 Representing: CITY OF LA PUENTE
PUBLIC WORKS DEPT.

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: 11/10/11

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
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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: Lisa Buarova
 Representing Self
 Representing: City of San Dimas

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: 11/10/11

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
 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 Covina

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: 11/10/2011

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
 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 Beshay
 Representing Self
 Representing: City of West Covina

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: 11/10/11

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 16 - WKSHP NPDES PERMIT
 I wish to speak during Public Forum on a non-agenda item. ADOPTION

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: JULIE HEGVOLD
 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

SPEAKER REQUEST CARD

Date: 11/10/11

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 16
 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: RENE GUERRERO
 Representing Self
 Representing: CITY OF PICO RIVERA

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: 11-10-11

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
- 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: ED SUHER

Representing Self

Representing: CITY OF INDUSTRY

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

SPEAKER REQUEST CARD

Date: 11/10/11

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16
- 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: RON RUIZ

Representing Self

Representing: CITY OF SAN FERNANDO

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: 11/10/11

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 16 ^{AT} MINIMUM DEC, 2012
 I wish to speak during Public Forum on a non-agenda item.

REQUEST TIME
EXTENSION TO

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: JARRICK TORRES
 Representing Self
 Representing: CITY OF VERNON

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

SPEAKER REQUEST CARD

Date: 11/10/11

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 16 → REQUEST EXTENSION
 I wish to speak during Public Forum on a non-agenda item. UNTIL
DEC 2012

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 ENRIQUEZ
 Representing Self
 Representing: CITY OF EL MONTE

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: 11/10/11

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. 16 - Extend Permit Deadline Approved
- I oppose Agenda Item No. _____

Name: Michael Shan

- Representing Self
- Representing: CIT of Redondo Beach

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: 11/10/11

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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 ENRIQUEZ

- Representing Self
- Representing: CITY OF EL MONTE

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-AR598
20
minutes

SPEAKER REQUEST CARD

Date: 11/10/11

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 16 (MS4 Permit W.S.)
 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: Heather Maloney, Heather Merenda, John Dettle
 Representing Self
 Representing: LA Permit Group

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

*We've previously requested 20 mins for a presentation.

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

(15 minutes)

SPEAKER REQUEST CARD

Date: 11.9.11

I wish to speak during the Board Meeting:

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 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: RAY TAJIR
 Representing Self
 Representing: COMPTON, PLANTE, LAWRENCE

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

ET
AL

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

SPEAKER REQUEST CARD

Date: 11-10-11

I wish to speak during the Board Meeting:

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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: City of Carson

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: 11/10

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

Name: MARK LOMBOS
 Representing Self
 Representing: LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

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

LACFCD
gets 20 minutes
total

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

SPEAKER REQUEST CARD

Date: 11-10-11

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 16
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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: Gary Hildebrand

Representing Self
 Representing: LACFCD and County of Los Angeles

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

I was approved for 20 min.

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

10 minutes

SPEAKER REQUEST CARD

Date: Nov. 10, 2011

I wish to speak during the Board Meeting:

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 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.

40 minutes

Requested **RB-AR601**
40
minutes

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

SPEAKER REQUEST CARD

Date: 11/10/11

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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. _____

JOINT

Name: Liz Crosson, Mark Gold, Noah Grunzow

- Representing Self
- Representing: Santa Monica Baykeeper, NRDC,

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

Heal the Bay

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

SPEAKER REQUEST CARD

Date: 11/10/11

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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: DANIEL PANKAU

- Representing Self
- Representing: CITY OF CALABASAS / LA PERMIT GROUP

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

SPEAKER REQUEST CARD

Date: 11/10/11

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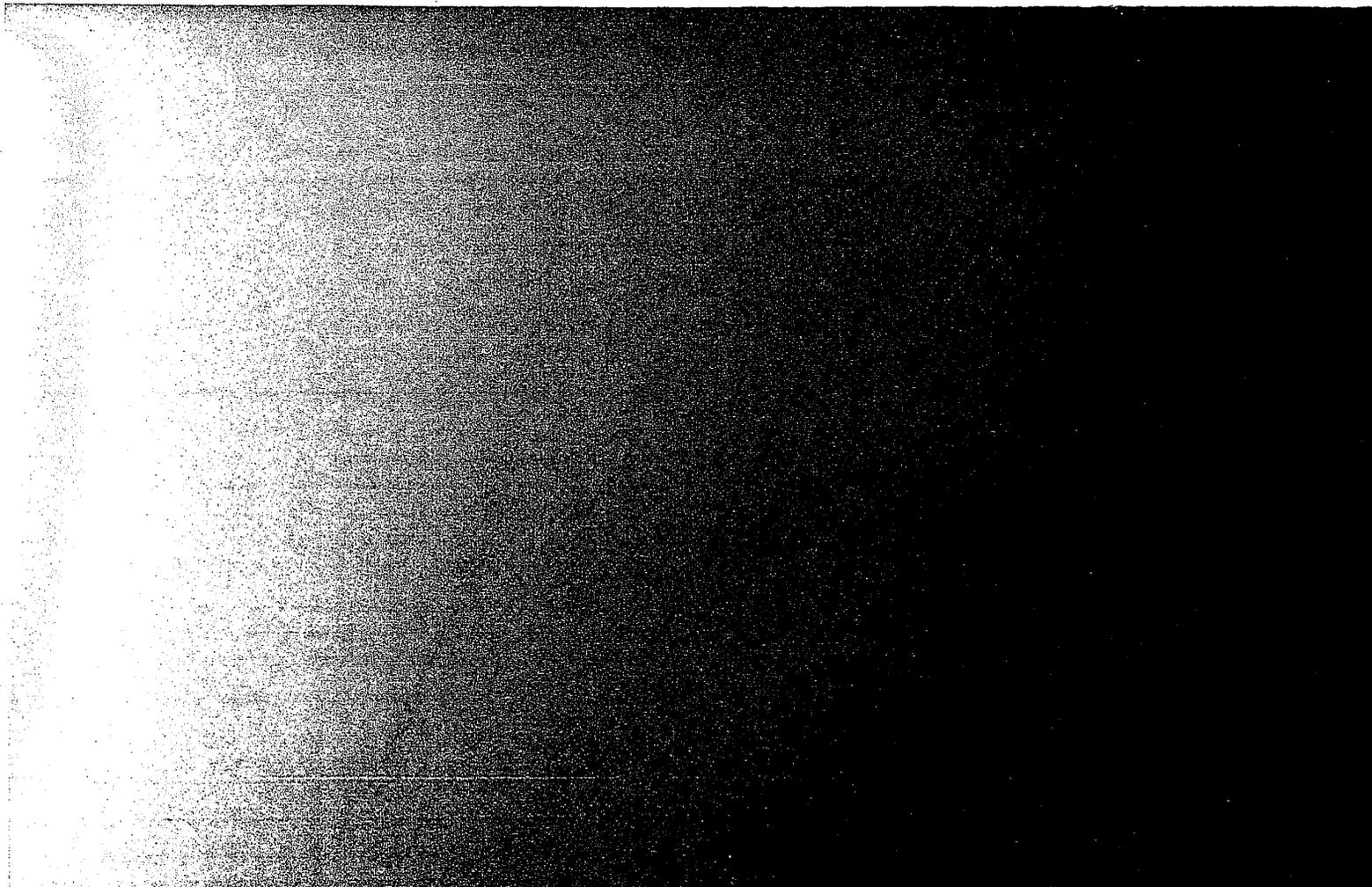
- I support Agenda Item No. _____
- I oppose Agenda Item No. _____

Name: John Kemmerer

Representing Self

Representing: U.S. EPA Region 9

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



LA County MS4 Permit: Board Workshop

Item 16

Los Angeles Water Board

November 10, 2011

Outline

- Permit Background
- Status of Permit Development
- Permit Structure Evaluation & Staff Conclusions
- Permit Requirements
 - Stormwater Management Program & Minimum Control Measures
 - TMDL Provisions
 - Other Key Topics

Background

- Last issued in 2001
- Reopened in 2006, 2007 and 2009
 - SMB Beaches Bacteria Summer Dry Weather
 - Marina Del Rey Bacteria Summer Dry Weather
 - LA River Trash
- Amended in April 2011
 - Voided and set aside 2006 provisions in response to writ of mandate
- Updated permit scheduled for 2012

Objectives for New Permit

- Increase flexibility of provisions, while ensuring consistent baseline level of implementation
- Improve SQMP requirements & minimum control measures to achieve water quality standards
- Implement TMDL WLAs
- Clarify compliance determination in a commingled system

Status & Outreach

- May-Jun.: Kick-off meeting & web-based survey
- Jun.-Sep.: Targeted program assessments
- Jun.-Nov.: As requested meetings
- Today: Board workshop

- **Nov. '11-Apr. '12: As requested meetings**
- **Dec. '11-Feb. '12: Two issue workshops**
- **Mar. '12: Draft permit**
- **May '12: Board hearing**

Permit Structure: Background

- Single permit for 84 cities, LA County & LACFCD
 - Highly interconnected system across jurisdictional boundaries
 - Commingled discharges to receiving waters
 - Opportunities for cooperation
 - Efficiencies gained in public outreach, monitoring & reporting
 - Los Angeles County Flood Control District role (LA County Flood Control Act)

Permit Structure: Alternatives

- Single unified permit
 - Watershed sections
- Watershed permits
- Other multiple-permit approaches
 - Individual permits
 - Permits based on 2006 ROWDs

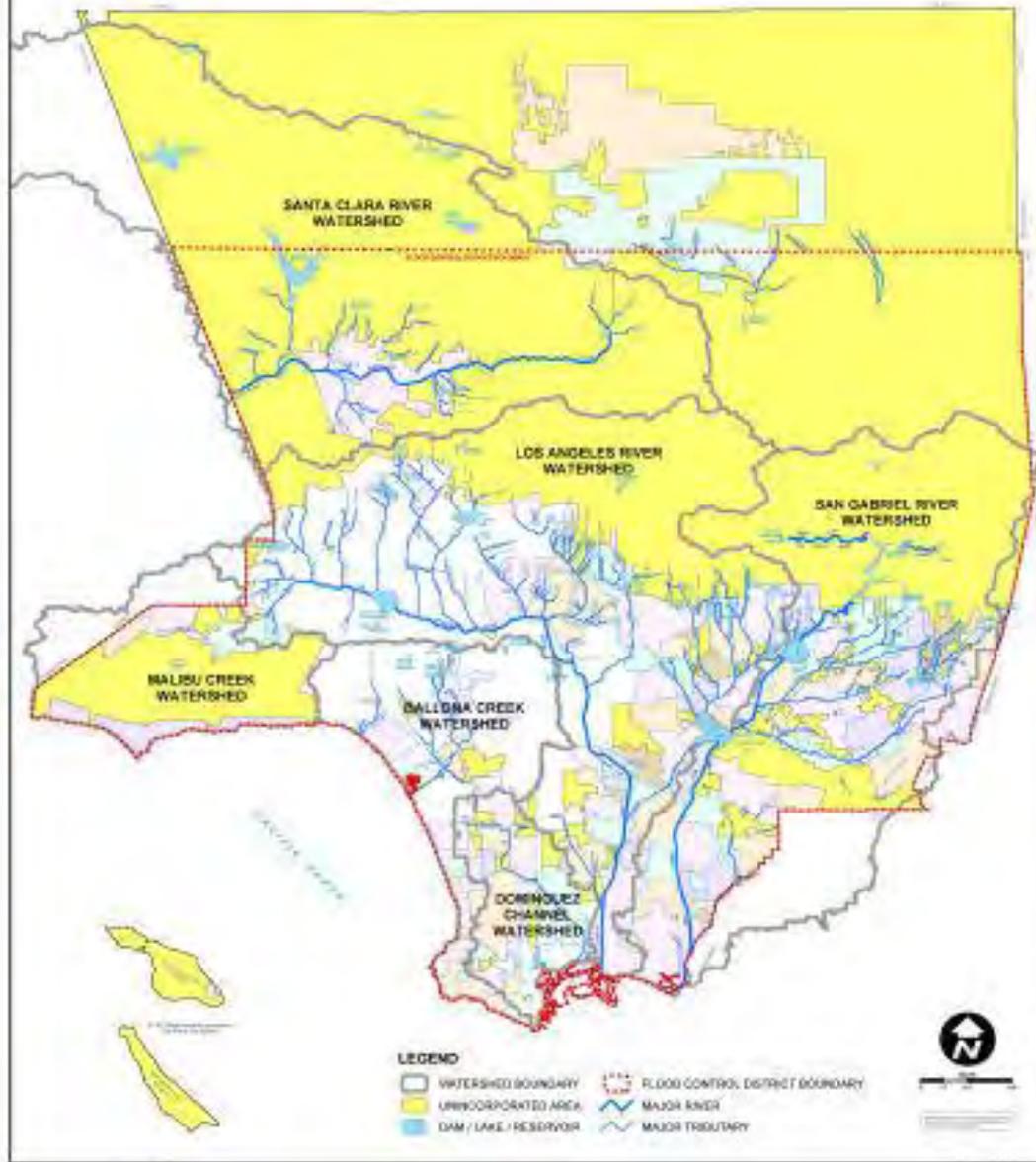
Permit Structure: Considerations

- Clean Water Act §402(p)
- Implementing regulations (40 CFR §122.26(a)(1))
- Factors considered:
 - Nature of Greater LA County MS4
 - **Permittees' input**
 - TMDLs
 - Opportunities for collaboration
 - LACFCD water quality funding initiative

Interconnected and Overlapping System

- Multiple jurisdictions discharge to MS4
- Discharges from co-permittees commingle prior to reaching receiving water
- MS4 infrastructure largely owned and/or operated by LACFCD

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT



Permittees' Input

- Survey of Permittees' preferences using web-based SurveyMonkey®
 - 85 percent support single MS4 permit or watershed-based permits
 - Small number support alternative groupings
 - Four permittees expressed a preference for individual MS4 permits
- 2006/2010 ROWDs
 - Signal Hill; Downey; Upper SGR Group; LACFCD

TMDL Provisions

- 29 TMDLs adopted with WLA for LA County MS4 co-permittees
- One of most significant parts of new permit
- Watershed-based implementation
 - Allocations
 - Implementation
 - Compliance monitoring

Opportunities for Collaboration

- Regional efforts and solutions may be most cost effective
 - Combine resources for program implementation
- LACFCD water quality initiative
 - Collaborative “watershed authority groups”
 - Watershed based funding
 - Some oversight by LACFCD

Permit Structure: Our Path Forward

- Single permit
 - Watershed sections
- Flexibility in provisions
 - Direct efforts to watershed priorities
 - Individualized requirements
- No Principal Permittee
- Revised compliance monitoring provisions

Storm Water Management Program: Minimum Control Measures

40 CFR 122.26(d)(2)(iv)

- Industrial / Commercial Program
- Development Construction Program
- Illicit Connections/Illicit Discharges Elimination Program
- Public Agency Activities Program
- New Development/Redevelopment Program
- Public Information and Participation Program

Minimum Control Measure – Industrial/Commercial Sources

- Key Objective: Ensure the implementation of BMPs at industrial/commercial facilities to reduce the contribution of pollutants to the MS4 from industrial/commercial activities.
- Basic Requirements
 - Watershed-based database of all industrial and commercial facilities
 - Inspections of all designated industrial/commercial facilities
 - Ensure BMP implementation (e.g. CASQA manual)

Minimum Control Measure – Development Construction Program

- Key Objective: Ensure the implementation of BMPs at construction sites to reduce the contribution of pollutants to the MS4 from construction activities.
- Basic Requirements
 - Inventory of grading permits, encroachment permits, demolition permits, building permits, or construction permits
 - Review and written approval of a Erosion and Sediment Control Plan (ESCP)
 - BMP implementation (per CASQA or Caltrans manual)

Minimum Control Measure – Illicit Connections and Illicit Discharges Elimination (Non-stormwater Discharges Oversight)

- Key Objective: Effectively prohibit non-storm water discharges to the MS4.
- Basic Requirements
 - Develop and implement a Dry Weather Outfall Screening Program to identify priority areas.
 - Develop procedures for conducting source investigations for IC/IDs

Minimum Control Measure – Public Agency Activities Program

- Key Objective: Minimize storm water pollution impacts from permittee owned or operated facilities and activities.
- Basic Requirements
 - Maintain an inventory and map of all Permittee-owned or operated facilities.
 - Implement activity specific BMPs (such as catch basin cleaning, open channel maintenance, street sweeping, and appropriate pesticide application)
 - Training of employees and contractors.

Minimum Control Measure- New Development and Redevelopment

- Key Objective: Minimize the impacts of development and significant re-development projects on water quality and hydrology.
- Basic Requirements
 - On-site retention of the storm water runoff volume resulting from the 85th percentile, 24-hour storm or the 0.75 inch 24-hour storm, whichever is greater.
 - Off-site mitigation where on-site retention is technically infeasible.

Minimum Control Measure- New Development and Redevelopment

Interim Hydromodification (Sites < 50 acres)

- Requirements
 - On-site retention of the volume of runoff from the 95th percentile, 24-hour storm, or
 - BMP implementation to ensure 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.
 - The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study

Minimum Control Measure- New Development and Redevelopment

Interim Hydromodification (Sites > 50 acres)

■ Requirements

- On-site project infiltration of at least the runoff from a 2-year, 24-hour storm event, or
- BMP implementation to ensure 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. These conditions must be substantiated by hydrologic modeling acceptable to the Permittee, or
- The Erosion Potential (Ep) in the receiving water channel <1.

Minimum Control Measure - Public Information and Participation Program

- Key Objective: To measurably increase the knowledge of the target audience about the adverse impacts of storm water pollution and change the waste disposal and storm water pollution generation behavior of target audiences.
- Basic Requirements
 - Watershed-wide reporting hotline
 - Storm water pollution prevention advertising campaign
 - Distribution of outreach materials

TMDL Provisions: Background

- 24 TMDLs with MS4 WLAs in effect for LA County
 - 2007 & 2009 amendments
 - MDR Bacteria TMDL – Summer WLAs
 - LA River Watershed Trash TMDL WLAs
- 5 TMDLs in state approval process

TMDL Provisions: Considerations

- Provisions consistent with assumptions and requirements of WLAs
 - Include all interim & final WLAs
- Numeric effluent limitations and **“action-based”** compliance demonstration

TMDL Provisions: LA River Trash WLAs Example

- Numeric effluent limitations
 - Equivalent to WLAs
 - Compliance measure if partial capture and/or institutional strategies are used
 - **Necessary absent “up-front” demonstration** that controls will achieve TMDL design/performance standard
- “Action-based” requirements
 - TMDL design/performance standard to achieve WLAs = full capture systems
 - Compliance measure = % drainage area addressed by full capture systems

TMDL Provisions: Considerations

- Dual Path for Compliance Demonstration
 - Numeric effluent limitations or
 - **“Action-based” with reasonable assurance**
 - TMDL implementation plans
 - Other quantitative analysis / implementation plan showing that actions will achieve WLAs
 - **“Reasonable assurance” standard and validation monitoring**

Other Key Permit Requirements

- Non-stormwater Discharge Prohibitions
- Receiving Water Limitations
- Water Quality Based Effluent Limitations (WQBELs)
- Monitoring & Reporting

Non-stormwater Prohibitions

- CWA § 402(p) - “Effectively prohibit non-stormwater discharges”
- Current tools: IC/IDE program; Public Outreach/Education; Categorical exceptions
- New directions:
 - Characterize & prioritize major outfalls based on monitoring
 - System assessment & remedial actions
 - Categorical exceptions/permitted discharges

Receiving Water Limitations (RWL)

- MS4 discharges may not cause or contribute to violations of water quality standards (Part 2.1)
- Iterative process to address exceedances of RWLs (Part 2.3)
- Considerations
 - Waterbodies subject to TMDL
 - Waterbodies not subject to TMDL

Water Quality Based Effluent Limitations (WQBELs)

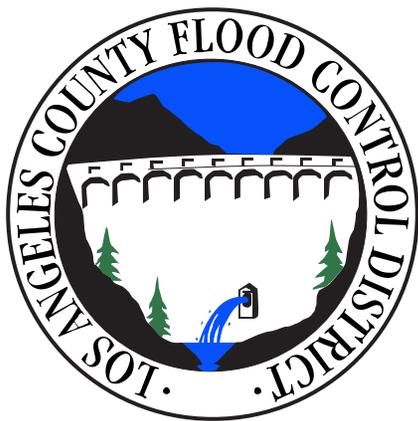
- Effluent limitations established to achieve compliance with water quality standards
- Numeric WQBELs - derived from water quality standards or WLAs
- Application to
 - Waterbodies subject to TMDLs
 - Non-stormwater discharges
 - Stormwater discharges

Monitoring Program Objectives

- Establish linkage between MS4 discharges and receiving water quality
- Determine compliance with
 - TMDL provisions
 - Other numeric WQBELs
- Target implementation actions
- Validate performance / outcome expectations for “action-based” compliance

Summary of Path Forward

- Single permit with watershed sections
- Stormwater Management Program & Minimum Control Measures, incl. LID
- TMDL Provisions and Dual Path for Compliance Demonstration



MS4 Permit Renewal Key Issues

Los Angeles County Flood Control District
and County of Los Angeles

Gary Hildebrand
Assistant Deputy Director

Regional Board Informational Workshop
November 10, 2011

Key Issues for LACFCD

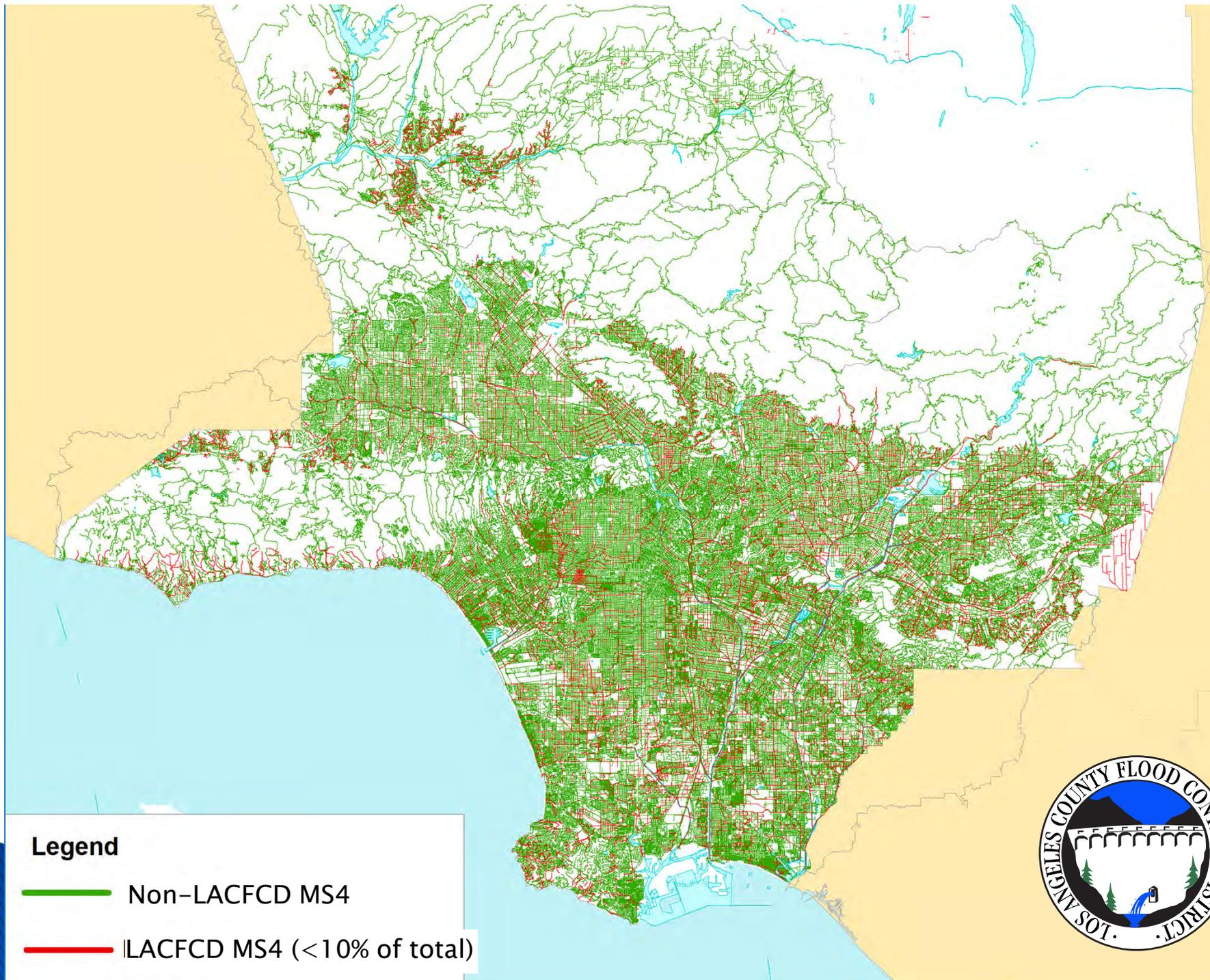
1. Permit Structure
2. Receiving Water Limitations
3. Role in TMDLs
4. Joint Liability
5. Non-stormwater Discharge Prohibitions
6. Monitoring



1. Permit Structure

- ▶ LACFCD should be issued a separate permit
- ▶ LACFCD is different from all other permittees:
 - LACFCD is not a municipality and has no land use authority
 - No control over sources of pollutants put into system
 - Must accept flood and stormwater to protect life and property without regard to constituents in water
 - Maintains backbone of system





Legend

- Non-LACFCD MS4
- LACFCD MS4 (<10% of total)



1. Permit Structure

- ▶ LACFCD Proposed Activities:
 - Continue Mass Emissions and Tributary Monitoring
 - Implement SWMP
 - Coordinate with cities
 - Participate in regional efforts where appropriate



2. Receiving Water Limitations

- ▶ Recent court decision renders compliance impossible
- ▶ Clarify RWL language so compliance is possible
- ▶ TMDLs recognize that standards cannot be met now



3. LACFCD's Role as a Responsible Party in TMDLs

- ▶ Pollutants originate within the watersheds
- ▶ Has no land use authority
- ▶ WLAs should be assigned to entities that generate pollutants or jurisdictions that regulate those entities
- ▶ Los Angeles River Trash TMDL approach



4. Joint Liability

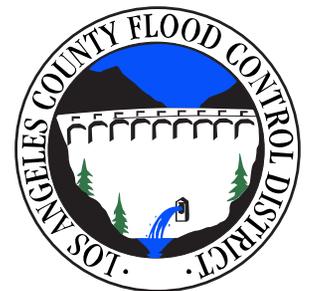
- ▶ Some TMDLs provide that responsible parties are “jointly responsible” or “jointly liable” for meeting WLAs
- ▶ Joint liability discourages collaboration among Permittees



4. Joint Liability

Individual rather than joint liability is more effective because:

- ▶ Creates true accountability
- ▶ Places the emphasis on water quality improvement rather than liability



5. Non-stormwater Discharges

- ▶ Currently allowed into the MS4 by the Regional Board from some entities without meeting water quality standards
- ▶ MS4 Permittees should not be responsible for non-stormwater discharges that do not meet WQS but are allowed into the MS4



6. Monitoring

- ▶ Want to encourage monitoring
- ▶ Different purposes and types of monitoring:
 - Characterize pollutants
 - Identify trends
 - Identify pollutant sources
 - Measure compliance
- ▶ Purpose of regional (mass emissions) monitoring is to characterize pollutants and identify trends



6. Monitoring

- ▶ Need to clarify that regional monitoring is meant to characterize pollutants in the system and identify trends and is not for measuring compliance
- ▶ Failure to specify purpose of monitoring may inhibit willingness to monitor

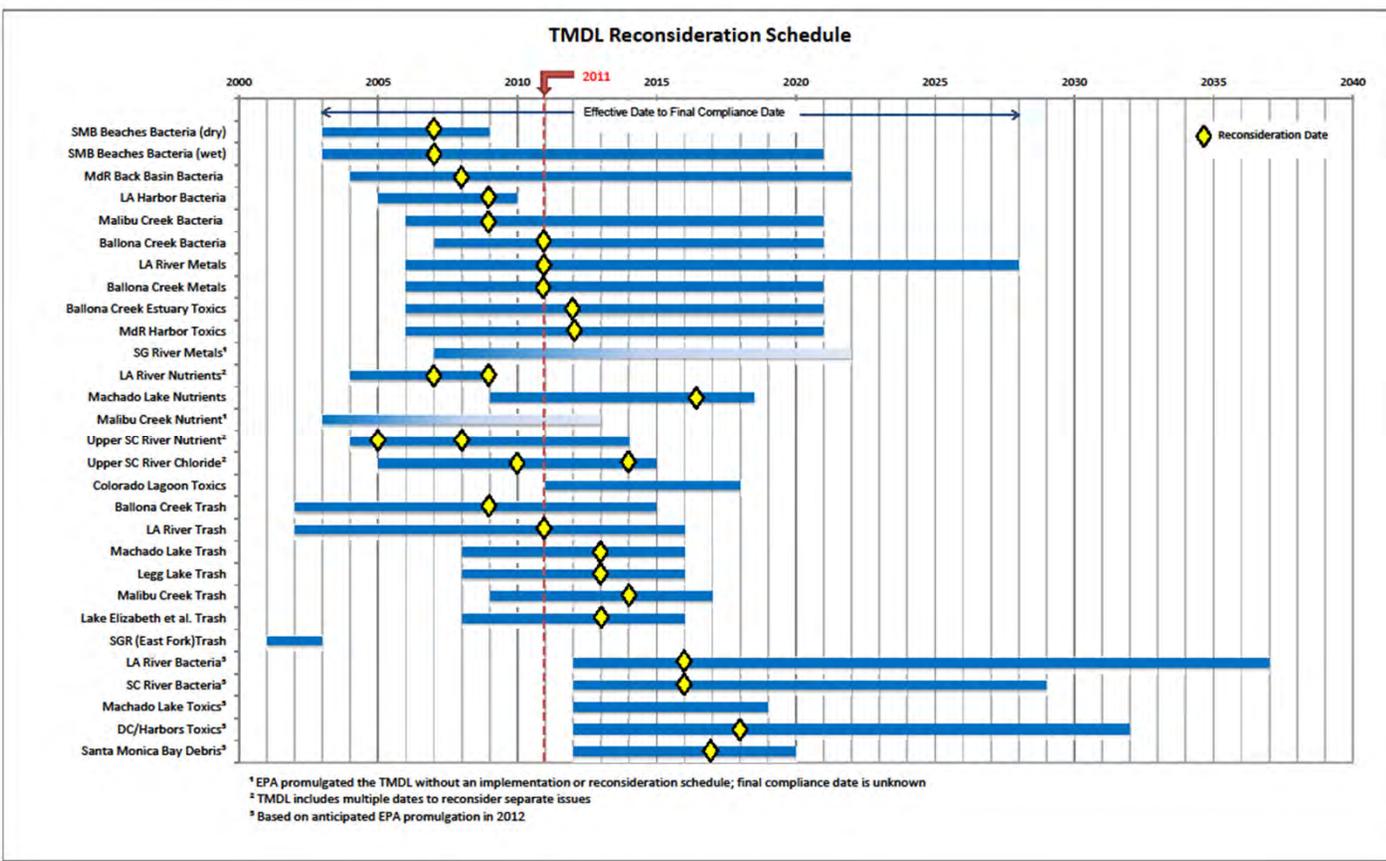


Key Issues for County of Los Angeles

1. TMDL Reconsideration
2. TMDL Incorporation
3. Low Impact Development
4. Support LACFCD positions



1. TMDL Reconsideration



2. TMDL Incorporation

- ▶ TMDL WLAs should be incorporated into the permit as narrative, non-numeric WQBELs
- ▶ NELs should not be used unless compliance can be measured by implementation of reasonable and cost-effective control measures (such as LA River Trash TMDL)



3. Low Impact Development

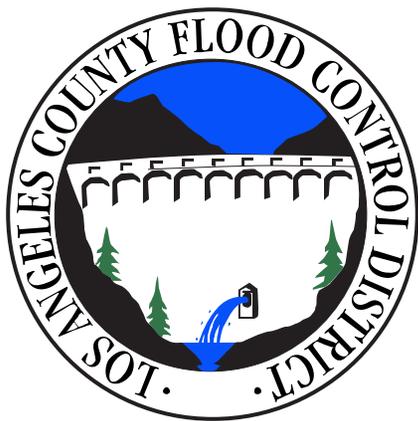
- ▶ Several permittees have already adopted LID ordinances
- ▶ The permit should be flexible to allow permittees to continue implementing their existing LID programs



4. Support LACFCD positions

- ▶ The County of Los Angeles supports the LACFCD's positions, especially:
 - Receiving Water Limitations
 - Joint Liability
 - Permit Adoption Schedule Concerns





Thank You





CITY OF SIGNAL HILL

2175 Cherry Avenue • Signal Hill, California 90755-3799

Statement before the Los Angeles

Regional Water Quality Control Board

NPDES Permit Workshop - November 10, 2011

By

Steve Myrter, Director of Public Works

City of Signal Hill

The U.S. EPA adopted principals for the restoration of the nation's urban water bodies in the Urban Waters Federal Partnership program in June of this year. A core guiding principle of EPA is to ***"be open and honest, and listening to the communities...recognize their values and seek to understand environmental issues through their eyes. We will work from the bottom up rather than taking a top down, one-size-fits-all approach."***

The Regional Board is being asked by your staff to only issue a system-wide MS4 permit and to deny the Los Angeles County Flood Control District, the Cities of Downey, Long Beach and Signal Hill, in other words, the agencies who filed separate ROWD's, their own applications for individual NPDES permits under the law. We urge you to reject this one-size-fits-all approach of your staff and embrace EPA's guiding principles.

Signal Hill's request for our individual permit is an opportunity for the Board to work with a small community that is taking seriously its responsibility to improve our local water quality and to address the unique circumstances confronting our community. Other cities have chosen to group together for their own reasons and we respect their decisions. We have chosen to apply for our individual MS4 permit for equally valid reasons and would hope that our decision is respected as well.

In June of 2006, Signal Hill submitted an individual ROWD/NPDES Permit application for permit coverage only for our respective jurisdiction. Our application explained how Signal Hill is located in the geographic middle and completely surrounded by the City of Long Beach on all sides. Runoff originates in the upland portions of Signal Hill and flows directly into the City of Long Beach, where our City is proposing to install water quality monitoring stations in order to characterize our runoff. It is important to note that in 1999 the Board issued an individual NPDES permit to the City of Long Beach. Your staff is now recommending issuing a second individual permit to the City of Long Beach.

In response to our June 2006 ROWD application, Regional Board staff concluded in their July 12, 2006 letter that our ROWD/Permit application was "incomplete." Nowhere in the letter did the Executive Officer ever indicate that the Regional Board would refuse to issue an individual permit to Signal Hill. Instead, the Regional Board staff indicated the opposite, that the City was "**proposing some positive changes**" to our NPDES Permit, and that the Board Staff looked "**forward to working out these details with your Staff during the MS4 Permit Reapplication Process.**" (see the July 12, 2006 letter)

The City responded in a timely manner on September 12, 2006 to each of the points raised in the Executive Officer's July 12th letter as to why Signal Hill's ROWD was consistent with the requirements of federal law and why the ROWD satisfied the requirements of federal regulations, including EPA's Interpretative Policy Memorandum. Signal Hill's letter concluded that the City looked forward to working with the Executive Officer to address all relevant issues necessary and looked forward to the issuance of the NPDES Permit for the City of Signal Hill.

Unfortunately, Signal Hill's letter was not responded to over the past five years. During this time, the City of Signal Hill has moved forward to implement new programs designed to insure compliance with our application for our individual NPDES Permit. Signal Hill has worked hard to implement our individual waste load allocation assigned by the Regional Board under the Los Angeles River Trash TMDL. We are pleased to report that our City is ahead of schedule at an 89% trash reduction rate, while the TMDL requires a 60% reduction rate this year.

Signal Hill is a small community, 2.1 square miles in size with a current population of 11,072. Oil was discovered in Signal Hill in 1924 and this discovery ushered in several decades of heavy industry, including well drilling, with oil sumps, tank farms and refining. These industries have left Signal Hill with a legacy of soil contamination and over 1,700 abandoned oil wells, including numerous leaking wells. Signal Hill formed its redevelopment agency in 1978 with the express intent of remediating these environmentally distressed properties. Since 1989, the Agency has

re-abandoned over 92 wells and invested over \$15 million into soil remediation, ground water clean-up and oil well abandonment projects. Over one million barrels of oil are pumped annually in Signal Hill, creating unique issues for our community and the need for an individually tailored storm water programs. The City's historical legacy also dictates the need for an individual MS4 permit, in order to better tailor storm water programs for Signal Hill's unique industrial history and existing industries.

This unique industrial heritage and the problems associated with the City's petroleum and other heavy industries, led Signal Hill to apply for and receive its own stand-alone County Sanitation District. Although the Los Angeles County Sanitation Districts functions as a county-wide system for 77 municipalities, Signal Hill's Sanitation District #29 is a stand-alone entity, with its own board of directors, maintenance staff, budget, permits and fee structure. The application for our individual MS4 Permit is simply another local agency responsibility that Signal Hill has determined is appropriate to address on its own at this time because of the unique runoff issues that confront our community.

Our City Council directed City staff to move ahead on a Storm Water Quality Master Plan, which will be a comprehensive plan for water quality in our community. Signal Hill has worked hard to improve water quality, including the installation of CDS units and 14 trash nets in the Hamilton Bowl. We have installed full capture devices in the majority of our 174 catch basins that drain into the Los Angeles River. We have also implemented SUSMP and LID requirements on dozens of developments, including state of the art infiltration devices on a concrete-batch-plant, which was recently studied by the National Academy of Sciences. We have moved forward implementing new programs, including additional inspections and have budgeted for the installation of two auto sampler monitoring stations this next year. The City is also designing a dry-weather diversion program in order to address dry-weather requirements for the LA River Metals and Bacteria TMDLs.

Issuing an individual permit to Signal Hill will not open up the flood gates to 88 ROWD's as suggested by your staff. Signal Hill's runoff is not co-mingled in some larger MS4 system. Issuing an individual NPDES Permit does not mean that the City of Signal Hill will halt its participation in important watershed and regional efforts to address water quality. Our City Manager has taken the lead in coordinating the 40 cities, Los Angeles County and Caltrans to complete the Special Studies on the Los Angeles River Metals TMDL. These special studies are now into their second of three planned study years, with a total investment of \$2.1 million from the 42 public agencies. We participated in the organization and administration of the coordinated monitoring plan and we participate in the County's public education program.

Signal Hill is also leading a seven member group of cities in developing the Implementation Plan for the Los Cerritos Channel Metals TMDL, a TMDL adopted by the U.S. EPA in 2010. In addition, we are participating in Jurisdictional Group One Group for the LA River Metals TMDL. Your staff is involved in all of these efforts. Your staff, as well as our neighboring cities, can attest that Signal Hill's is not only a willing participant in group planning efforts, but a leader of regional and sub-regional efforts to improve water quality.

The LAR Metals TMDL was adopted by the Regional Board in 2006 and assigned group waste load allocations to the Jurisdictional Groups. We commented to the Regional Board at the time that this requirement would have unintended consequences and would essentially make one city (or a small subset of cities) responsible for all of the cities in their Jurisdictional Group. This implementation scheme, combined with the Board's current position that the existing permit imposes "Joint and Several Liability" on the permittees, has resulted in Signal Hill concluding that it can ill afford to continue to participate in the larger system-wide permit. Adding to Signal Hill's concerns with the Regional Board's position on joint and several liability is the recent Ninth Circuit decision in the NRDC v. County of Los Angeles case. The Board stated that your position is that compliance with the 2001 Permit's Iterative process does not constitute compliance with the Receiving Water limitation requirements in the 2001 Permit.

We recognize that the Board has the authority to issue large jurisdictional group permits where these larger permits have been requested by the participating local agencies, it is clear from the federal regulations that Signal Hill cannot be forced into the large multi-jurisdictional permit against its will. The Regional Board staff has cited in the past what they believe are the relevant sections of the federal codes to argue that the Board has the discretion as the permitting authority to determine whether to issue the system-wide or jurisdiction-wide permit. This assertion is incorrect, since it is clear from a plain reading of the federal codes that cities have the express ability to submit individual applications in conjunction with other MS4 operators, or alternatively, submit a **"distinct permit application which only covers discharges from the"** individual city system in question.

40 CFR Section 122.26(a)(5) reads as follows:

(iii) The operator of a discharge from a municipal separate storm sewer which is part of a large or medium municipal separate storm sewer system must:

(A) Participate in a permit application (to be a permittee or to be co-permittee) with one or more other operators of discharges from the large or medium municipal storm sewer system which covers all, or a

portion of all, discharges from the municipal separate storm sewer system; (or)

(B) Submit a distinct permit application which only covers discharges from the municipal separate storm sewers for which the operator is responsible.

Further, the federal codes make it clear that a city has the right to apply for and obtain their own individual NPDES Permit under Sections 122.26(a)(3)(iii) and 122.33. The individual permit requested to be issued would be a ***“distinct permit application which covers the discharges from the municipal separate storm water sewers for which the operator is responsible.”*** (Section 122.26(a)(3)(iii)(B)). The federal codes are also clear that small cities, with populations of under 100,000 residents, have the right to be included in a system-wide permit, if they so choose, or they may apply for their own individual permit. (Section 122.33) In particular, for small MS4 Permittees (which would include the City of Signal Hill), the regulations are clear that such cities cannot be forced into a joint system-wide NPDES permit.

Section 122.30-122.37 of the federal regulations identify the permitting and application requirements for small MS4 dischargers. Section 122.33 is entitled ***“If I am an operator of a regulated small MS4, how do I apply for an NPDES Permit and when do I have to apply?”*** This section identifies the various permitting options available to a small city, including specifically allowing small cities to obtain their own individual permits, even if they are part of a large or medium size MS4 system.

We understand that the Regional Board intends to incorporate numeric limits from the various TMDLs into the upcoming permit. The Regional Board also intends to hold cities responsible for strictly complying with numeric water quality standards and numeric water quality based effluent limits in the upcoming MS4 permits. We believe that these policies and permit language will result in a watershed of litigation and enforcement activity in the 2012 permit.

As mentioned, the Regional Board's decision to back away from the iterative BMP process and its position on “joint and several liability” has already led to litigation in the region under the 2001 permit. For example, the NRDC and the Baykeeper are suing the County of Los Angeles for violations of water quality standards for the Los Angeles and San Gabriel Rivers based on monitoring station data. The County in turn filed government tort claims with over 50 cities in the County and has initiated litigation against the Cities of Downey and Los Angeles, who refused to sign tolling agreements with the County. Further, the tolling agreements that have been signed will only likely delay additional massive County-wide stormwater litigation until the final outcome of the NRDC litigation. The NRDC v. County litigation, and the County's decision to file

litigation against two other cities is just the beginning of the "watershed of litigation" that many predicted and largely resulting from this Board's decision to pull back from the iterative process and to insist on strict compliance with water quality standards. It is also the result of a large, multi-jurisdictional permit that appears to seek to impose joint and several liability on the permittees.

The Regional Board's policies have raised the issue of what approach should local governments follow in achieving compliance with water quality standards and permit requirements. Signal Hill does not choose to be included in the system-wide permit for a variety of reason, including its unique discharges, the prospect of being saddled with another's liability or being dragged into a massive County-wide "free for all" stormwater lawsuit as a result of the Board's policies on joint and several liability and the iterative process, the unfair grouped waste load allocations, and the proposed incorporation of strict numeric limits from the various TMDLs into the upcoming permit, enforced by the receiving waters limitations requirement.

Signal Hill believes that we must monitor and characterize our stormwater and urban runoff in order to design programs that address our particular impairments. The "top down" "one-size fits all" approach of a system-wide permit breaks apart as it cannot adequately address the individual circumstances of Signal Hill. The characteristics of water quality vary based on the mix of industrial, commercial and residential uses in our community, our history of brownfields, our proximity to major sources of airborne pollutants, the successful efforts of our city to regulate runoff and the availability of storm water infrastructure in our community to address water pollution, as well as other factors unique to Signal Hill.

Like the County of Los Angeles, which has applied to withdraw from their 2006 ROWD and now seeks an individual MS4 permit for the Los Angeles County Flood Control District, Signal Hill looks forward to working with you, the City of Long Beach and the Flood Control District in a collaborative process during the upcoming Permit renewal process and to obtaining our individual NPDES Permit.

NPDES Workshop Signal Hill's Request for an Individual MS4 Permit

By

Steve Myrter, Director of Public Works

November 10, 2011

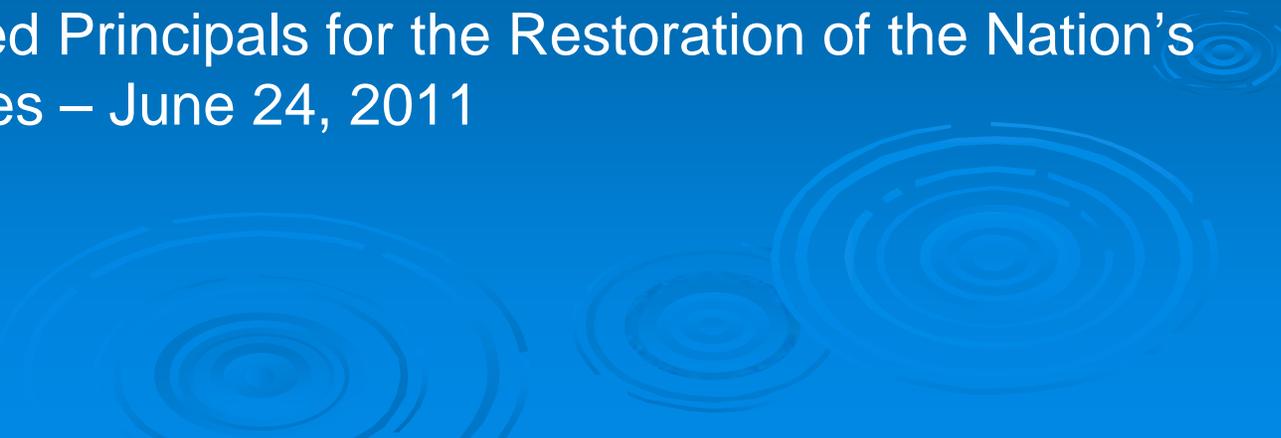


Presentation Outline

- I. City of Signal Hill's Case for an Individual MS4 Permit
- II. City's Unique Factors that Warrant an Individual Permit
- III. City's Actions Taken In Anticipation of Receiving an Individual Permit
- IV. Concerns with a System-wide MS4 Permit

“be open and honest, and listening to communities... recognize their values and seek to understand environmental issues through their eyes. We will work from the bottom up rather than taking a top down, one-size fits all approach.”

U.S. EPA's Adopted Principals for the Restoration of the Nation's Urban Water Bodies – June 24, 2011



Signal Hill's Individual Permit

- Opportunity for the Board to work with a small community that is taking seriously its responsibilities to improve water quality, while addressing our unique circumstances
 - Other cities have grouped together for their own reasons and we respect their decisions
 - We would hope that our decision is respected as well
- 

Signal Hill's Individual Permit

- Signal Hill submitted our ROWD application in June of 2006
- The Executive Officer replied on July 12, 2006 that Signal Hill was “***proposing some positive changes***” and that staff looked “***forward to working out these details with your Staff during the MS4 Permit Reapplication Process.***”

Signal Hill's Individual Permit

- Regional Board Staff responds five years later (July 13, 2011)
- Absent any response from the Board, Signal Hill has worked to design and implement new programs to insure compliance with our application for our individual permit
- Signal Hill is at 89% trash reduction rate, while the TMDL requires 60% this year.

City's Unique Factors

- Signal Hill is a small 2.1 square mile community, with a population of 11,072
- Discovery of oil in 1924 ushered in several decades of heavy industry, including oil well drilling, oil pumps, pipeline construction, tank farms and refineries
- Oil field covers 70% of the community
- Because of oil production and legacy of soil contamination, 1,700 abandoned wells, including numerous leaking wells
- Redevelopment Agency formed in 1978 to deal with these legacy issues
- Agency has invested \$15 million in soil remediation, ground water clean-up and 92 well re-abandonments
- Over 600 active and reserve wells - 1 million barrels of production

City's Unique Factors

- Oil Legacy creates need for individual MS4 Permit and individually tailored storm water programs
- Signal Hill applied for an individual stand alone County Sanitation District to deal with this legacy – Sanitation District 29
- Although part of a system-wide Districts, Sanitation District 29 has its own board, maintenance staff, budget, permits and fee structure
- Individual permit will be more responsive to unique issues confronting Signal Hill

City's Unique Factors

- Signal Hill is a hill that rises 300 feet above the City of Long Beach
- Signal Hill is surrounded on all sides by the City of Long Beach
- Runoff originates in the upper hill portions of the community and drains into the Los Angeles River and the Los Cerritos Channel
- Signal Hill drains through the City of Long Beach through County FCD facilities (two retention basins and pipes)
- Regional Board is planning on issuing an individual permit to the City of Long Beach

Signal's Hill Actions

(Based on Regional Board's 2006 Letter)

- City Council directed preparation of Storm Water Quality Master Plan
- Signal Hill has installed CDS units, 14 trash nets on the Hamilton Bowl, completed the installation trash capture devices on our 134 catch basins
- Implemented SUSMP and LID on dozens of developments
- National Academy of Sciences studied "state of the art" runoff requirements at recently constructed Signal Hill concrete batch plant

Signal's Hill Actions

- City has submitted monitoring plan with our ROWD
- City has initiated its own monitoring program
 - Budgeted installation of two auto-samplers
 - Additional Samplers to be installed on drains to Los Angeles River and Los Cerritos Channel
- City is designing dry-weather diversion program for LA River Metals and Bacteria TMDL

Signal Hill and Regional Efforts

- City will continue to participate in regional efforts, even with individual permit
 - Leading LA River Metals TMDL Special Studies
 - Leading Los Cerritos Channel Metals TMDL Implementation Plan
 - Participates in the LA River CMP
 - Participates in County-wide Public Outreach Effort

Major Issues With the System-Wide Permit

- LAR Metals TMDL assigns “group waste load allocations” to Jurisdictional Groups
- Board’s current position on “Joint and Several Liability” has the practical effect of making one city responsible for all cities
- Board’s position is that compliance with the “iterative process” does not constitute compliance with Receiving Waters limitations requirement in the 2001 Permit (see 9th Circuit ruling in NRDC v. Los Angeles County)

Major Concerns with the System- Wide Permit

- Board has authority to issue system-wide permits when requested by the cities
 - Federal regulations prohibit the Regional Board from forcing a system-wide permit on cities.
 - Cities are allowed to participate with one or more operators or
 - ***“Submit a distinct permit application which only covers discharges from the municipal separate storm sewers for which the operator is responsible***
- (40 CFR Section 122.26(a)(5)(b))

Concerns with the System-Wide Permit

- Federal codes allow for ***“a distinct permit application which covers the discharges from municipal separate storm water sewers for which the operator is responsible”*** (Section 122.26(a)(3)(iii)(B))
- Cities under 100,000 in population have the right to choose to be included in a system-wide permit or to apply for an individual permit

Concerns with the System-Wide Permit

- Federal regulations identify the permit and application process for small MS4 dischargers
- Section 122.33 outlines the application process, permitting options and specifically allows small cities to obtain individual permits, even if they are part of a large or medium sized MS4 system

Numeric Limits

- Regional Board appears to be headed toward incorporating numeric limits from the TMDLs into the MS4 permits
 - Regional Board appears to be headed toward holding cities strictly responsible for compliance with water quality standards and effluent limits
- 

Joint and Several Liability

- Joint and Several Liability, Receiving Waters Limitations language in the permit and Board's lack of support of BMPs and the iterative process is the beginning of the “watershed of litigation” that many predicted
 - NRDC and Baykeeper v. County of Los Angeles
 - County filing of tort claims with 50 cities
 - County v. Cities of Downey and Los Angeles
 - Recent 9th Circuit Court Ruling

Conclusion

- Signal Hill does not choose to be included in the system-wide permit:
 - City has unique legacy issues, unique facilities, unique topography which require specific programs
 - City is proposing a robust monitoring program
 - Does not want to be dragged into massive County-wide litigation “free for all”
 - City does not want the “top down” “one-size-fits-all” system-wide permit being proposed
 - City looks forward to working the Board, the City of Long Beach and the Flood Control District in a collaborative process to obtain our individual permit

LA PERMIT GROUP

LA County MS4 Permit Development Comments

November 10, 2011

LA Permit Group

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

LA Permit Group Structure

LA Permit Group

*(Heather Maloney,
City of Monrovia)*

Negotiating Committee

*Heather Maloney, LA River • Heather Merenda, Santa Clara River
John Dettle, Santa Monica Bay • John Hunter, LA River
Joe Bellomo, Malibu Creek/Rural Watersheds • Patricia Elkins, Dominguez Channel
Rene Bobadilla, LA/San Gabriel River • Ray Tahir, San Gabriel River*

Technical Sub-Groups

LID/SUSMP

(Kosta Kaporis, City of Los Angeles)

Monitoring

(John Dettle, City of Torrance)

Reporting

(Lisa Bugrova, City of San Dimas)

TMDLs

(Heather Merenda, City of Santa Clarita)

Permit Development

Additional time should be allowed to develop the permit

- * Takes time to organize 80+ municipalities
- * 28 TMDLs
 - * EPA TMDLs
 - * Many are still in draft
 - * Some will not be adopted until 2013
- * City approval process
- * Funding Challenges
- * Extend permit adoption

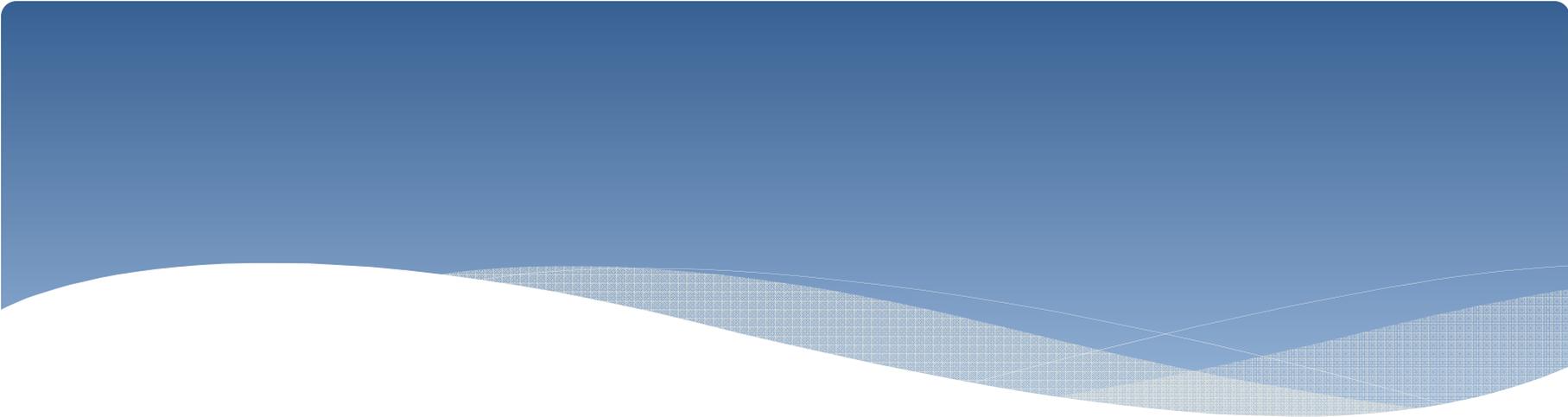
Permit Structure

Flexibility is Key

- * Flexibility should be preserved to reflect the vast varying nature of LA County's sub-regions and TMDLs
- * Permit should be based on existing resources and sound science

Sub-Group Discussion Items

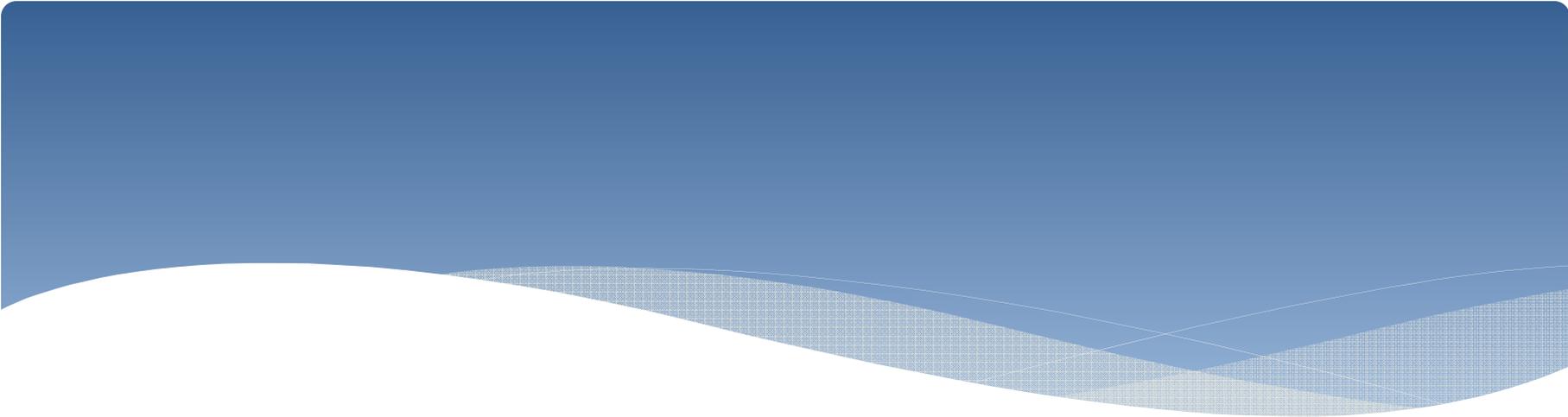
- * TMDLs
- * Development Programs
- * Monitoring
- * Reporting



TMDLs

Iterative Approach to TMDLs, WQBELs, and Waste Load Allocations

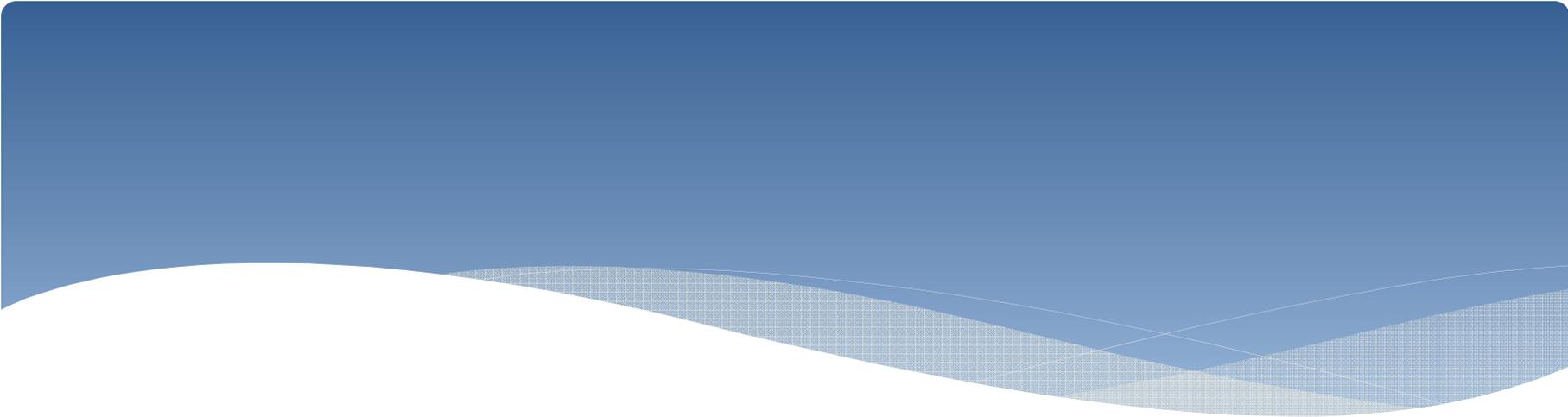
- * Want to ensure that iterative approach is retained
- * Revised receiving water limitation language to ensure retention and inclusion of the iterative process;
- * WLA attainment through best management practices;
- * Detailed, watershed based implementation plans to support and inform the iterative approach;
- * Integrated watershed monitoring will also support this approach



Development Programs

Development Programs

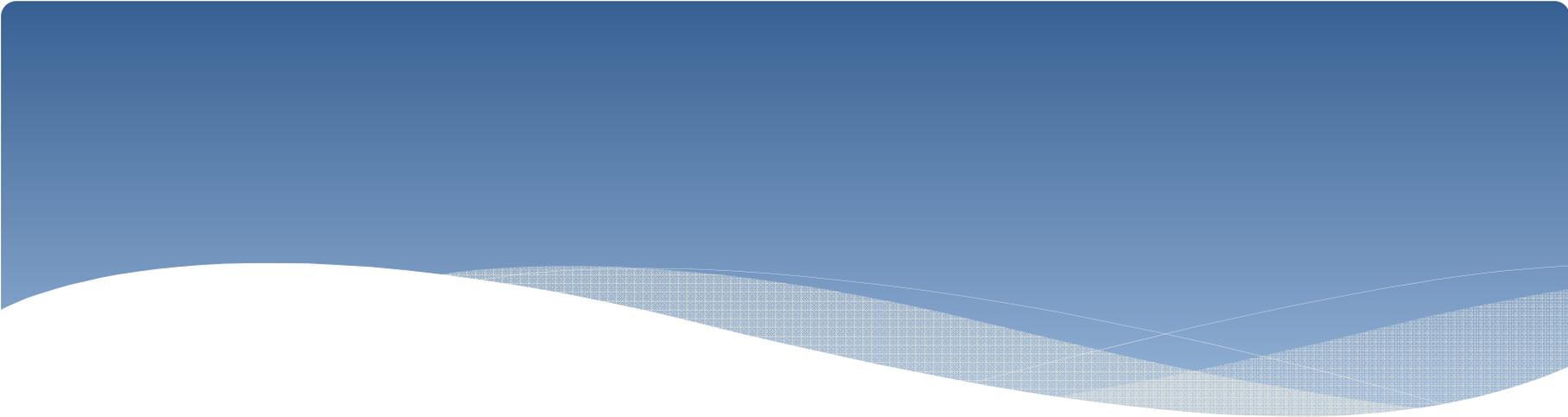
- * Development Programs should be based on the goal of improving stormwater quality not the specific methodologies
- * Development Programs should be tailored to the unique characteristics of LA County
 - * Development Programs should be based on a design storm
 - * Municipality should be able to prioritize BMPs based on unique characteristics and TMDLs



Monitoring

Integrated Watershed Monitoring

- * Permittees recognize benefits of having Integrated Watershed Monitoring Plans (IWMP) for all TMDLs within each Watershed
 - * 84 cities and 28 TMDLS results in too many plans and annual reports for Permittees and Board to manage
 - * IWMP eliminate redundancy and data gaps and give the Big Picture for Watershed Health
 - * The purpose of the IWMP should be to focus on problem identification and BMP selection and not trigger enforcement action



Reporting

Reporting

- * Current Permit Reporting should be streamlined
- * Online Reporting System for Annual Report Submission such as SMARTS
- * Once a milestone or requirement is documented as met, the item should be removed from report requirements
- * Questions in the Annual Report should correspond directly to language in the Permit

Conclusion

- * Extend permit development timeline
- * Economically reasonable
- * Create flexibility
- * Coordinate Monitoring
- * Provide an Iterative Process
- * Streamline reporting
- * Tailor Development Programs to the unique characteristics of LA County

Los Angeles MS4 Permit Workshop

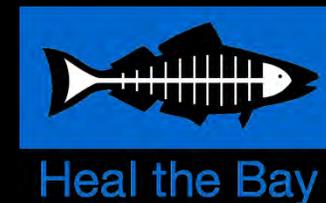
November 10, 2011



OVERVIEW

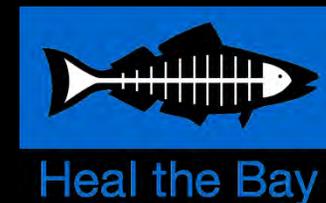
Support Single Permit with WMA specifics

- Nature of LA County MS4
- Watershed-based TMDLs
- Storm water Pollution Abatement Fee (AB 2554)
- On-line survey



PERMIT REQUIREMENTS: CURRENT PERMIT

- Discharge Prohibitions – Part 1
- Receiving Water Limitations – Part 2
- Compliance Monitoring (Mass Emissions Stations)



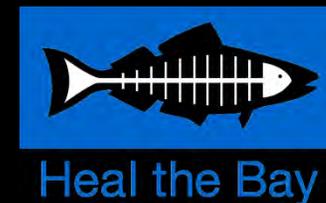
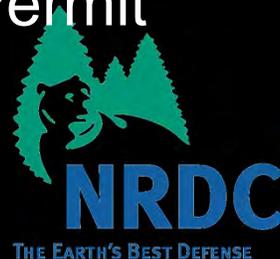
PERMIT REQUIREMENTS: SUGGESTIONS

- Discharge Prohibitions/Receiving Water Limitations – Leave As Is
 - Successful provisions legally upheld over time
 - State Court
 - Federal Court
 - Required by CWA §§1313, 1342(p); 40 C.F.R. §122.44(d)(1)
 - Consistent with Regional Board's longstanding position



PERMIT REQUIREMENTS: SUGGESTIONS

- Compliance Monitoring – Improve to provide clarity
 - Retain Mass Emissions Stations/Receiving Water Monitoring
 - Requested by the dischargers
 - Successfully employed to determine compliance
 - Provides clarity on sources of pollution
 - Add End of Pipe Monitoring
 - Each discharger in each sub-watershed should provide regular end of pipe monitoring to coordinate with samples collected at MES
 - Will help provide additional clarity to permittees on the sources of pollution
 - See Ventura MS4 Permit



PERMIT REQUIREMENTS: SUGGESTIONS

- Regional Board should not implement “action levels” for WQS compliance – that approach would be inconsistent with the longstanding position that 2.1 and 2.2 are stand alone, distinct requirements
- “Action levels” may be considered for interim goals in TMDLs where consistent with the TMDL and included in the permit.



LOW IMPACT DEVELOPMENT

Consensus on the superiority of LID practices

Ocean Protection Council:

“LID is a practicable and superior approach . . . to minimize and mitigate increases in runoff and runoff pollutants.” (LID Resolution, 2008)

U.S. Environmental Protection Agency:

“Implementing integrated LID practices can result in enhanced environmental performance while at the same time reducing development costs when compared to traditional stormwater management approaches.”
(LID Cost Report, 2007)



LOW IMPACT DEVELOPMENT

Necessity for Clear Implementation of LID

Los Angeles Regional Board:

“The Implementation of LID techniques across the United States and Canada has demonstrated that . . . LID techniques results in more benefits than single purpose stormwater and flood control infrastructure . . . There is a growing acceptance by stormwater professionals and local governments to integrate LID strategies that limit impervious area, and associated onsite retention criteria into . . . MS4 permits.”
(Ventura County MS4 Permit, July 2010)



LOW IMPACT DEVELOPMENT

Necessity for Clear Implementation of LID

U.S. Environmental Protection Agency:

“EPA’s primary objective for incorporating LID into renewed MS4 permits ... is that the permit must include clear, measurable, enforceable provisions for implementation of LID.... [P]ermit[s] should [also] include a clearly defined, enforceable process for requiring off-site mitigation for projects where use of LID design elements is infeasible.”

(Letter to SF RWQCB re: MS4 Permit, April 2009)



POLLUTION REDUCTION

	Best-performing conventional BMPS	LID	Best-performing conventional BMPS	LID
Suspended solids	80.6%	99.5%	75.4%	99.3%
Copper	78.2%	98.0%	69.1%	96.7%
Zinc	84.3%	98.9%	78.1%	98.8%
Phosphorus	69.1%	98.8%	70.7%	98.6%



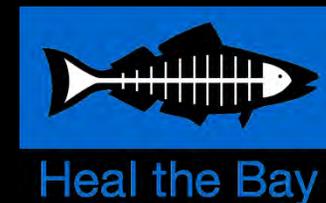
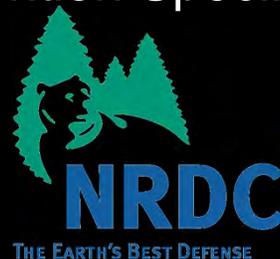
POLLUTION REDUCTION

Biofiltration

Full biofiltration systems are likely to attenuate only:

- 57 percent of TSS
- 80 percent of Tcu
- 62 percent of TZn
- 78 percent of TP
- 55 to 65 percent of total Kjeldahl nitrogen / 20 percent of nitrate

(Richard Horner, Assessment of the San Francisco Bay MRP, 2009; BASMAA, Draft Model Bioretention Specifications, Dec. 2010)



POLLUTION REDUCTION

Permit Concerns: Biofiltration

Draft Core Permit Requirements (Oct. 27, 2011)

“If it is not technically feasible to retain on-site the entire storm water runoff volume, the project must be designed and operated to biofiltrate 1.5 times the storm water runoff volume that cannot be retained on-site.”

Ventura MS4 Permit

“. . . shall achieve 1.5 times the . . . pollutant load reduction as would have been achieved by on-site retention.”



POLLUTION REDUCTION

Permit Concerns: Biofiltration

“ . . . the project must be designed and operated to biofiltrate 1.5 times the storm water runoff volume. . . . ”

U.S. Environmental Protection Agency:

“[P]ermit[s] should [also] include a clearly defined, enforceable process for requiring off-site mitigation. . . . ”

(Letter to SF RWQCB re MS4 Permit, April 2009)



COST OF LID

LID is fiscally and environmentally beneficial

U.S. Environmental Protection Agency:

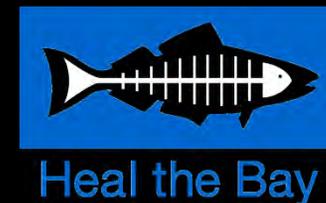
“in the vast majority of cases, significant savings were realized due to reduced costs” as a result of LID.

(LID Costs Study, 2007)

ECONorthwest:

No staff in surveyed jurisdictions had “observed that developers were choosing to invest in greenfield projects over redevelopment projects because of [LID stormwater] standards.”

(Managing Stormwater in Redevelopment and Greenfield Report, 2011)



EXISTING BUILT ENVIRONMENT

Retrofit Programs:



BMP PERFORMANCE STANDARDS

“Each Permittee shall require that treatment control BMPs...be designed, at a minimum, to achieve the BMP performance criteria for storm water pollutants likely to be discharged as identified in Attachment ‘C’...”

- Order No. R4-2010-0108, page 37



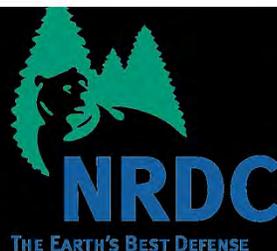
ATTACHMENT C
Treatment BMP Performance Standards

Effluent Concentrations as Median Values

BMP Category	Total Suspended Solids mg/L	Total Nitrate-Nitrogen mg/L	Total Copper, ug/L	Total Lead, ug/L	Total Zinc, ug/L
Detention Pond	27	0.48	15.9	14.6	58.7
Wet Pond	10	0.2	5.8	3.4	21.6
Wetland Basin	13	0.13	3.3	2.5	29.2
Biofilter	18	0.36	9.6	5.4	27.9
Media Filter	11	0.66	7.6	2.6	32.2
Hydrodynamic Device	23	0.29	11.8	5	75.1

Expected BMP pollutant removal performance for effluent quality was developed from the WERF-ASCE/ U.S. EPA International BMP Database, 2007.

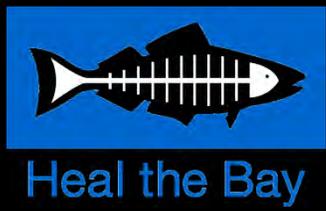
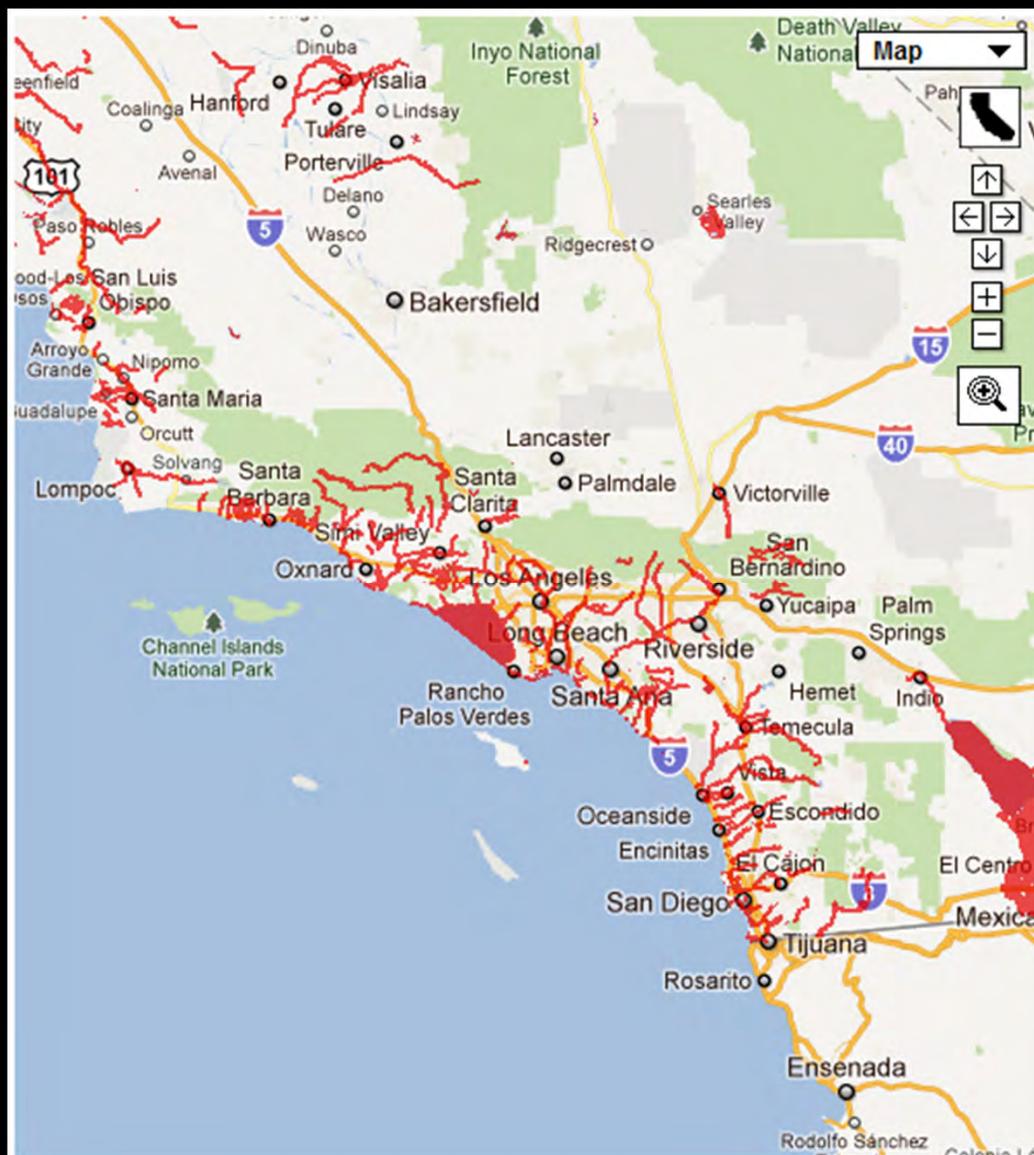
See Part 3.A.3 (Storm Water Quality Management Program Implementation- General Requirements).



RETROFIT

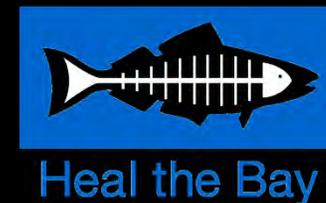


2010 303(d) LIST



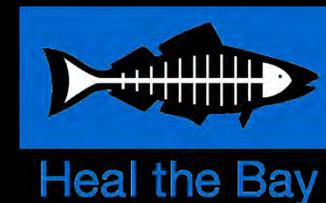
TMDLs

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
 Santa Monica Bay Beaches Bacteria TMDL 2. Santa Monica Bay Nearshore and Offshore Debris TMDL
 Malibu Creek and Lagoon Bacteria TMDL
 Malibu Creek Watershed Trash TMDL
 Malibu Creek Watershed Nutrients TMDL (USEPA established)
 Ballona Creek and Wetland Trash TMDL
 Ballona Creek Estuary Toxic Pollutants TMDL
 Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL
 Ballona Creek Metals TMDL
 Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
 Marina del Rey Harbor Toxic Pollutants TMDL
 Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)
 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
 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
 San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (USEPA established)
 Legg Lake Trash TMDL
 Los Cerritos Channel Metals TMDL (USEPA established)
 Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL



UPCOMING TMDLs

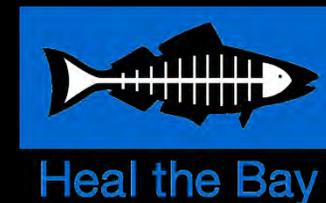
- Los Angeles Area Lakes TMDLs (in development by USEPA)
- Santa Monica Bay DDT and PCBs TMDL (in development by USEPA)



WASTELOAD ALLOCATIONS (WLAs)

“Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.”

- 40 CFR § 122.44(d)(4)(vii)(B)



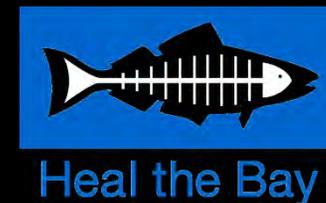
VENTURA COUNTY MS4

“This Order incorporates applicable WLAs that have been adopted by the Regional Water Board and have been approved by the OAL and the U.S.EPA.”

“Part 5 of this Order incorporates provisions to assure that Ventura County MS4 Permittees comply with WLAs and other requirements of TMDLs....”

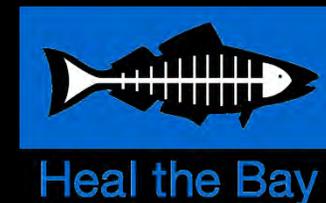
“Each Permittee shall attain the stormwater WLAs incorporated into this Order....”

-Order No. R4-2010-0108, pages 14 & 88



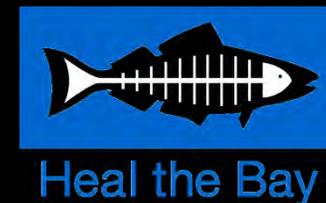
KEY MONITORING ELEMENTS

- Outfall
- Receiving Water
 - Mass Emission
 - Other
- Bioassessment
- Toxicity
- Beach
- TMDL



BIOASSESSMENT

- Track trends from year to year
- At least one reference and six permanent sites in each watershed
- Minimum annual monitoring at each location



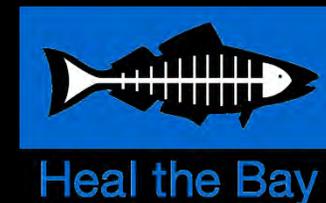
TOXICITY

- Outfalls and receiving waters
- Acute and Chronic
- Species sensitivity screening
- Minimum of two wet weather and two dry weather



BEACH MONITORING

- Beach bacteria monitoring on a weekly, year-round basis at AB 411 beaches
- Coordinate with other monitoring agencies to minimize costs



TMDLs

- Must include all monitoring requirements discussed in adopted TMDLs





MS4 Permit Workshop November 10, 2011

**Shahram Kharaghani, PhD, P.E., BCEE
Program Manager**



**City of Los Angeles
Department of Public Works
Bureau of Sanitation
Watershed Protection Division**



Outline

- MS4 Permit
- Los Angeles City Green Initiatives
- Proposition O
- TMDLs Implementation Plans
- Funding



MS4 Permit

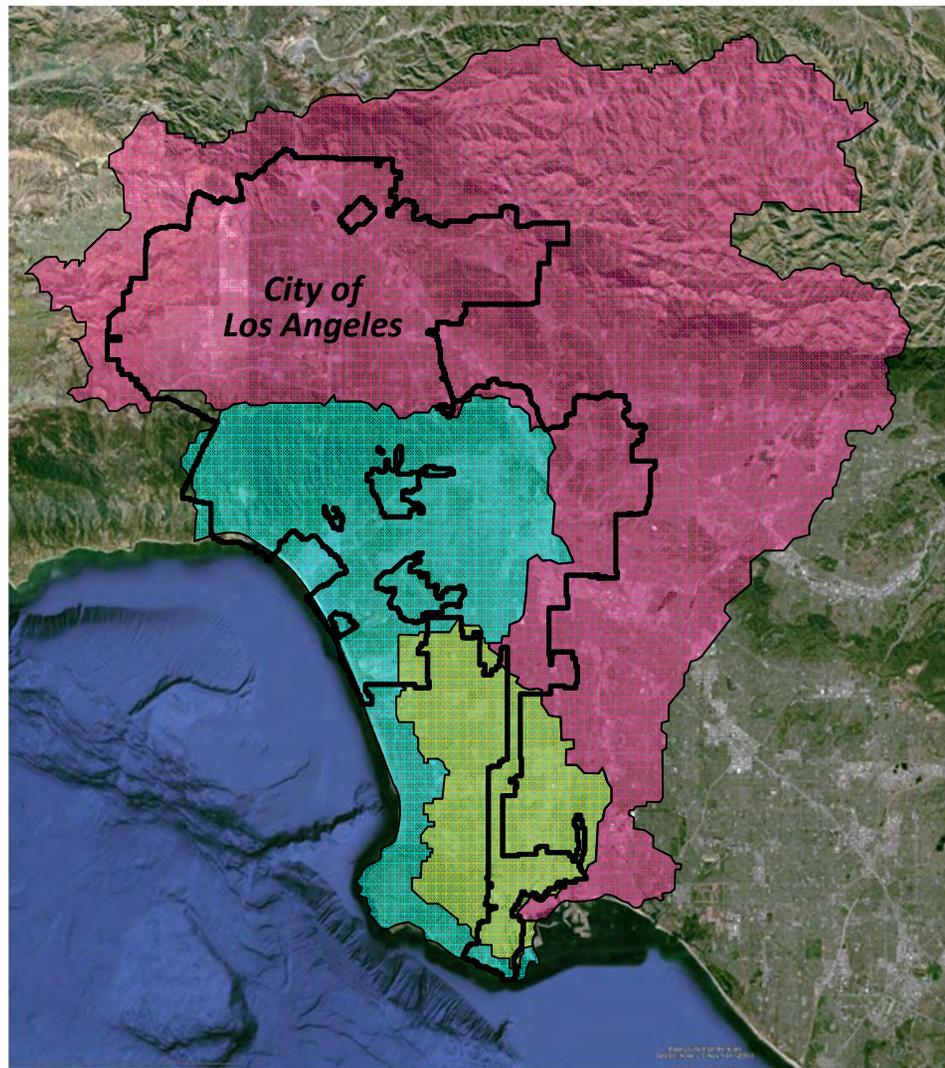
- Single Permit
- Watershed Based
- Programs Flexibility
 - Public Outreach
 - Inspection
 - Construction
 - Development (LID)
 - Monitoring and Reporting



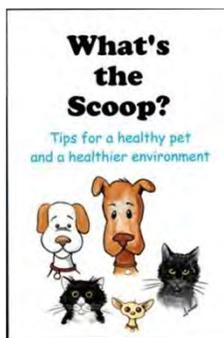
Watersheds

The City of LA contributes to four major watersheds

- Los Angeles River
- Santa Monica Bay
- Ballona Creek
- Dominguez Channel



Public Education



- Winner 2010 NACWA E-Media Program Award
- Winner 2010 CASQA Media Award
- Twitter, e-newsletter, blog, YouTube
- LA program materials used
- www.LAstormwater.org; 250-page web site receives over 100,000 hits monthly
- Educational Materials
- Public forums, schools



Public Agency Activities



- Conduct site audits at all 202 City yards/facilities for SWPPPs
- Meet regularly with City Departments to maintain awareness of stormwater related issues
- Provide training to City Staff on new general construction permit - QSP/QSD

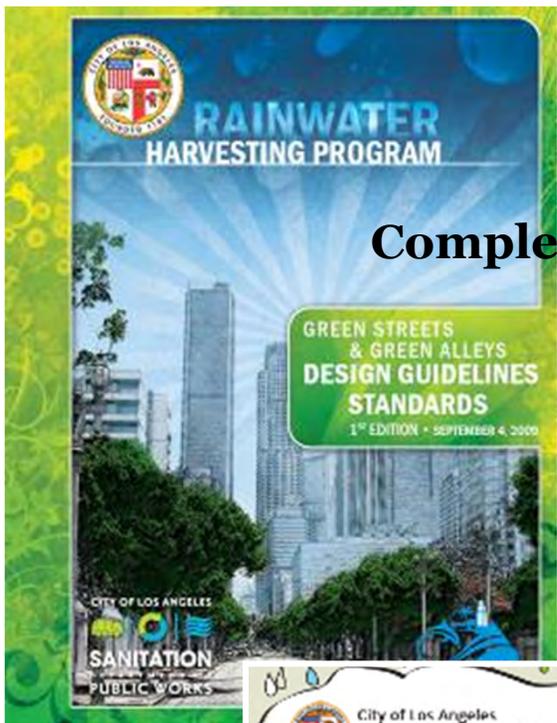


Green Initiatives

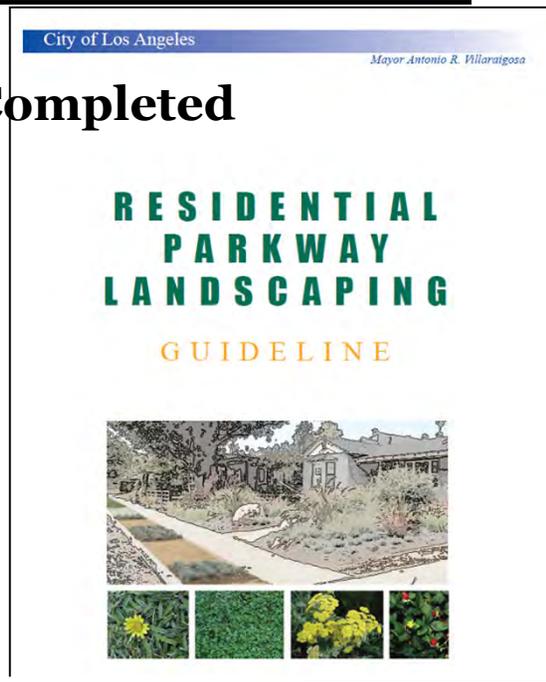
- **Manuals** – guidance standards
- **Green Streets** - Converting public right-of-way or parkway to open space for multi-benefit uses
- **Green Standards** – institutionalizes, applies to public and private
- **LID** – land developments and re-developments
- **Rainwater Harvesting** – capture and use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



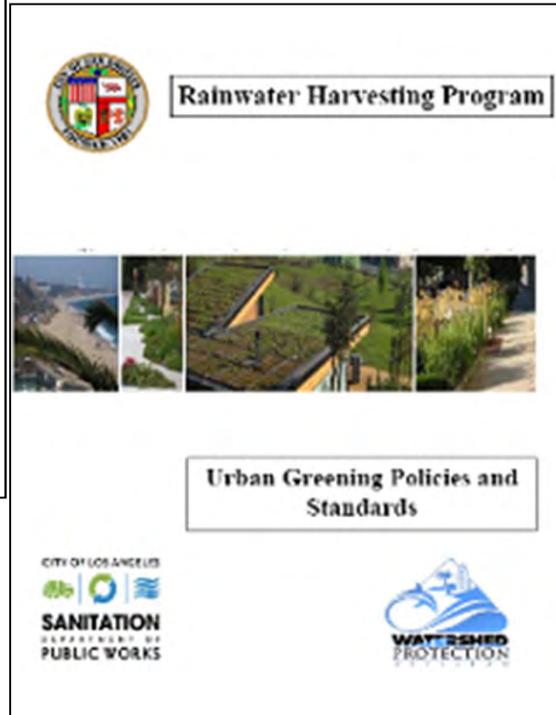
Green Streets Manuals



Completed



Completed



Target Completion: By end of 2013

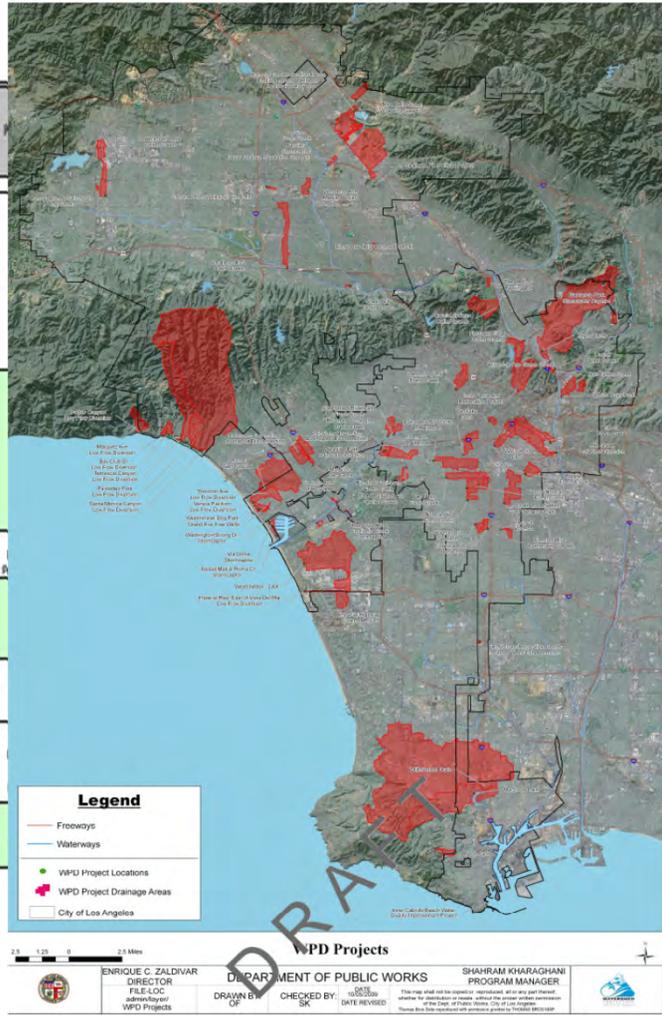
Completed



Green Streets Master List Database

Green Infrastructure Projects

No.	Project Title	Project Description	BMP1	BMP2	BMP3	BMP4	BMP5	CD	Est. Const. Cost	Funding Source/Secured \$ Amount	
Green Street											
1	6th Street Green Corridor Project	An innovative approach to greening in the heavily-impacted urban environment, the creation of a green corridor along 6th Street in the economically disadvantaged Los Angeles community of Boyle Heights will reduce air pollution, water pollution and the urban heat island effect, while simultaneously increasing pedestrian and bicycle safety for schoolchildren, enhancing the aesthetic experience of the neighborhood and improving local quality of life. The project includes the addition of 55 street trees as well as four rain gardens at crosswalk curb extensions that will capture and filter stormwater before it enters the groundwater system. Having a traffic calming effect, the curb extensions will also reduce vehicular speeds, significantly improving area safety.	Infiltration System (Swale)	Permeable Paving	Deceleration Planters	Drought Tolerant Plantings			14	\$127,500	
2	87th and Figueroa St Project	Project is located a low-income and densely populated portion in Council District 8 of City of Los Angeles. Area is a strip of City owned land that runs between Figueroa and 110 FWY on-ramp from Manchester to W. 87th St. Nearby elementary school is located about 1000 ft away from the project site. Project proposes construction of a safe and maintenance pedestrian path of travel that will enhance direct pedestrian access as well as stormwater from the adjacent areas. Proposed elements include: infiltration swales with sub-drains, permeable paving, vandal-resistant concrete bollard lighting, planting of native shrubby trees, an 11 ft wide tree well and a curble twice at parking edge.	Infiltration System (Swale)	Permeable Paving	Canopy Trees	Drought Tolerant Plantings	Tree Wells		8	\$750,000	
3	Alameda Street/Spring Street Arterial, Phase V (North Spring from Manager Street to Whittard Street)								\$1,517,000		
4	Balboa Blvd and San Fernando Road Intersection Greening Improvement	This project will provide two left turn lanes on Balboa Blvd to facilitate left turn demand onto Balboa Road, and create two right turn lanes on Balboa Road at San Fernando Road to facilitate the right turn demand. Elements could include measures such as canopy trees, infiltration swales, drought tolerant plantings, and permeable paving.	Infiltration System (Swale)	Permeable Paving	Canopy Trees	Drought Tolerant Plantings		12	\$750,000		
5	Baldosa Creek Greenway starting at Cochran Avenue	Baldosa Creek Greenway starting at Cochran Avenue will be three miles along Baldosa Creek and the BMPs will be vegetated swales with walkways, bike path, native vegetation to capture runoff from streets and small storm drains along the street crossings.	Infiltration System (Swale)	Permeable Paving	Deceleration Planters	Stormwater Detention	Drought Tolerant Plantings			BOS	
6	Burbank Blvd. between Lankershim Blvd and Class Ave	This project will transform Burbank Blvd. between Lankershim Blvd. and Class Ave. into a green street through the planting of green solutions for stormwater management and aesthetic improvements. Elements of the project include measures such as flowering canopy trees, planters, infiltration swales, drought tolerant plantings, and permeable paving.	Infiltration System (Swale)	Permeable Paving	Deceleration Planters	Canopy Trees	Drought Tolerant Plantings		\$8,000,000		
7	Cabrillo Paved Walkway/Bike Path Greening and Infiltration	The project, located in Palmdale City, will convert a "paper street" into a multipathway graded to direct flow into bioswales & tree wells for infiltration. Other elements include installation of mesh collector at stormwater inlets and smart irrigation system.	Bioswales	Tree Wells	Trash Collector	Smart Irrigation System		8	\$4,463,000	Prop Of \$1,337,886	



Green Streets Standard Plans

Green Street Standards

- [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)

- Incorporating LID Strategies and Techniques into stormwater management
- Developed an LID ordinance for development and redevelopments to capture, infiltrate and use the first $\frac{3}{4}$ of rain on site

Treats Polluted Urban Runoff:



Nearly 40% of the County's needs for cleaning polluted runoff could be met by LID projects on existing public lands.



Community Conservancy Imp. Mar '08

Increases Water Supply:



LID projects in L.A. County could save 41,000—83,000 AF/year of imported water (groundwater recharge).

NRDC, August 2008

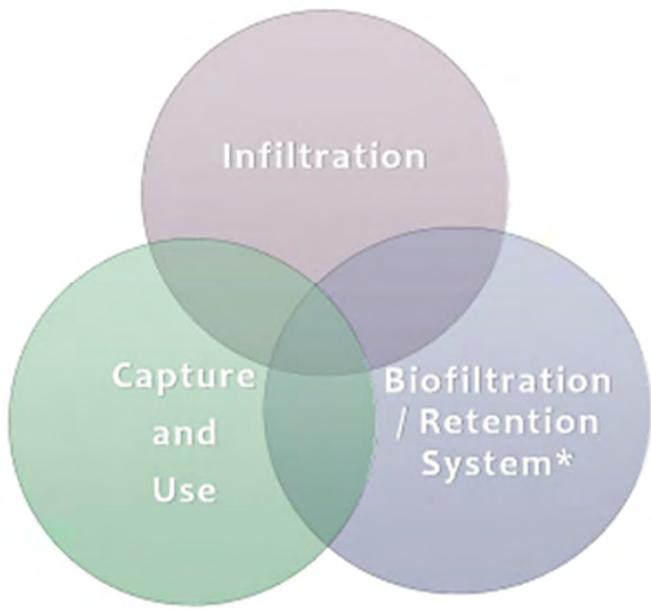
Energy Use & Climate Change:



Greater water supply instead of pumping from distant locations would save 72,000—233,500 MWH of energy per year.

NRDC, August 2008

Low Impact Development (LID)



Rain Gardens



Capture & Use with Rain Barrel



Planter Boxes



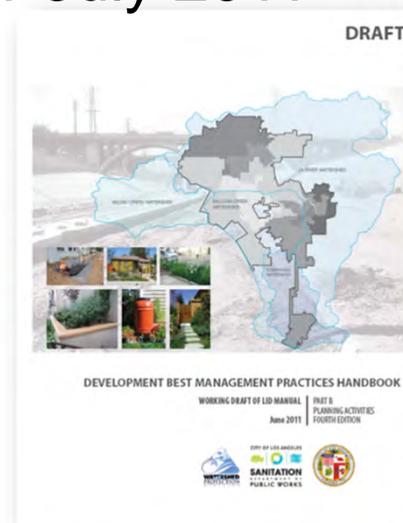
LID Ordinance

Ordinance effective
November 14, 2011
Operational April 14, 2011



Expands SUSMP to include small projects greater than 500 sf of impervious area

Handbook adopted by
BPW July 2011



Summarizes the City's permitting process, identifies stormwater mitigation measures, and references source and treatment control BMP information.

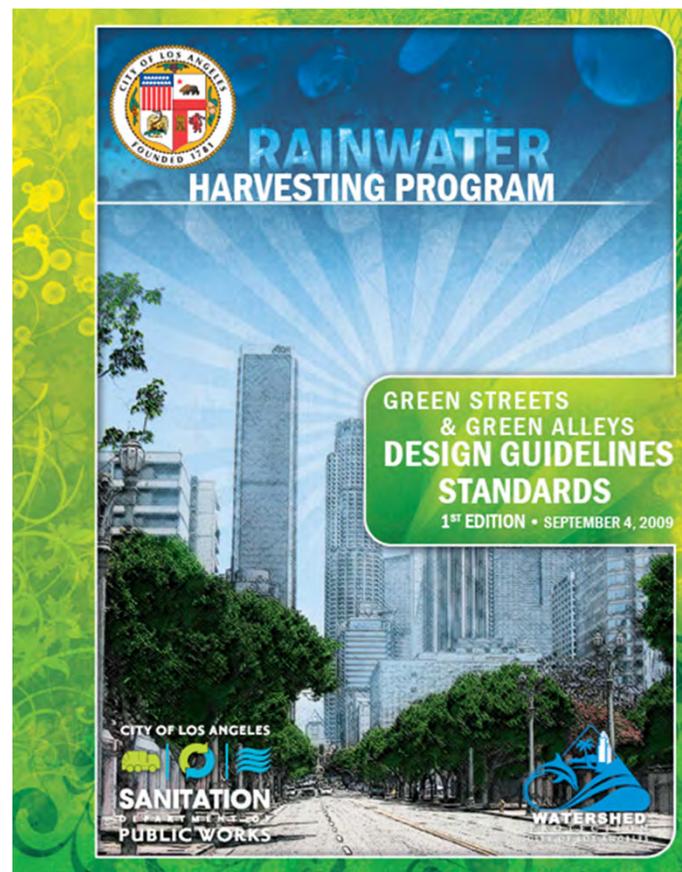


Small Scale Residential BMPs



Rainwater Harvesting Program

- This pilot program provided free rainwater harvesting installation for 600 property owners in targeted neighborhoods by Fall of 2009. The project was such a success that over 3,000 residents applied

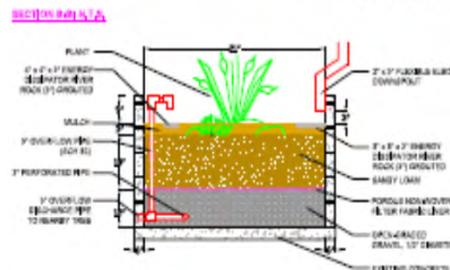


Rainwater Harvesting

Pilot program to harvest rainwater for irrigation use on residential and commercial properties completed.

Installed rain barrels, directed roof runoff to on-site pervious area, and constructed planter boxes.

Developing standards for City-wide implementation.



Rainwater Harvesting



LOWE'S (13500 Paxton)



Elmer Green Street



Capture & Use with Rain Barrel



Rain Gardens



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

- Adopted and released November 2011.
- Implementation of the standards on our stormwater capture.
- The uses are for spray irrigation, drip irrigation, car wash, dust control, water feather, etc.



LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC HEALTH



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

Tier I On-site collection of rainwater in rain barrels for on-site	
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. 	Landscape irrigation
	Car washing

Rainwater Harvesting Program

Urban Greening Policies and Standards

CITY OF LOS ANGELES
SANITATION
DEPARTMENT OF PUBLIC WORKS

WATERSHED PROTECTION
CITY OF LOS ANGELES



**Temescal Canyon Park
Rainwater Use**



CITY OF LOS ANGELES
SANITATION
DEPARTMENT OF PUBLIC WORKS



Green Street Projects

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

Riverdale Avenue – Green Streets Program
Demonstrate and monitor Green Streets

Elmer Avenue – Water Augmentation Study
Combined distributed and regional solution

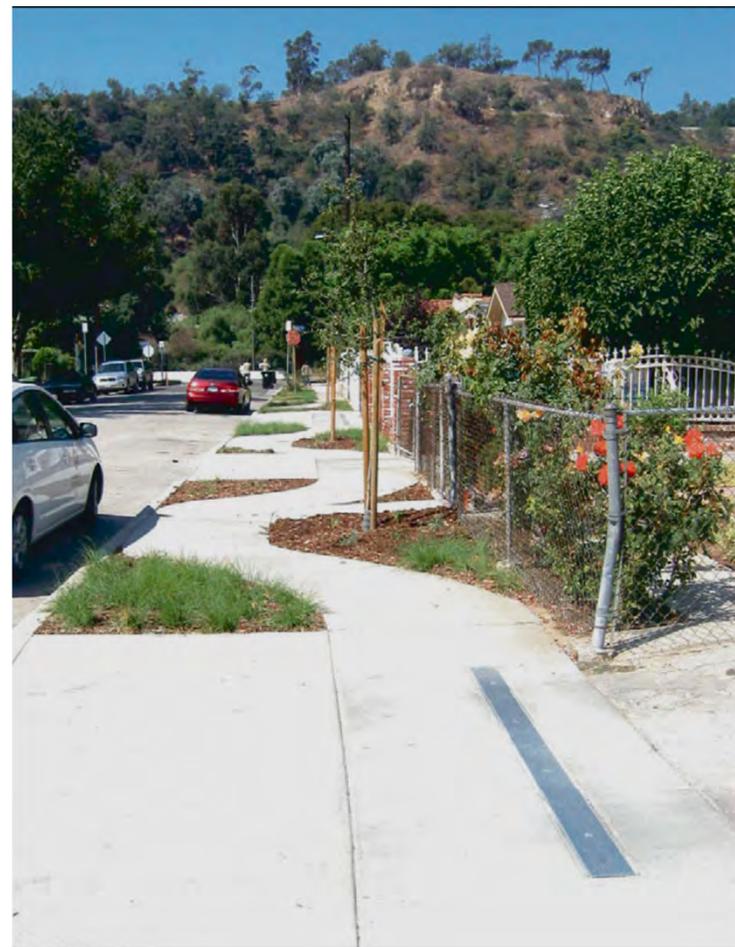
South Park – Ultra-urban Application
Hope Street and Grand Ave.



Oros Green Street



Before



After



**Stormwater
Garden &
Infiltration**



Elmer Green Street

Joint Project of:
City of Los Angeles
Los Angeles and San Gabriel Rivers Watershed Council
TreePeople



Infiltration galleries under street



Rain Barrels, Rain garden bioswales & porous pavement



Riverdale Green Street

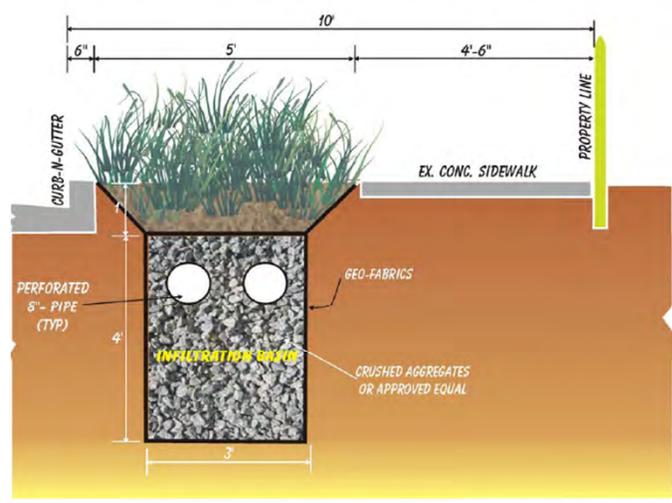


Figure 5 Profile of the Proposed Infiltration Basin

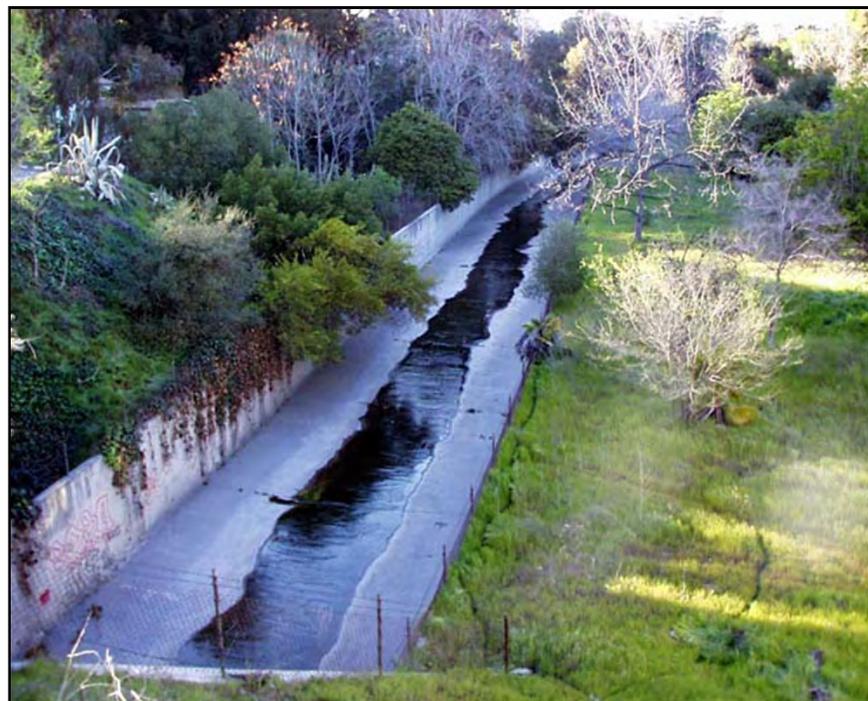


- Planters
- Porous pavement
- Infiltration gallery along parkway / sidewalk



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.



Proposition "O"

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

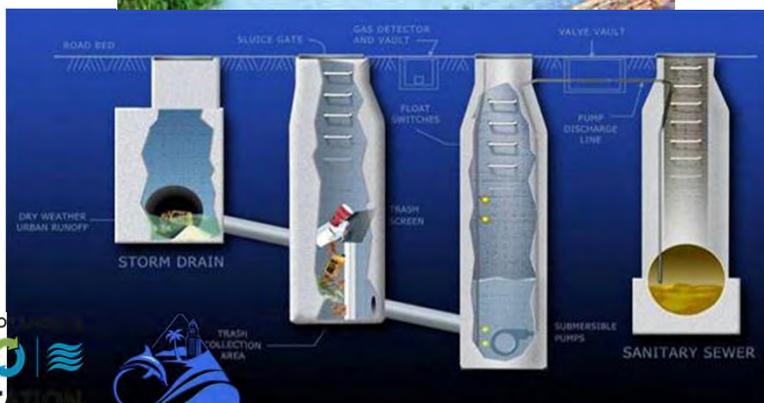
STORMWATER BOND MEASURE



South LA Wetlands Park



Imperial Highway Median Greening



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



South Los Angeles Wetlands Park Project

- 9-acre Metropolitan Transportation Authority (MTA) property transformed into wetland and riparian habitat
- 525-acre watershed area diverted and treated in a 4-acre stormwater treatment wetland
- Multi-beneficial use
 - Educational opportunities
 - Wildlife viewing
 - Historical railway elements
 - Community multi-use center
 - Historical building reutilization



Before



After



South Los Angeles Wetlands Park Project



Echo Park Lake

- 13 acre urban lake
- Provides hydraulic relief to storm drain
- Drainage area – 365 acres
- Targeted pollutants: Nutrients, PCBs, Pesticides, Trash
- Adds improved park, green areas, habitat
- Educational signage

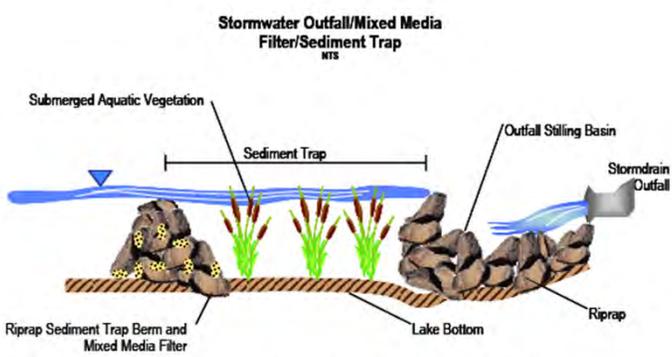
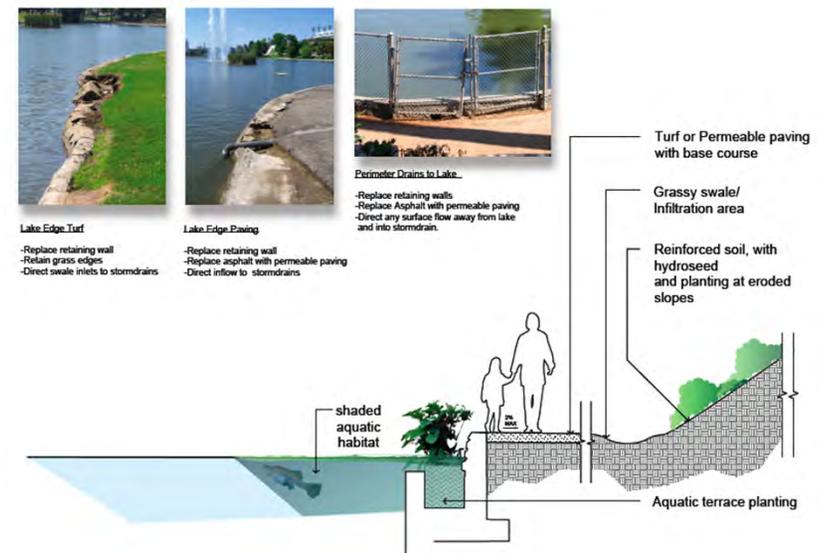


Figure 3-2: Schematic of the storm drain inlet sediment trap and media filter
Source: CDM.

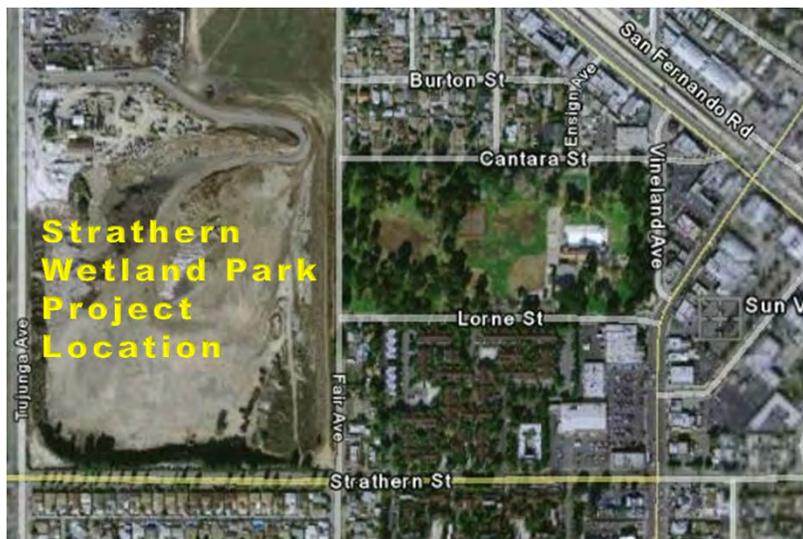


Machado Lake

- 45 acre urban lake
- Drainage area – 12,800 acres
- Targeted pollutants: Algae, Nutrients, - Toxics, Trash
- Rehabilitates lake, improves habitat
- Educational signage, improved park area



Strathern Wetlands Park



Sun Valley Park Infiltration Gallery



Trash TMDL

Catch Basin Inserts

Installed – 7,600 units

Catch Basin Screen Covers

Installed – 35,000 units

By Sept 2011, the City will reduce its trash contribution to receiving waters by 70%.



TMDLs

TMDLs affecting City of Los Angeles

- **Adopted TMDLs**

- Los Angeles River Trash
- Ballona Creek Trash
- Santa Monica Bay Beaches Bacteria (Dry Weather)
- Santa Monica Bay Beaches Bacteria (Wet Weather)
- LA River Nitrogen
- Marina Del Rey Bacteria
- LA Harbor Bacteria
- Ballona Creek Metals
- LA River Metals
- Ballona Creek Toxics
- Marina Del Rey Toxics
- Ballona Creek Bacteria
- Machado Lake Trash
- Machado Lake Nutrient
- LA River Bacteria
- Dominguez Channel / LA Harbor Metals and Toxics
- Santa Monica Bay Nearshore & Offshore Debris
- Machado Lake Toxics

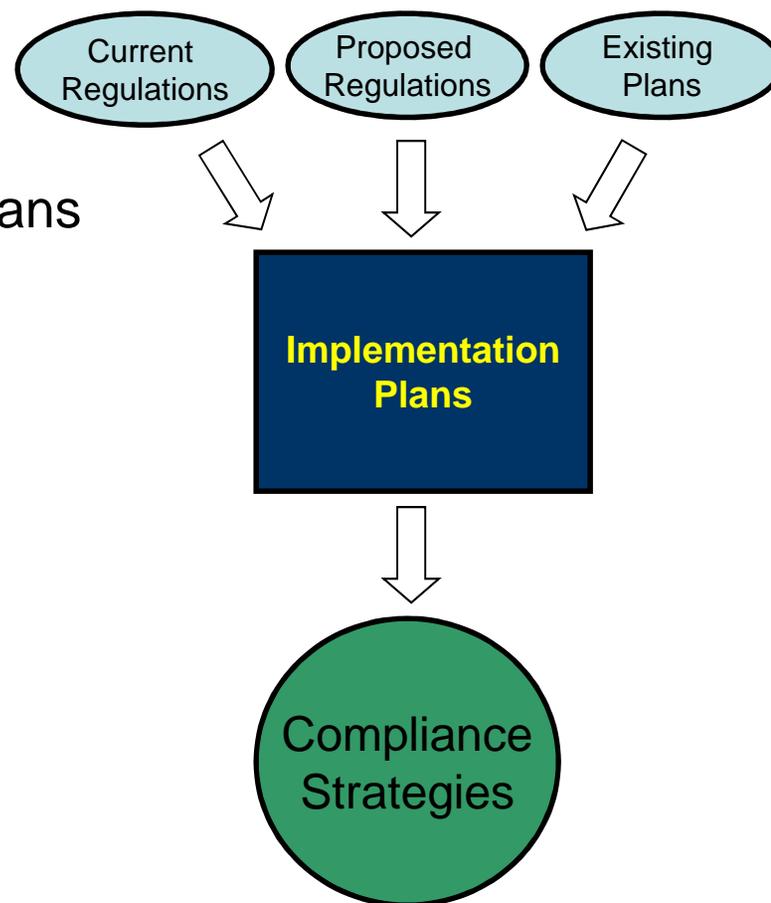
- **TMDLs in Development**

- Echo Park Lake Toxics
- Lincoln Park Lake Trash, nutrients
- Santa Monica Bay Toxics



TMDLs and Green Strategy

- Comprehensive Implementation Plans
- Roadmap to Green Approaches
- Stakeholder involvement, approval
- Different approach to meet water quality standards and regulations
- Avenues to seek funding
- Look at integrating into the MS4.



Funding Sources



Water Quality



\$8 Billion



Questions/Comments

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



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“To Protect the Beneficial Uses of Receiving Waters, while
Complying with All Pollution Abatement Regulations”

CITY OF LOS ANGELES



SANITATION
DEPARTMENT OF
PUBLIC WORKS

Major MS4 Permit Issues

Presented By
Ray Tahir

Baldwin Park, Compton, Claremont, Duarte, El Monte,
Gardena, Irwindale, Lawndale, Lomita, San Fernando,
and South El Monte



Several MS4 Permit Issues Require Resolution

1. The Target date for issuing the next round of L.A. County MS4 permits is too short
2. Need to resolve permit structure (single v. multiple permits)
3. There is the need to resolve the compliance point issue (outfall v. receiving water)
4. Need to resolve how the iterative process will operate
5. Need to revise the non-stormwater discharge prohibition to exclude water courses
6. WQBELs to attain WQs and TMDL/WLAs requires clarification
7. Need to verify information during permit discussions

Adoption Date too Soon

- The March target date for issuing the next round of MS4 Permits for L.A. County Municipalities is too soon
 - Regional Board gave Ventura County a little over two years from the time it issued a draft MS4 permit in 2007 to the time it adopted it in 2010
 - The Caltrans permit, adopted in 1999, 7 years over due for reissuance
 - The General Industrial Activity Stormwater Permit (GIASWP) was adopted in 1997 is now 9 years over due
 - L.A. Permits are more complicated and controversial
 - Will be packed with TMDLs than any permit issued in the State
 - Not clear on how USEPA adopted TMDLs will be incorporated into the next Permits
 - Impact of 9th Circuit ruling in NRDC v. LACFCD on next MS4 permits is uncertain
 - Issue of Permit Structure is not resolved (one v. several permits)
 - Bottom Line: there should be no rush
 - Let's take our time and do it right!

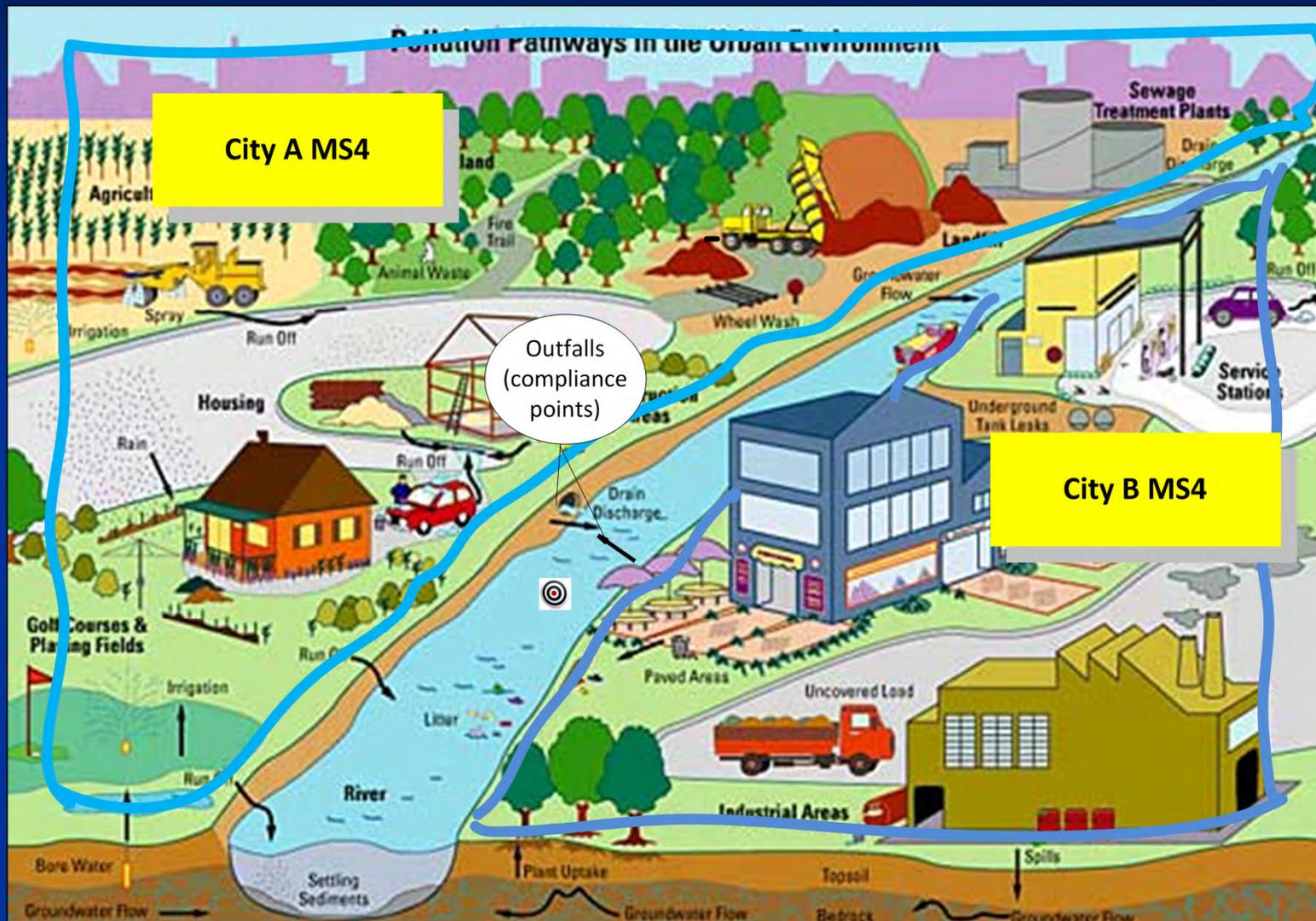
Outfall is the Compliance Point Not the Receiving Water

- All of the TMDLs (except trash) include the receiving water as the compliance point
- But the 9th Circuit Court ruled that the outfall is where compliance should be determined, not the receiving water
- Judges told NRDC that if you want evidence of exceedances sample at the outfall
 - Ruling supports federal stormwater regulation setting the outfall as the compliance point

Outfall is the Compliance Point Not the Receiving Water

- Setting the compliance point at the outfall enables better MS4 stormwater management
 - Will be able to determine to what extent an MS4 is generating pollutants that exceed water quality standards (includes TMDLs)
 - Data generated from outfall monitoring would establish a baseline (over a 5 year period) instead of relying on in-stream monitoring station data
 - BMPs could be focused on intra-MS4 pollution issues instead of issues outside of the MS4 in the receiving water (where you have commingled dischargers from multiple sources)
 - Example: if an exceedance occurs in a receiving water all dischargers would be held collectively responsible (even if an MS4 permittee did not cause the exceedance)
 - This is neither fair, in keeping with federal regulations, nor effective stormwater management

Outfall v. Receiving Water MS4 Responsibility Ends at the Outfall



Outfall is the Compliance Point Not the Receiving Water

- Conflict Between the TMDL and the Permit Needs to be Reconciled
 - If the Regional Board places the compliance point at the outfall this would conflict with the TMDLs placement of the compliance in the receiving water
 - How to resolve the conflict?
 - Put language in the to permit override what is in the TMDL or
 - Re-open each TMDL to correct the conflict
 - We recommend that the Regional Board request the State Board's Office of Chief Counsel to issue a memorandum commenting on this issue
 - Cities will also recommend appropriate language in the findings section of the new permit

Iterative Process

- Confusion as to How IP Would Operate in the Next MS4 Permits
 - In its L.A. County MS4 Permit Status and Development Paper staff says that the iterative process does not protect permittees against enforcement action -- we disagree
 - The iterative process is present in most if not all MS4 permits issued in the U.S. to serve this very purpose – if properly followed
 - The iterative process is required by the State Water Resources Control Board as mentioned in 2 precedent setting water quality orders
 - Contrary to what staff asserts, the 9th Circuit ruling in NRDC v. LACFDC did not eliminate the iterative process

Iterative Process

- Confusion as to How it Would Operate in the Next MS4 Permits (cont.)
 - Instead the court just said that there is no “textual support” for the proposition in the current MS4 permit an exceedance may be forgiven if a permittee implements BMPs in accordance with its SQMP
 - The court held that the County could not be afforded by iterative process protection under the Receiving Water Limitation provisions of the current MS4 permit because it did not follow the procedure for addressing an exceedance (viz., submitting a RWL and amending BMPs in its SQMP)
 - We recommend that the regional board request the State Board’s Office of Chief Counsel to provide an opinion memorandum on the impact of the 9th Circuit’s decision in NRDC v. LACFDC on this matter

Iterative Process

- A Clearly Defined and Reasonable Iterative Process is Needed to Prevent Regional Board Enforcement Action Third Party Litigation
 - If a weak iterative procedure is placed into the next MS4 permit permittees could be at risk for non-compliance and exposed to third party litigation
 - Includes TMDLs with 20-25 year compliance periods
 - In fact this has already happened (the 9th Circuit ruled that the County exceeded bacteria TMDL for the Los Angeles River despite the 20-25 compliance period
 - LAR Bacteria TMDL language was of no help because it is the permit that controls
- The Cities will propose a revision to receiving water limitation language with clarification in the findings section of the permit

Non-storm Water Discharge Prohibition

- Regional Board Proposes to Prohibit Non-stormwater Discharges to Watercourses in addition to the MS4
 - Staff's new permit development paper carries over the non-stormwater discharge prohibition from the current permit to include watercourses exceeds federal regulations
 - Staff concludes that CWA Section 402(p) as well as all MS4 permits in California prohibits non-stormwater discharges to the MS4 and watercourses.
 - We disagree.
 - Actually CWA 402(p)(3)(B)(ii) says that permits for discharges from municipal storm sewers "shall include a requirement to effectively prohibit non-storm water discharges into the storm sewers"
 - There is no reference to watercourses
 - We were not able to find in any other MS4 issued in California the non-stormwater discharge prohibition extending to watercourses
 - There is not a definition of watercourses in the MS4 permit or any where in the CWA

Non-storm Water Discharge Prohibition

- Please note that the San Diego Regional Board's Office of Chief Counsel affirmed this in a memo to Chairman Wright and San Diego Regional Board Members dated November 5, 2009
- It contained no reference to watercourses as being subject to the non-stormwater discharge prohibition

Non-storm Water Discharge Prohibition

- Why is this a big deal?
 - Because including watercourses would place permittees in a state of non-compliance for dry weather discharges to receiving waters (oceans, lakes, rivers, streams, etc.) that exceed TMDL WLAs
 - This was the justification for issuing 22 notices of violations to those permittees that discharge into to Santa Monica Bay for exceeding the dry weather WLA for bacteria
 - Were it not for a procedural error made by the Regional Board, those cities – and the County – could have been open to enforcement action and possible third party litigation

- How then would receiving waters be protected from contaminated non-stormwater discharges?
 - Through a well-designed and implemented illicit discharge/connection elimination program that prohibits unauthorized discharges to the MS4 (as Congress intended)

WQBELs

- More Discussion with Staff is Needed on WQBELs
 - Generally, WQBELs translate WQSs and TMDL WLAs into BMPs
 - There are 2 types of WQBELs: numeric and non-numeric
 - Staff asserts that because TMDL WLAs are expressed numerically, numeric WQBELs in MS4 permits are appropriate
 - However that should not be the determinant
 - California Courts have held that WQBELs mean BMPs
 - California Courts have also said a WLA, which is inherently numeric, and numeric WQBELs are not the same (one is the problem and the other is a solution)
 - They are different; a numeric WQBEL is a numeric BMP
 - A numeric WLA does not require a numeric WQBEL as evidenced by the San Francisco Regional Board's use of a narrative BMP that address the WLA metric for Diazinon

WQBELs

WQBELs for Diazinon (Pesticide Toxicity)

- 🐸 WLA = TMDL numeric targets
 - » No toxicity in creeks
 - » Diazinon < 50 ng/l
- 🐸 WQBELs = Implement pesticide management plan designed to control pesticide caused toxicity
 - » Control municipal uses
 - » "Manage" uses by others

WQBELs

- Staff says that the trash TMDL as numeric WQBEL
 - There is nothing in the final trash TMDL or the amended L.A. County MS4 permit that refers to the trash TMDL as WQBEL at all (no reference to USEPA's 2002 memorandum that would have applied to the
- To clarify the definition of WQBELs the cities recommend that L.A. Regional Staff invite Tom Mumley of the San Francisco Regional Board to do a presentation on numeric and narrative WQBELs at workshop devoted to this subject (could also help with the Receiving Water Limitation language)

The Need to Verify Information

- Future Workshops Need to Evaluate Information for accuracy
 - Mentioned earlier proposed requirements need to be vetted for accuracy (e.g., watercourses being subject to non-stormwater discharges, trash TMDL as a numeric WQBEL, the iterative process not safeguarding permittees against exceedances)
 - Vetting information can reduce disagreement and produce a cleaner, sensible MS4 permit

Thanks!

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1 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
2 LOS ANGELES REGION
3 FRANCINE DIAMOND, CHAIRPERSON
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6

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

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13 TRANSCRIPT OF PROCEEDINGS
14 Los Angeles, California
15 Thursday, November 10, 2011
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22 Reported by:
23 MARCENA M. MUNGUIA,
CSR No. 10420

24
Job No.:
25 B7657WQLA

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1 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
2 LOS ANGELES REGION
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Regional Board)
8 Public Meeting/Hearing)
_____)

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15 TRANSCRIPT OF PROCEEDINGS, taken at
16 State of California Building, 320 West Fourth
17 Street, First Floor Carmel Room, Los Angeles,
18 California, commencing at 9:15 a.m., on Thursday,
19 November 10, 2011, heard before the LOS ANGELES
20 REGIONAL WATER QUALITY CONTROL BOARD, reported by

21 MARCENA M. MUNGUIA, CSR No. 10420, Certified
 22 Shorthand Reporter in and for the State of
 23 California.

24
 25
 0003

1 APPEARANCES:

2 CHAIRPERSON: Francine Diamond

3 VICE CHAIR: Mary Ann Lutz

4 BOARD MEMBERS: Steve Blois

Madelyn Glickfeld

5 Maria Mehranian

Charles Stringer

6 EXECUTIVE OFFICER: Samuel Unger

7 BOARD STAFF: Jennifer Fordyce

8 Frances McChesney

Sarah Olinger

9 Deborah Smith

Ronji Moffett

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1 Los Angeles, California, Thursday, November 10, 2011
2 9:15 a.m.

3
4

5 MS. DIAMOND: Good morning. Can you hear me? Good
6 morning, everybody, and welcome to the Los Angeles
7 Regional Water Quality Control Board meeting. We are
8 going to begin and I am going to ask Mr. Blois if he
9 would please lead us all in the Pledge.

10 MR. BLOIS: Ready, begin.

11 (Pledge of Allegiance)

12 MS. DIAMOND: Ms. Moffett, will you please take the
13 roll call.

14 MS. MOFFETT: Yes. Good morning.

15 Mr. Blois?

16 MR. BLOIS: Here.

17 MS. MOFFETT: Ms. Diamond?

18 MS. DIAMOND: Here.

19 MS. MOFFETT: Ms. Glickfeld?

20 MS. GLICKFELD: Here.

21 MS. MOFFETT: Ms. Lutz?

22 MS. LUTZ: Present.

23 MS. MOFFETT: Ms. Mehranian?

24 MS. MEHRANIAN: Here.

25 MS. MOFFETT: Mr. Stringer?

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1 MR. STRINGER: Here.

2 MS. DIAMOND: Mr. Unger, will you please go over the
3 Agenda.

4 MR. UNGER: Yes. There are two changes to the
5 Agenda. First I'd like to let you know that the meeting
6 minutes from the October 6th meeting are not quite
7 completed yet, so they will be continued to the
8 December 8th meeting; and the other is Item Number 4,
9 which is a discussion of the schedule for next year, will
10 be held after lunch.

11 MS. DIAMOND: Thank you.

12 We do have the draft meeting minutes for
13 October; is that correct? No, we do not?

14 MR. UNGER: No. I don't think they're complete. You
15 may have a partial.

16 MS. DIAMOND: Oh, we have a partial.

17 MR. UNGER: Yeah, you have a partial.

18 MS. DIAMOND: Okay. So we'll continue that.

19 MR. UNGER: Correct.

20 MS. DIAMOND: In terms of the adoption of the Board
21 meeting schedule, do you want to -- should we continue to

22 have that discussion now or did you want to wait until
23 later for the calendar of next year?

24 MR. UNGER: My recommendation is that we wait until
25 either the end of the day or certainly after lunch at
0009

1 least.

2 MS. DIAMOND: Okay. Then we'll go to Item Number 5.
3 And if anybody can't hear, please let us know. We'll
4 speak up. You can't hear? Our mikes are on, but I
5 think -- can you hear now? Okay. Everybody will need to
6 put it right up to their mouths.

7 We'll go now to Board member communications and
8 we'll start with any ex parte disclosure, Mr. Blois,
9 starting with you.

10 MR. BLOIS: I'm not sure if it requires ex parte
11 reporting, but I'm going to mention it anyway.

12 Last Wednesday, I participated in a tour
13 sponsored by the Ventura County Farm Bureau and
14 co-sponsored by the Association of Water Agencies in
15 Ventura County. Basically, the tour -- we spent all day
16 touring various water facilities throughout Ventura
17 County and it was a most informative day.

18 MS. MEHRANIAN: Nothing to report, Chair.

19 MR. ALVAREZ: At the beginning of the month, I, along
20 with vice -- with Madelyn Glickfeld attended a meeting of
21 municipalities at the request of Senator Hernandez, Ed
22 Hernandez.

23 MS. DIAMOND: Thank you.

24 Ms. Glickfeld?

25 MS. GLICKFELD: I have the same disclosure, and I'm
0010

1 just going to put it on the record that there was an
2 agenda to that meeting and there were, I don't know,
3 maybe 40 participants mainly from cities, Public Works
4 directors, some water agencies, you know, and from
5 Congressional representatives. So -- and I wanted to --
6 I thought it was a very well-run meeting.

7 Senator Hernandez was a great facilitator and I
8 just wanted to also put out that they put some questions
9 before me that they wanted me to answer. These questions
10 were too related to the MS4 permit for us to discuss, but
11 I have asked -- I have made copies of them to be
12 distributed to the Board as appropriate and I've asked
13 the Executive Officer to discuss them during the MS4
14 discussions with the cities because I think they're
15 important.

16 What I found out through these meetings is that
17 there are some real communication problems between our
18 Board and the cities. There's a lot of misunderstanding
19 and I'm hoping that our workshops are helpful and the
20 workshops that our staff is going to have with them are
21 helpful in trying to allay some of the concerns that they
22 have.

23 MS. DIAMOND: Mr. Stringer?

24 MR. STRINGER: I have nothing.

25 MS. DIAMOND: I did have a phone call. I don't

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1 believe it's ex parte because I have been meeting with
2 members of the community, the community at the Ujima
3 Village area, and I did have a telephone call this week
4 that I -- where I spoke with several people from Exxon,
5 along with the Executive Director. They wanted to tell
6 me what some of their plans were for helping to find a
7 new site to relocate the day care center.

8 I listened to them and told them that I would
9 like to have their thoughts in writing, and they did
10 provide a letter that was made available to the -- or is
11 being made available to the Board members today.

12 Mr. Unger will talk about it and if any members
13 of the public would like to have a copy, we can make that
14 available to you as well.

15 And that's it for that item.

16 So, Mr. Unger, would you please give us the
17 Executive Director's report.

18 MR. UNGER: Thank you, Chair Diamond.

19 I want to say on behalf of staff here we're
20 really excited that we're holding the meeting here in a
21 State facility. I think it's the first time that I know
22 of that we've held it in a State facility in 12 years and
23 so staff is very excited. Many of them in the
24 groundwater programs will be coming down to hear the
25 groundwater presentation later on this morning, so we're

0012

1 very happy you're here from a staff level and I just want
2 to just thank you for choosing this venue. If it works
3 out, we'll do it again.

4 The first thing I want to report on is the
5 Santa Susana Field Laboratory. Last month, as you all
6 know, with the exception of Board member Stringer, we
7 visited the Santa Susana Field Laboratory. I think it
8 was a very informative site visit in showing the progress
9 that has been made on the facility and also the
10 effectiveness of some of the BMPs which may have broader
11 applicability in stormwater management such as our
12 municipal or our industrial programs. And so we had
13 that.

14 And I'd like to follow up with two
15 administrative items regarding the Santa Susana Field
16 Lab. The first is the Regional Board and I have, with
17 one of the project managers at DTSC, have completed the
18 review for the cesium contaminated soil for the ISRA
19 program. I am pleased to report that the soil will be
20 disposed of in a low-level radioactive waste site
21 out-of-state and I have signed a joint letter to Boeing
22 and to NASA that approves this work plan. So hopefully
23 that will get under way in the very near future.

24 The second item I wish to discuss
25 administratively on the Santa Susana Field Lab is the

0013

1 current permit. The current permit for the Boeing
2 Santa Susana Field Laboratory, Order R4-2010-0090, was
3 adopted by the Regional Board on June 3rd, 2010 and it is
4 now scheduled to expire on April 10th, 2014. Routinely,
5 NPDES permits have a five-year term. At the end of the
6 five years, the data that's collected are reviewed and a
7 new permit issued is based on that new data. The Boeing
8 permit in the Reopener has a clause that reads:

9 "This order may be reopened and
10 modified, in accordance with the State
11 Implementation Plan Section 2.2.2.A, to
12 incorporate new limits based on future
13 reasonable potential analysis to be
14 conducted, upon completion of the collection
15 of additional data by the Discharger.
16 Notwithstanding the foregoing, in the event
17 that reasonable potential analysis indicates
18 that a pollutant has reasonable potential,
19 the Regional Water Board staff shall bring
20 an appropriate modification to the Regional
21 Board, at the next practicable Board
22 meeting."

23 I want to report today that staff have reviewed
24 the data collected at Boeing Santa Susan Field Laboratory
25 over the past year and have conducted an RP analysis. No

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1 new constituents demonstrated reasonable potential.
2 There are numeric effluent limits in place for discharges
3 from Outfalls 003 through 014, 018 and 019. The
4 remaining outfalls, 015 through 017, no longer discharge.
5 They are treatment -- excuse me. They were treatment --
6 on-site sewage treatment plans and they're no longer used
7 to treat the sewage because there are just very few
8 people working at the site now relative to when it was in
9 place in the '60s and '70s. These are periodically
10 pumped out and the collected sewage is transported via
11 truck to be treated at one of the L.A. County Sanitation
12 Plant facilities. Outfalls 001 and 002 are located
13 directly downstream of Outfalls 011 and 018 and do not
14 require effluent limits. Consequently, staff recommended
15 that there is no need to reopen the permit at this time
16 and we are not planning to bring this permit forward
17 until we collect more data next year and review those
18 data. If the data in the future indicate that a reopener
19 is warranted, we will inform you at that time and put it
20 on the schedule. So that's Boeing and Santa Susana.

21 Mary Ann, at the last Board meeting, you asked
22 that we provide an update on the Clearwater Program by
23 County Sanitation Districts. I am pleased to report to
24 you that the County Sanitation Districts have agreed to
25 provide an information item at our next meeting in

0015

1 December on this program.

2 Seaside Lagoon: You've received some memoranda
3 on Seaside Lagoon and we have completed our study of the
4 Total Suspended Charges discharges from the facility.
5 And just to briefly refresh your memory, this was a
6 highly contentious issue with the NPDES permit for the
7 City and the Board issued a TSO, a Time Schedule Order,
8 that provided the City with limits that are nearly
9 50 percent greater than the permit limits for a period of
10 three years. This allowed the City to conduct special
11 studies and implement the appropriate remedies, if
12 required. You may recall that the City was very
13 concerned because if a technology-based remedy was
14 necessary, the City thought it would be too costly and
15 the facility might be -- needed to be closed.

16 Regional Board staff agreed to assist the City
17 in conducting the special study, which consisted of the
18 Regional Board providing laboratory support for the
19 analysis of total suspended solids through our contract
20 with California State University at Long Beach. The City
21 collected samples of various locations and times in order
22 to ascertain if certain conditions were causing high TSS
23 readings, such as tides, turbulence, various issues such
24 as that.

25 We sent a report to you earlier this week and
0016

1 the Regional Board worked with the City to conduct
2 testing throughout last summer. The results that our
3 laboratory obtained were much lower than either the
4 permit or the TSO effluent limits. The City sent one
5 sample, a split sample, to their laboratory, which
6 confirmed the work of Cal State University at Long Beach.
7 So there doesn't appear to be an issue with TSO at the
8 present time moving forward.

9 The City has expressed thanks to our staff for
10 the work, but in a meeting with staff and one of the
11 Council members, they still expressed concerns if the
12 testing that we undertook cannot be replicated next
13 summer and they may again be out of compliance. We
14 assured the City that they could set forth benchmarks and
15 if they trip a benchmark much lower than the permit
16 limit, we would get involved in possibly reactivating Cal
17 State Long Beach and trying to further understand why the
18 two laboratories cannot corroborate results.

19 We don't think that's going to be an issue, but
20 the City also raised an issue with copper testing. And
21 as you'll recall, there it wasn't quite as contentious as
22 TSS, but one test showed copper, but there was no copper
23 limits in the TSS permit or TSO. The City requested that
24 the requirements for copper monitoring be reviewed, and
25 the staff is currently conducting that review to submit
0017

1 whether it stays on as a requirement. So that's Seaside
2 Lagoon.

3 Madelyn, for the Contaminated Sediment Task

4 Force, you directed us to reconvene a meeting of the
5 Contaminated Sediment Task Force. As you requested, we
6 held that meeting. You received a report from us on that
7 meeting and a letter from Heal the Bay.

8 I think both documents accurately assess the
9 input from the Ports of Los Angeles and Long Beach. Both
10 ports have indicated they do not have a need for a
11 regional treatment facility, as they can time their
12 dredging projects with their construction projects so
13 that the contaminated soils can be beneficially reused in
14 the ports. This essentially leaves a much lower volume
15 of material to be treated than originally thought, mostly
16 coming from dredging of Ballona Creek and private marinas
17 such as Los Alamitos.

18 The Army Corps. attended our meeting and they
19 expressed interest in continuing to study a feasibility
20 of a contaminated sediment treatment facility and was
21 looking for funding to lead such work.

22 Thank you.

23 The ports and the Army Corps. agreed to meet
24 periodically to predict the volume of material that will
25 need to be dredged over the next three to five years and

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1 identify likely disposal plans. At this point, we await
2 your direction before pursuing staff initiatives.

3 Thank you. I've been asked to slow down a bit.
4 There's a lot to report, though. Speak louder?

5 MS. DIAMOND: You need to put it right here
6 (indicating).

7 MR. UNGER: Right here (indicating).

8 The TMDL, I just want to let you know that the
9 Los Angeles River Bacterial TMDL was approved by State
10 Board on November 2nd by a vote of three-zero. We now
11 have three additional TMDLs scheduled for the State Board
12 on December the 6th, including the L.A. Harbor Toxics
13 TMDL, Machado Lake Toxics TMDL, and the Santa Monica Bay
14 Debris TMDL. As I'll describe right at the end of my
15 discussion here, the staff and our attorneys are quite
16 busy in preparing for the State Board hearing in
17 December.

18 I want to move on to some of the two -- the two
19 groundwater sites that we're looking at, Kast and Ujima
20 Village.

21 First, Kast: As you know, staff issued a
22 Cleanup and Abatement Order on Shell Oil to initiate
23 pilot studies to test the feasibility of cleanup methods
24 in a residential neighborhood earlier this year. Shell
25 submitted a work plan that focuses on three technologies:

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1 soil vapor extraction, chemical oxidation, and excavation
2 in the proximity of slab foundation residences.

3 We approved Shell's work plan and decided to
4 notice it through the CEQA process, which would allow the
5 residents to comment. We received only two comments, one

6 from a Native American Heritage Foundation and the other
7 one from DTSC. None of the residents commented, so we
8 are hoping we can initiate the work in the near future,
9 but access continues to be an issue in moving ahead with
10 the work. At this point, we understand that Shell has
11 identified one house that will allow work to be
12 conducted, so we hope to get that work under way in the
13 meantime. In the meantime, we have received preliminary
14 results from the deeper groundwater investigation and
15 staff are reviewing those results at this point.

16 Ujima: As you know, there's a lot of interest
17 recently in the former Athens Tank Farm and that former
18 Athens Tank Farm includes the former Ujima Village, the
19 Magic Johnson Regional Park, and the Ujima Housing
20 Corporation site that houses the day care facility and
21 continuing education. The interest is precipitated, we
22 believe, by the receipt of the off-site monitoring report
23 that investigated the area to the east of the site that
24 was submitted to our agency on October 28th.

25 There's two issues that I wish to discuss:

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1 First, the results of the recent testing and second is
2 the status of the day care facility that continues to
3 operate at the site.

4 So, Alex, can I have the slide, please. I
5 prepared a couple of slides to talk about the testing, if
6 I might.

7 Basically, the first slide which is up is really
8 a microscale depiction of contaminant that is present
9 below the groundwater. What you see are soil particles
10 and you see contaminant which is stuck on the surfaces of
11 those soil particles, and you see vapor space and
12 airspace in between, which can become filled with vapors
13 and gasses.

14 The slide shows that beneath the ground surface
15 and above the groundwater, contaminants can be present in
16 three phases: one adsorbed onto the soil particles and
17 within the airspaces either as a vapor or a liquid. Soil
18 vapor is far more mobile than adsorbed contamination and
19 it can move both vertically and laterally.

20 This slide shows that -- the next slide,
21 please -- this slide shows the concern that we are
22 having -- that we are investigating at this point. It
23 shows how people may become exposed to those levels if it
24 rises from the ground and enters the building which can
25 trap these vapors and adversely impact air quality

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1 indoors.

2 At the former Athens Tank Farm, as well as many
3 other sites in our region, much of our work focuses on
4 quantifying the levels of soil vapor and determining if
5 those levels can affect human health. This evaluation
6 entails measuring soil vapor in the shallow surface,
7 subsurface, and indoor and ambient air above surface to

8 see what is actually getting into the airspaces.

9 And so what I want to do is I want to show now a
10 couple data -- a couple slides of the data that we found
11 from the soil.

12 Next slide, please, Alex. This slide shows
13 essentially the soil plume; that is, the sorb phase that
14 doesn't move that readily. You see the yellow dots on
15 the site. What you see is an aerial depiction of the
16 site, the two lakes in the Magic Johnson Park, and on to
17 the right side of the green shaded area is the former
18 Ujima Village -- I think I have a pointer here.

19 Thank you, Ronji. And then if --

20 MS. LUTZ: Excuse me. Sam, can you point out which
21 parts of this? Where are the plumes exactly?

22 MR. UNGER: These are the two plumes I'm talking
23 about and really I'm just talking about these plumes to
24 give you a feel when you see the next slide about how
25 immobile soil contamination is versus how mobile soil
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1 vapor is.

2 MS. GLICKFELD: Would you also -- this is
3 Ms. Glickfeld. Would you also point out -- you pointed
4 out the former housing development. Where is the day
5 care center and where is the site that you are in
6 discussion with the County about relocating the site?

7 MR. UNGER: Right there (indicating).

8 MS. GLICKFELD: Right there. Okay. So it's
9 pointed -- point to that again. The day care center is
10 at that corner, and where do you want to relocate it?

11 MR. UNGER: Yes. I'll be talking about that in a
12 moment after I'm done talking about the test results.

13 So the point of this slide compared to the next
14 slide, if you can see -- fix in your mind, please, just
15 for a moment the size of those yellow spots there on the
16 map -- and our next slide, Alex -- is this is the slide
17 of the soil vapor plume. This is based on benzene and
18 you can see how small a soil plume can create a larger
19 lateral benzene plume.

20 So essentially what happens is up until the
21 recent results, all our testing was essentially at the
22 boundary of the site, but it's clear that vapor has
23 potential to migrate further east and that's what we just
24 received the report on on October 28th.

25 And the final slide, Alex, please, is these are
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1 the points that we've been testing off-site. We've just
2 gotten that report in. There seem to be several of the
3 sites that have levels above soil screening. However, I
4 want to say that our results at Ujima show high levels of
5 petroleum compounds in soil and soil vapor, but the data
6 show no levels above the background in indoor air.

7 So if you go back two slides for me, please,
8 Alex -- one more, please. So essentially what we're
9 saying is we're not seeing a lot of vapor that is

10 exfiltrating from the soil into the housing and you
11 can -- that's it for slides.

12 The fact that our ambient air and indoor
13 sampling is characteristic of background levels is why
14 DTSC and Water Board staff conclude that there's no
15 immediate threat to human health at the present time.
16 The scope of risk assessment done by DTSC only evaluates
17 whether occupants are at risk today or in the future.
18 The scope of the risk assessment does not involve
19 clinical health issues of the impact to occupants in the
20 past. Nonetheless, though, soil contamination exists and
21 cleanup is warranted. We have ordered ExxonMobil and the
22 County to initiate tests and cleanup technologies and
23 these tests have started already. We've already started
24 cleanup on one area of the site. We've been using --
25 ExxonMobil has been using a technology known as soil

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1 vapor extraction and we have a preliminary report on the
2 effectiveness of that and staff is also evaluating that
3 technology at this time as well.

4 Regarding the day care center, as I showed on
5 the map, adjacent to the former apartments is a small
6 parcel that is privately owned. It is owned by the Ujima
7 Housing Corporation. A private day care center and a
8 Los Angeles Unified School District facility operate at
9 this site. As I showed, it is also located on the
10 eastern edge of the site, in close proximity to the
11 former apartments. The County plans to begin demolition
12 of the buildings, the apartment buildings, next year.
13 Given the soil plume beneath the day care center and the
14 planned demolition, Regional Board staff initiated
15 discussions with the responsible parties, ExxonMobil and
16 the County, to relocate this facility. Initial
17 discussions focused on moving the bungalows to the west
18 end of Magic Johnson Park whereas maybe you don't find
19 high levels of contamination at all, but the County is
20 not agreeable to that option and they set forth an option
21 for a second option for consideration off-site.

22 The County and Exxon are now investigating the
23 viability of that option, and to that end, I received an
24 e-mail yesterday from Exxon and the County which I've
25 copied and you have with you right now. It lays out some

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1 preliminary schedules for trying to identify a different
2 site and suffice it to say, searching and screening
3 options off-site is considerably more complicated than
4 what was initially thought, or moving to on-site, but all
5 parties find that relocation of the facility is
6 necessary. And for those of you who watched the news
7 last night, you heard some statements from the County to
8 that effect as well.

9 So I think that's about what I have to say about
10 former Athens Tank Farm. I don't know if there's any
11 questions at this time or discussion, or should we just

12 wait until we're done? Your choice.

13 MS. DIAMOND: Well, I would like to say that it is
14 true that the discussion with the County, particularly
15 the meeting that I attended with Supervisor Mark
16 Ridley-Thomas and Sam Unger and other staff, the
17 discussion was brought up of moving the day care center.
18 We brought up the issue of moving the day care center to
19 the west end of the park, which is property that is owned
20 by the County and is clean and we've tested it, and to
21 the best of our ability -- and I want you to -- I guess
22 I'm asking you this question to put on the record, Sam.

23 To the best of our ability, the testing that's
24 been done at this park on the west end of Magic Johnson
25 Park we believe to be noncontaminated and would be a site
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1 that would be owned by the County and where, if they
2 agreed to it, the day care center could be moved there?

3 MR. UNGER: We believe that the level of
4 contamination there, if it exists at all, is considerably
5 less than what it is on the eastern part of the site.
6 And certainly in moving a day care center over there,
7 certainly if there were anything residual, it could be
8 handled by engineering control fixes such as liners,
9 ventilation systems, and possibly operating an SVE, a
10 soil vapor extraction system. So we think the west end
11 of the site would essentially meet the requirements to
12 moving it to a safer place, yes.

13 MS. DIAMOND: And is my memory serving me correct
14 that the County has suggested another site that's owned
15 by the County, but that that site is within -- is not too
16 far from a freeway? Is that correct?

17 MR. UNGER: It's close to a freeway off-ramp. I
18 think it's less than 500 feet and we're now investigating
19 siting criteria and things like that. There is another
20 school in the near vicinity of where they are, of where
21 the proposed County facility has been identified. So
22 we're still a little -- we're still researching that, but
23 it is fairly close to the on-ramp to the 105 Freeway, I
24 believe, so yeah.

25 MS. DIAMOND: And is there a way that we can find out
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1 what the ambient air quality is at the site that the
2 County is suggesting we move a day care center?

3 MR. UNGER: I have initiated those discussions with
4 ExxonMobil. They are -- they're in the first phase
5 called Phase I assessment to see the site history and
6 they are open to considering doing that assessment. If
7 not, we will go to the AQMD to see if we can get
8 assistance from them to conduct that.

9 MS. DIAMOND: I would definitely want to know what
10 the air quality was before we were in any way involved in
11 moving a day care center and very young children from the
12 age of newborns to a site where the air quality was
13 impacted.

14 MR. UNGER: Yes. We agree. Yeah, we will be doing
15 that.

16 MR. BLOIS: Madam Chair, I've got two quick
17 questions.

18 MS. DIAMOND: Yes.

19 MR. BLOIS: Thank you for your report, Sam.

20 I notice that Kleinfelder is the engineer that
21 did the studies that you presented on the slides.

22 MR. UNGER: Yes.

23 MR. BLOIS: First question is how would you
24 characterize the quality of their report on a scale of
25 one to five, zero being poor, five being excellent?

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1 MR. UNGER: I would characterize it as a four-plus.
2 We do have some comments. We were hoping that we would
3 have had a little bit more analysis of contours and
4 things like that; but at this point, we think the data
5 was collected competently. We think they sent it to a
6 State-certified laboratory and it was reported in a very
7 readable, clear format that staff could generate -- that
8 staff could review very effectively. So we consider it
9 to be at least a four.

10 MR. BLOIS: But then my other question is who's
11 paying Kleinfelder for their work?

12 MR. UNGER: My understanding is that it's ExxonMobil.

13 MR. BLOIS: Thanks.

14 MR. UNGER: I want -- a couple things about personnel
15 in the office that I'd like to report on. I reported to
16 you late last year that the task of bringing Basin Plan
17 Amendments, including TMDLs, to the State Board for
18 approval has essentially been shifted from the State
19 Board staff to the Regional Board staff.

20 For the past year we have been exempted from
21 that because we are so productive in our TMDL program and
22 then we had so many in the pipeline where State Board
23 staff greatly assisted that. That is about to come to an
24 end. As I reported, we have the first three coming up in
25 December that the Regional Board staff has to prepare the

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1 records and the presentation materials.

2 We believe that the underlying -- as we
3 understand, the underlying logic of this change is that
4 the Regional Board staff is more familiar with the issues
5 and the stakeholders than State Board staff and so
6 ultimately when you look at both together, it's a more
7 effective paradigm. However, despite this fact, there is
8 significant work to be accomplished, just as there is in
9 bringing a TMDL to you, as there is in bringing a TMDL to
10 State Board, and we expect that this shift will affect
11 the productivity of the basin planning in the TMDL units
12 for the next year in moving forward. I've talked to
13 other Executive Officers in the state and they've
14 confirmed that it had definite impacts, the productivity
15 of the TMDLs.

16 MS. DIAMOND: Sam, you're going to have to really put
17 this right next to your mouth. Thank you.

18 MR. UNGER: I'm sorry. Yeah. I just -- like I said,
19 I wanted to report to you that we will now be taking the
20 TMDLs and Basin Plan Amendments to the State Board rather
21 than the State Board staff, and our attorneys and our
22 staff are very busy at this time with the three that are
23 proposed one month from now, essentially.

24 Also, I want to report to you that our region is
25 implementing a paperless office system, quote, unquote.

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1 It's called the Electronic Content Management and soon
2 all of our correspondence, both to be received and to be
3 sent out, will be sent only in electronic format.

4 We are the fourth region to be implementing this
5 system and we've had a lot of support from State Board,
6 the I.T. unit there, and there have been a lot of staff
7 who have worked very hard to try to get the system in
8 place here at our region; and of course the big question
9 is if and when the Board members would like to receive
10 their Board packages electronically -- and we're not
11 quite ready for that, Charlie, but thank you -- we're
12 going to ask if anyone is interested in piloting the
13 electronic Board package when we're ready next year.

14 I think that we would appreciate that and we'll
15 be in touch and as soon as we think we've made enough
16 headway, where we have control of it, a lot of us will be
17 taking that next step.

18 MR. STRINGER: My shoulder will thank you, as will
19 the environment.

20 Hey, Sam, before you finish up, I just have
21 something I want to say.

22 Just for the record, as the Board and staff
23 knows, I'm -- my firm -- Boeing is a client of my firm
24 and while I understand from Water Board counsel there's
25 no real conflict just for -- just to avoid any appearance

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1 of conflict, I would like to know ahead of time, Sam, if
2 you're going to brief the Board related to Boeing so I
3 can just step down, just in an abundance of caution.

4 MR. UNGER: Thank you. I apologize. And hopefully
5 unless there's further direction from the Board, you
6 won't be hearing anything from me about it.

7 And finally, I'm happy to report that on
8 October 13th of this year, I attended the Seventh Annual
9 Update of the Collection System Section Agreement for the
10 City of Los Angeles, and this is a report that they've
11 put together (indicating). You're welcome to borrow my
12 copy if you'd like to take a look. But at this point I
13 would -- it was -- it was really quite an amazing meeting
14 in the sense that the City had the report at this point
15 that they have reduced their number of spills from 2003
16 by nearly 90 percent. They have completed two very large
17 sewer construction projects that essentially has

18 eliminated all capacity problems in the area from
19 downtown here to the Hyperion plant, so there's very few
20 capacity issues left, if any.

21 The City has set into place a Citywide fats,
22 oils, and grease program at all restaurants that are over
23 a certain size, I think that serve over 25 meals a day,
24 and essentially they have eliminated persistent odor
25 issues, sewer odor issues that have plagued parts of the
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1 city for years.

2 The Bureau of Sanitation asked their City
3 Council about a week and a half later to adopt a ten-year
4 planning and budgeting plan for the maintenance of the
5 infrastructure that they have built and the City Council
6 adopted that budget and I believe that was precedential
7 with the United States in the sense that it was the first
8 ten-year budget that was adopted for a sewage agency, and
9 it will allow them to complete their planning in a much
10 more orderly fashion than they have done.

11 So that's hopefully leaving on a high note here
12 because it was really quite an impressive feat for the
13 City of Los Angeles. When we first entered into the
14 settlement agreement, we were wondering how far they'd be
15 able to reduce it, the number of spills, and I don't
16 think anyone who was working on that settlement agreement
17 thought they would get it down to 90 percent and here
18 they are with three years left to go and they've already
19 achieved that.

20 MS. DIAMOND: Sam, I would like to suggest, 'cause I
21 remember when this was initiated and we had more than, I
22 think, two spills a day, sewage spills a day in the City
23 of Los Angeles --

24 MR. UNGER: Yes.

25 MS. DIAMOND: -- and it was happening near
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1 neighborhoods, parks and schools and now for them to
2 achieve this, it's truly remarkable, and I would like to
3 suggest that maybe we send a letter to them
4 congratulating them for the success that they've achieved
5 on this.

6 MR. UNGER: I'd be happy to prepare that for your
7 signature.

8 MS. DIAMOND: Okay, great.

9 MR. UNGER: Thank you. That's it for me.

10 MS. MEHRANIAN: Yes, I have a question. And it might
11 be for the answer here or later and it might be for
12 Rebecca. It's on Newhall, since I was on a tour.

13 It's in your report and since I was on a tour
14 last year and then the scale of the development is clear
15 to everybody, I just had two questions. One is how long
16 they are going to be under the provisional permit and how
17 long does it take for us for their permit; and then the
18 second question is that the permit that we issue for
19 them, is it a cumulative permit of the development

20 overall or piece by piece or both?

21 MR. UNGER: Actually, I think there's some
22 representatives from Newhall here who can actually inform
23 you, if they want to come up, but my understanding is we
24 issued a permit for essentially the first phase which I
25 think is probably on the order of about 25 percent to
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1 50 percent of the eventual build-out -- and please
2 correct me if I'm wrong -- but initially our
3 understanding is that they're going to be pumping the
4 sewage to the County Sanitation District, the
5 Santa Clarita Valley Sanitation District Valencia plant,
6 because the flows from the first phase of the project
7 that's actually going to be built and occupied will
8 essentially not justify a six mgd, million gallons per
9 day, sewage treatment plant. So that's -- their initial
10 plans are to use the existing Valencia capacity.

11 MS. MEHRANIAN: Yeah, that will be good for me to
12 hear that either now or if you want it later, it's fine.

13 MR. UNGER: Deb may have --

14 MS. MEHRANIAN: Not only what is coming up, but
15 what's already there and then the 25,000 added to that,
16 the cumulative impact versus, you know, piece by piece.

17 MR. UNGER: Deb, do you want to speak to this?

18 MS. SMITH: Hi. This is Deb Smith.

19 There are two aspects of the project that we'll
20 be permitting and one is for the wastewater, one is for
21 the development. I'm not sure which one you're most
22 keenly interested in.

23 But on the development side, we will need to
24 issue what's called a 401 certification in order for the
25 Corps. to finalize its 404 permit. We at staff --

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1 because of the scale of the project, we have decided,
2 which we often do when we have big projects, to issue the
3 404 -- the 401 nested inside of a WDR which we will bring
4 to you.

5 So we have sent a letter to the Corps. asking
6 them for a bit more time. Normally we issue within 60
7 days of having a completed application, but we can seek
8 up to one year with the Corps. We sent a letter. We
9 don't expect it to take that long, but we sent a letter
10 to them asking for that and we are busily working on ways
11 to charge requirements and working closely with Newhall
12 on that.

13 On the wastewater side, a number of years ago we
14 gave them -- you guys adopted a permit for them to build
15 their own wastewater treatment program; however, because
16 they are starting off on a smaller scale than expected,
17 they are interested in tying in to one of the County
18 San plants up there. So that issue is still unresolved.
19 We're going to try to address it, in part, through the
20 WDR process and then we may have to address it through
21 NPDES permits should we look at them going into County

22 San on a temporary basis.

23 MS. MEHRANIAN: I'd like to hear that when we're
24 further along, when you address that issue.

25 MS. SMITH: Okay, definitely.

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1 Well, the waste discharge requirements will come
2 to you for adoption, as will -- if we have to open up the
3 L.A. County San permits to allow more flow, that will
4 come to you, but we'd be glad to brief you or talk to you
5 further about it in the meantime.

6 MS. MEHRANIAN: Sure. And the provisional is 60 days
7 now? Is that what you said?

8 MS. SMITH: No. We've requested -- we can have up to
9 a year with the Corps. We have 60 days, but we've
10 requested that additional time because just bringing a
11 permit before the Board requires -- I mean, even a 60-day
12 notice would wipe out our 60-day time. We need time to
13 prepare it. It's more complicated than a 401 to prepare
14 complete Waste Discharge Requirements and then we need to
15 put it on the streets for at least 60 days and then bring
16 it to you, so we're looking at --

17 MS. MEHRANIAN: A year?

18 MS. SMITH: No. I'd like to do it more in a
19 six-month time frame, but we're trying to nail all that
20 down right.

21 MS. MEHRANIAN: Thank you.

22 MR. UNGER: Maria, let me add this to the Board
23 directive checklist and we will report back to you next
24 month.

25 MS. DIAMOND: Do we have a report from -- on

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1 enforcement today?

2 MR. UNGER: There's no oral report on enforcement
3 today. There will be one next month.

4 MS. DIAMOND: Okay. Thank you.

5 And I don't believe our State Board
6 representative is here today, Fran Spivy-Weber, so we'll
7 move on then to Public Forum.

8 This is the time for anybody who wants to
9 address us on any item that's not on the Agenda today,
10 and there is -- I have speaker cards so we're going to
11 ask -- I'll call the people up and you have up to three
12 minutes to speak, and the speakers will come right up
13 here to the podium.

14 So the first person I have is Donald Brown.

15 Mr. Brown?

16 MS. GLICKFELD: Madam Chair, while Mr. Brown is
17 coming up to the podium, I have been having trouble
18 hearing my colleagues on the other side of the table and
19 I'm concerned about whether the people in the back are
20 hearing anything at all. So is there anything that we
21 can do about our sound system? And then I would ask that
22 you remind every speaker -- see how close I am? That's
23 how close you need to be.

24 MS. DIAMOND: Put your mouth as close to it as you
25 can without swallowing it.

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1 MR. UNGER: We're having one of our interns check to
2 see if we can adjust it.

3 MS. DIAMOND: And would you also just state your name
4 for the record.

5 MR. BROWN: My name is Donald Brown --

6 MS. DIAMOND: Thank you.

7 MR. BROWN: -- and I live at -- I used to live in
8 Ujima Village and I have cancer, and I didn't have cancer
9 until I moved in there, and I have three daughters, an
10 18-year-old, a 21-year-old, and a 24-year-old, and a
11 grandbaby, a two-year-old. And my 21-year-old, she was
12 having problems with rashes. Now her baby has -- my
13 grandbaby has terrible rashes from her neck to her foot,
14 and a lot of the neighbors -- a lot of the kids that used
15 to play around there, I used to coach them and just work
16 with them and have them running and playing football and
17 running all in the grass. Now all of the kids are sick.
18 They have respiratory problems and, like I said, we used
19 to go over to Magic Johnson and fish. I would cook some
20 of the fish for them and they're sick.

21 And I was looking -- I had some notes to say,
22 but after looking at that survey and they had Ujima
23 Village, they had the contaminants around it. The
24 contaminants is all around the Village, but yet they were
25 drilling right in front -- 24, 25 feet from my front door

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1 and I ended up catching pneumonia twice and the doctors
2 would ask me, "Have you been out of the country?" And I
3 told them, "No." Three days later they'd come back to my
4 room and ask me, "Mr. Brown, are you sure you haven't
5 been out of the country?" "No, I haven't been out of the
6 country."

7 After I had cancer and I had cancer surgery I
8 think last month -- the days are just getting -- last
9 month, I think, and the cancer doctor asked, said -- he
10 told my sister for a person my age, healthy as I am, and
11 the kind of cancer that she found and where it was
12 located she said is so unusual. She had -- it's just
13 unusual. But it's just hard seeing these kids down
14 there -- they're all spreaded out -- that I used to, like
15 I say, coach them and take them fishing and all these
16 kids are sick and like I say, it's hard.

17 And I want to ask the people, Why is it taking
18 so long for people to respond to us? What happened to
19 the EPA? What happened to the sources that when
20 something happens, everybody's supposed to get involved
21 in?

22 Like if an animal or something gets trapped in a
23 water well, you have water supervisors come out, the head
24 of the fire department that comes out, County supervisor
25 comes out, and here you have people dying. A lot of

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1 people are sick and nobody came out to see us until word
2 started getting around, and we had a Congressperson to
3 come out, we had a State senator to come out, we had a
4 County supervisor sent a representative out, we had Parks
5 and Recreations that sent attorneys out, but nobody
6 wanted to talk to see what's going on with us. It was
7 just to protect their own interests.

8 And I wish that somebody would -- if there's a
9 hundred -- if there's just 100 of us, why would somebody
10 just make a graph or a chart and say, "Out of 100 people
11 in the Ujima Village, 85 percent of them are sick"? So
12 it's not just a coincidence or he'd contracted something
13 in Africa or one of his ancestors had something. You
14 have people who are sick and somebody needs to take a
15 survey to say, This many people has died in there from
16 cancer, this many people have cancer, this many kids have
17 respiratory problems.

18 I haven't seen of that. The Health Department
19 hasn't come out and asked us questions. They haven't
20 talked to us and the information we find out is always
21 mailbox talk, where we meet at the mailbox. Oh,
22 Ms. So-and-so around the thing, she died or Mr. So-and-so
23 died or so-and-so's kid's in the hospital sick.

24 That's how we found information out. That's how
25 we found information. And then when you ask the

0041

1 representatives, Oh, we need you guys to move because the
2 buildings are old and dilapidated and, you know, we --
3 I'm sorry.

4 I can't say any more, but thank you for giving
5 me the opportunity to express myself. And like I said,
6 I'm not worried about myself. The cancer I have is
7 terminal; but my kids, it's something that they have to
8 worry about and that's one of my biggest worries. My
9 worry's not about myself. It's about, Well, what's going
10 to happen to my kids? Like I said, I have three
11 daughters. They're hard-headed and they think they know
12 everything about the world and I need to be there to show
13 them and I might not be and I hope Mobil will do the
14 right thing and help us.

15 I hope the City government will do something to
16 help us and not just think that we're just a bunch of
17 blacks out there in this little corner of South Central
18 L.A. and that's it, because if it was Beverly Hills --
19 and I'm not being racist by no means. But if it was
20 Beverly Hills or Torrance, you'd have had everybody from
21 presidents to everybody out there. Everybody's been out
22 there. They'd have everybody out there, Let's do this,
23 Let's get this survey, Let's get this.

24 But people in South Central, we feel that at
25 Ujima Village we're just tossed aside. We was just

0042

1 tossed aside. And like I said, that many people dying,

2 that many people being sick -- and like I said, I was
3 just a fat, healthy guy around there and, like I said,
4 now I'm fighting for my life every single day now.

5 And the other day I saw the doctor, the cancer
6 doctor, was so surprised that I look the way I do and I
7 told him, "Whoa, I'm not ready to go yet" and they've
8 told me that the cancer is terminal. Only one person can
9 tell me that and that's God. So God hasn't gave me the
10 paperwork yet other than letting me wake up every
11 morning, so that's it.

12 So thank you for letting me express myself and
13 thank you.

14 MS. DIAMOND: Thank you, Mr. Brown.

15 Willie Mitchell?

16 MR. MITCHELL: Hello, how you doing? My name is
17 Willie Mitchell. My brother Ernest couldn't be here
18 today because he's real emotional.

19 MS. DIAMOND: Mr. Mitchell, put your mouth right next
20 to it. Thank you.

21 MR. MITCHELL: My other brother and siblings couldn't
22 be here because they get real emotional or they have work
23 at this time. Thank you.

24 I'm here on behalf of my mother, Claudia
25 Mitchell. She lived in the Village for over 12 years and
0043

1 she got sick. She got sick and went to the doctor and
2 told her she had leukemia, cancer. And when I went with
3 her, I ended up talking to him myself and he asked me,
4 where did she work, what does she do for a living,
5 because this right here at the age of in here 60s, this
6 come from -- you have to be born with it or you have to
7 get it somewhere like at a factory or a plant from
8 working for so many years there and I said, "No, my
9 mother never worked. She had six children and she raised
10 all of us and she raised all our kids and she also raised
11 our family and friends' kids."

12 So like before day care existed, she was
13 considered day care mom, 'cause people always brought her
14 to take care of their kids and change it up, because
15 living off of the County wasn't really doing anything for
16 her. And the reason she lived off the County is because
17 when she was pregnant with my youngest brother, she fell
18 off some stairs and messed up her legs, so she couldn't
19 really work. So that's what she ended up doing, just
20 raising kids. And I told the doctor, "Okay. She didn't
21 work. That's what she did."

22 Now, the guy before talking about they're tested
23 and Exxon. Okay. If they had all the testing over
24 there, they need to reopen the Village and move their
25 family in there for over 10, 20 years and let them drink
0044

1 the water and live in that contaminated place and then
2 come back in and see if they're singing the same tune,
3 because I know something's wrong over there because a lot

4 of people -- mainly older people -- you know, as they get
5 actually older and everything, they start to drop and
6 they open their body up for the infection. I know a lot
7 of old people living over there is dying over there. Two
8 of my mother's friends were living over there and they're
9 all living there around the same time and they all died
10 around the same time, different forms of cancer. One of
11 them moved out, so that I guess saved her because she's
12 still living. She's still sick.

13 And now I'm kind of stressed out myself. Like
14 I -- on and off and I'm wondering if, you know, I'll go
15 to the doctor one day and they'll say, "Mr. Mitchell, you
16 have leukemia," you have this or that. I feel like my
17 nerves is real bad. I don't know if it's from over there
18 or just stressing about her and what's going on with this
19 situation because it's too overwhelming for me. Every
20 time I get a phone call, my eyes just shoot through the
21 roof. I'd just -- like I said, if they really think it's
22 nothing wrong over there, why don't they rebuild it and
23 move all their families over there and want to know --
24 they keep saying nothing's wrong over there. Okay.

25 Prove it to me. Move over there yourself. Move over
0045

1 there and move your family and loved ones over there and
2 then let -- I'll -- if God lets me live 15, 20 years, I'd
3 like to see the outcome of it. Thank you.

4 MS. DIAMOND: Thank you, Mr. Mitchell.

5 Dominique Nicole Tanner. Next card, Dominique.

6 MS. TANNER: Hi. My name is Dominique Tanner.

7 MS. DIAMOND: Can you put it a little closer to your
8 mouth?

9 MS. TANNER: Right there?

10 MS. DIAMOND: Yeah. That's better. Speak up.

11 MS. TANNER: I'm Dominique Nicole Tanner. I was born

12 there. My mom stayed there five years before I was born
13 in '76. I was born with a right kidney, no left kidney.

14 I found out when I was 16. But way before that time, I

15 used to always go outside and play and things with other

16 kids and stuff and then come back in the house and tell

17 my mom, "I'm hurting. My side is hurting." My mom used

18 to say, "You're playing too hard. You don't stop playing

19 out there. You're playing tough. That's what's wrong.

20 Sit down and rest." I said, "No, mom. I'm really

21 hurting." This is like when I was six and seven, you

22 know, and I used to tell my mom, "I'm hurting real bad.

23 Something's wrong." She said, "No. You're all right.

24 You just go ahead and, you know, sit down. You're

25 playing too much."
0046

1 So when I turned -- when I was 16, I had to go
2 to the emergency room because I was leaning over and
3 having abdominal pain; I mean, really pain that was
4 killing me. I was crying. And they said, you know,
5 "Ms. Tanner, you know, we're going to do an ultrasound on

6 you and see what's the matter." I said, "Okay."

7 So when they did the ultrasound, they found
8 out -- the guy was going and looking around, looking at
9 both sides, and he said, "You know, I'm just going to
10 send you back to the doctor and send the report over
11 here." I said, "What's the matter?" He said, "Just go
12 back to the doctor." You know, "Go back to your room and
13 they'll let you know."

14 So the doctor came back in and he said, "You
15 know, this is unusual. You was born with what looked
16 like on the ultrasound the right kidney. We don't see
17 the left." I said, "Where is it? Is it down there or
18 something? Is it behind something?" I said, "Where is
19 it?" He said, "We don't know. What we're going to have
20 to do is admit you into the hospital."

21 I was in the hospital for two weeks. They had
22 to give me antibiotics. They put me through a CAT scan
23 to make sure. Like the second day I was there, they
24 found out I was born with a right kidney, no left kidney
25 at all. They said it didn't form at all. So they called

0047

1 that a birth defect they told me. I'm like, "Wow, how
2 did this happen?" What they asked me, "Where did you
3 used to stay? Where did you" -- you know something? I'm
4 like, "I don't know." I'm 16 and still just afraid, like
5 "What is going to go on?" Am I going to die? What's
6 going to happen to me?"

7 They said, "Well, you know, we're just going to
8 treat you and from now on you have to be very careful."
9 They told me that I couldn't have any kids. I had my
10 daughter. You know, I had her before I knew about it.
11 They said they wanted me to tie my tubes. They didn't
12 want me to have any more kids. My life was limited, you
13 know and I'm like, "No. I want kids. I want more kids,
14 as many kids that I can take care of, if I can."

15 They said, "Oh, no. You need to stop now. You
16 have one. We need to tie." I said, "No. God's not
17 going to let you. I'm not going to let you do that.
18 God's going to make sure that I be able to have kids.
19 I'm going to have a normal life like everybody else out
20 here."

21 And they said, "Oh, well, Ms. Tanner, I
22 understand that you want to be able to have kids and all
23 and do these things, but now since you've found this out,
24 don't you think your life is important to you?" I said,
25 "Yes." I said, "Well" -- and I used to always cry and

0048

1 say, "Well, how can this happen to me? You know, how did
2 I get this way?" My mom and my dad had both of their
3 kidneys. I had my kids -- they told me to make sure that
4 my kids have both of theirs, always. I have three. I've
5 took them to the hospital every time I had a child to
6 make sure that they was born with both. It don't run
7 down in my family. Everybody has theirs. They just

8 said, you know, "Yours is called like a birth defect."

9 Right now I'm in pain. I have to go to the
10 doctor today to see my kidney specialist because I have
11 to see -- I can't drink like a dark drink. I don't care
12 what it is; no soda, not even too much orange juice,
13 because it goes and filters and goes there and I'm in
14 pain. I really am in pain. I have to take pain pills,
15 you know, to even get through the day and, too, sometimes
16 my stuff gets approved when I have to see the kidney
17 specialist; but when I see this kidney specialist very
18 often, I don't have to get approved now.

19 I've been going back and forth to the hospital
20 all the time, you know, with regards to this and they
21 have to give me antibiotics all the time, take this stuff
22 to always try to keep myself together and make sure it's
23 not overworked and everything.

24 Now I had a CAT scan twice this year. They told
25 me I can't take more than two or whatever because it had
0049

1 damaged me. My body can't take the stuff that the -- the
2 dye because the dye would affect me. I've got a little
3 kidney stone now. You know, I was born -- I mean, I
4 was -- they told me that a little kidney stone is there.
5 That kills me. Even though it's small, it bothers me.

6 They told me my life is limited. I have to eat
7 certain foods. I have to do this a certain way, got
8 this -- why should I have to be limited to what I have to
9 do? But I have to do it now because I know I'm born with
10 one kidney, you know.

11 They told me I have to keep blood going --
12 yesterday I just had blood drawn. You know, things like
13 that. I have to keep that going, have to go to the
14 doctor all the time. They told me that my -- I have to
15 make sure that somebody in my family has the same blood
16 type to make sure that I get -- in case I need a kidney,
17 in case it shuts down, you know, anything like that.

18 I mean, it is so, so much pain and it just kills
19 me sometimes that I can't sit up too long. I'm a happy
20 person, but no one can tell when a person is hurting
21 inside what's the matter with them. You know what I
22 mean? You can see that I'm maybe happy. I may look like
23 this, but I'm in pain, I mean, all the time, you know,
24 all the time.

25 And I just need to know -- have some answers. I
0050

1 need to know what they're going to do right now because
2 this is -- this is terrible to put me in a situation like
3 this and everybody else, you know, because we didn't ask
4 for none of this. You know, I'd like to know what Exxon
5 and the City are going to do about this. I would need
6 some answers right now because I should not have to have
7 limited myself to what I have to do. I can't even play
8 sports. I can't even run. If I run too much, just
9 running to exercise to lose weight, my side started

10 hurting.

11 You know, this is -- this is -- you know, it
12 just -- I don't know what to say no more, but I just
13 thank you guys for letting me speak and for this
14 opportunity to tell my story. You know, for years I've
15 just been saying, you know, why I have to be like this,
16 you know? Like when I leave here, I've got to go and
17 take care of myself. I stay at the hospital and the
18 doctor's office more than I stay at home you can say
19 because I've always got to keep myself together.

20 I have to keep myself treated. I have to drink
21 water all the time. You know how you want to drink a
22 soda pop or something? I can't drink that too much. I
23 can't drink it at all, really, because I have to go and
24 get antibiotics. So I don't know what we're going to do
25 today about my situation. I have to go to see my

0051

1 specialist today. I'm in pain right now, but I had to
2 come here and give you guys -- you know, let you guys
3 hear my story and hear what's going on with me. It's
4 hard to stand up sometimes. It goes and comes when
5 you're real bad --

6 MS. DIAMOND: Thank you, Ms. Tanner. Thanks for
7 sharing your story with us.

8 MS. TANNER: Thank you.

9 MS. DIAMOND: Ebonizha Jackson.

10 Hi. And I just wanted to remind you the public
11 forum is basically three minutes each.

12 MS. JACKSON: That's why I wrote something down, so
13 it's not going to be more than three minutes.

14 Hello. My name is Ebonizha Jackson. Hi.

15 I'm speaking on behalf of my grandmother. She's
16 over there (indicating). That was my mom that just left.
17 Yeah.

18 Her name is Margie Tillman. She lived at Ujima
19 Village she said for more than 15 years, or less, and she
20 suffered a great -- equal amount of pain and suffering.
21 I'm speaking on behalf of my grandma because this is
22 about her, you know, because she can't stand up here for
23 a long time. She can't stand at home for a long time
24 because of the medicines she's on.

25 She has cancer. She has actually two types of

0052

1 cancer. She has breast and lung cancer.

2 The Ujima Village -- I blame the Ujima Village
3 for the cancer because of all the pain and suffering my
4 mom has to go through, too. She had my mom there. She
5 was -- she got, you know, pregnant there and she, you
6 know, drank and ate with the water, you know, the
7 contaminated water, and she made my mom's bottles with
8 it, too.

9 I think it's not fair how this is happening. No
10 one should go -- be going through this. It's so many,
11 you know, medications my grandma have to go through.

12 Ever since I was little, my grandma, we would
13 always have to go to the doctor. We would always have to
14 go there. If it's not for us, it would be for my grandma
15 because she always had cancer. One time we thought she
16 was clear of it, but it came back because they said it
17 was so much. She had lymph nodes on her arm. They
18 couldn't get rid of it.

19 She never knew where it came from. She stopped
20 smoking when she was young. She said she smoked a lot,
21 but she stopped smoking. Until she started living there,
22 that's when she started getting the cancer. She never
23 knew like if you -- 'cause she had kids there. You know,
24 she didn't think that it would be consequences for the
25 child which she had, which is my mother. Her doctor even
0053

1 said, you know, didn't my grandma ever work in a bad
2 facility, you know, contaminated and stuff? But no. My
3 grandma always stayed home. She worked from home.

4 I think whoever is liable for this, I think they
5 should suffer the great consequences like everybody else
6 did.

7 All I want to know is I have one question. Why
8 is the Water Board, you know, just now finding out the
9 contamination has spread so far into the neighborhood and
10 could anyone have known sooner? Because it's -- it's
11 very bad. You know, it messes up so many -- so many
12 people and their lives and their children, too, because
13 that causes mutation and nobody knows -- nobody don't
14 care what will happen if, you know, I drink that
15 contaminated bottle or whatever because it always has
16 consequences from anything. I don't care how little it
17 is, how much it is. You know, it still had consequences.
18 You will get sick, period, and I know cancer isn't like
19 the common cold or whatever, but it's not likely that,
20 you know, half of the community gets cancer. It doesn't
21 make any sense.

22 Thank you for letting me speak.

23 MS. DIAMOND: Thank you very much.

24 I have three more cards. The next person is
25 Mark Pumford from the City of Oxnard.

0054

1 MR. PUMFORD: Good morning, Chair, members of the
2 Board. Mark Pumford with the City of Oxnard. It's now
3 very difficult to switch from the other side where you
4 have actually helped the kids.

5 Alex, if you have the pictures, I'd appreciate
6 those.

7 At the Annual CASQA Stormwater Conference in
8 September, Oxnard City Corps received an award for
9 outstanding BMP implementation for their innovative trash
10 monitoring project in the Calleguas Creek watershed.

11 When they found out that I was coming to this
12 meeting today, the City Corps founder, Efron Gore,
13 holding the award, asked me to thank you, Board and

14 staff, for your support.

15 You may remember that the Stormdrain Keeper
16 Program at City Corps started in 2000 with a Supplemental
17 Environmental Project, or SEP, grant provided by this
18 Board for the purpose of manually removing trash from
19 channels in the local area and studying the sources.

20 In its 11-plus years, the City Corps Stormdrain
21 Keeper Program has had a huge environmental benefit in
22 the Oxnard area, while keeping --

23 MS. DIAMOND: Excuse me, Mr. Pumford. She needs you
24 to speak up because she can't hear.

25 MR. PUMFORD: I'm sorry. It's had a huge

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1 environmental benefit, while keeping the kids off the
2 street and gainfully employed. Thank you for giving them
3 a start.

4 MS. DIAMOND: Thank you.

5 James Enriquez, from the City of El Monte. Are
6 you here? We'll go on to the next -- please come up.

7 MR. ENRIQUEZ: Good morning, Board members, Regional
8 Board staff. My name is James Enriquez. I represent the
9 City of El Monte. I'm the Director of Public Works and
10 the City Engineer and I'd like to comment this morning on
11 Agenda Item 16. The City of El Monte respectfully
12 requests the Regional Board --

13 MS. DIAMOND: Wait. Wait. Wait. Wait. Wait.

14 We're on public comment. Item 16 is going to
15 be -- is a regularly agendized item that we are going to
16 be hearing today. You'll have an opportunity to speak
17 then but not during Public Comment forum on that issue.

18 MR. ENRIQUEZ: I apologize for that. The card did
19 indicate that it was Item 16 that --

20 MS. DIAMOND: We're just on Public Forum and that is
21 the last card I have for Public Forum.

22 MR. STRINGER: Fran, can I just ask a question of
23 staff?

24 MS. DIAMOND: Yes.

25 MR. STRINGER: Sam, maybe you can address this. What

0056

1 health studies have been done on Ujima?

2 MR. UNGER: We are not aware that health studies have
3 been done. Our work, as I said, focuses on health risk
4 assessment where we're looking forward, so we haven't
5 gone back. We don't have the capability to go back.
6 We've been talking with the County Department of Public
7 Health to try to conduct that work and it hasn't yet been
8 initiated and I don't have anything more to report to you
9 on the status at this point.

10 MR. STRINGER: I know it's out of our purview to do
11 that. I'm just wondering what we can bring to bear on
12 others to ensure that it gets done. It sounds like
13 that's being done and I'd just encourage that it be done.

14 MR. UNGER: Thank you. I appreciate that and I will
15 bring that to our discussions to the County staff.

16 MS. DIAMOND: We know that it is an issue for the
17 County to deal with; but if they don't do it, certainly a
18 request from the Executive Director from -- you know,
19 from the Regional Board saying, We are concerned about
20 the health risks and we know that there's been a request
21 that's not happened yet, can you please move on it? I
22 mean, I don't know what it would take to help -- we hope
23 the County would be doing that, too, but since they're
24 not doing that on their own, we need to do it. And even
25 though it's not under our purview, we certainly have the
0057

1 opportunity to talk about public health issues in our
2 region and that would be something that I think we all
3 would encourage.

4 MR. UNGER: I will prepare such a letter and get it
5 out as soon as I can.

6 MS. LUTZ: Sam, can I just follow up and ask that you
7 keep us abreast of that information? You know,
8 as Mr. Stringer said, this is not under our purview.
9 However, we cannot ignore the fact that this park is not
10 keeping up with what we are doing to try to rectify the
11 situation there and whatever we can do to help make
12 matters better there and that the knowledge be gained is,
13 I think, good for the entire community. And I think one
14 of the things that one of the commentors said was
15 something about, you know, the City people need to be
16 there. Am I correct, this location is an unincorporated
17 County area?

18 MR. UNGER: That is correct.

19 MS. LUTZ: Yeah. So when the residents talk about
20 needing to talk to somebody in a political realm, what
21 they -- the people they need to talk to are the County
22 Board of Supervisors. This is their purview.

23 MR. UNGER: That's correct. As Chair Diamond
24 mentioned to you, we have had one meeting with the
25 Supervisor. I've talked with his staff regularly and I
0058

1 will prepare a letter to send to them requesting that
2 they undertake the health assessment.

3 MS. LUTZ: Thank you.

4 MS. MEHRANIAN: Madam Chair, I just -- and I'm
5 thinking that's under our purview of letting -- I mean, I
6 think everybody who spoke, they brought up the issues
7 that some of them we have done some things about and
8 there's some past records of things that we've done and
9 we're doing right now. It's very important I think that
10 they're informed of that and they have some certain level
11 of input to what it is. And I know you have public
12 hearings there, but I'm just reiterating.

13 MR. UNGER: Yes. We have held a series of public
14 workshops and hearings where the community can come
15 after-hours. We were waiting until we received the
16 results from this October 28th report to see off-site and
17 staff were planning to schedule one. With the holidays

18 coming up, we don't have the time schedule yet, but we
19 were planning on public -- another public meeting to
20 report on the results to the public.

21 MS. MEHRANIAN: Thank you.

22 MS. DIAMOND: Ms. Glickfeld.

23 MS. GLICKFELD: Yes. I want to ask about the time
24 schedule. I'm looking at the memo, the e-mail from Peter
25 Haviland to the Board, to you, Sam --

0059

1 MR. UNGER: Yes.

2 MS. GLICKFELD: -- and it looks like -- it looks like
3 all the other sites require a Phase I environmental
4 assessment. Does the site that the County owns require
5 that assessment, too, or has it already been done?

6 MR. UNGER: We think there's plenty of data on the
7 site that we have right now that we could make a decision
8 if the day care center could be moved to a cleaner area
9 on the site.

10 MS. GLICKFELD: Is it possible that the County could
11 temporarily put this -- put a facility on this site as
12 they're looking for other sites to put them? It just
13 seems to me that it's not to their advantage to look for
14 other sites when they have one that's already gone
15 through the process. If they look for other private
16 sites, there are all kinds of approvals. I think this
17 idea that they're going to get it done in 14 weeks is
18 unrealistic on their part. So I would really urge you to
19 continue to ask them and do everything we can to get
20 those kids off that site.

21 The fact that these soil gasses have not yet
22 affected those kids doesn't mean it couldn't happen
23 tomorrow. As you showed, it's a -- it's something that
24 there is no control on until we get them out of there.
25 Thank you.

0060

1 MR. UNGER: We agree. Thank you.

2 MS. DIAMOND: I've asked some of those questions
3 and at the meeting with the Supervisor, we brought up the
4 issue of the site that makes the most sense to move them
5 to, the site that we've just been discussing where
6 there's already been a study to make sure that it's not
7 contaminated, where it would take less time.

8 At that meeting, the Supervisor's office was not
9 very interested in that site. I don't know why, but he
10 did invite me to call him again. I am going to call him
11 again, hopefully meet with him again. I think that we
12 should urge as much as possible that that site be the
13 site that they are moved to, whether temporarily or
14 permanently, but it makes no sense. We know that the
15 airspace has not been contaminated, but nobody can answer
16 the question of if that will ever be contaminated. We
17 know the soil -- it hasn't come up into the airspace, but
18 we don't know and I don't think any of us want to take
19 that chance that we wait until it does.

20 So I urge the County and I think we all urge the
21 County and we need to do whatever we can to urge the
22 County to move the day care center as expeditiously as
23 possible and I guess we're all giving you that message
24 and we'll take it personally back to the Supervisors, but
25 they have to hear it as often as possible.

0061

1 MR. UNGER: I will -- I will prepare two letters
2 then, one to accelerate the relocation of the day care
3 center for your signature and then I'll prepare one to
4 the County Department of Public Health for a health
5 assessment request. Thank you.

6 MS. DIAMOND: I'm sorry. We do apparently have one
7 more person. I didn't have this card before. Mark
8 Lombos from the L.A. Flood Control District for Public
9 Forum.

10 Thank you. I'm sorry I missed your card.

11 MR. LOMBOS: Good morning. Can everybody hear me
12 clearly?

13 My name is Mark Lombos from the Los Angeles
14 County Flood Control District, and I'm here to give an
15 update on the Strathern Wetlands Park Project.

16 Next slide, please.

17 Just some background information on our project
18 area. Sun Valley is a 4.4 square mile watershed located
19 in the San Fernando Valley in the city of Los Angeles and
20 historically it suffers from a variety of watershed
21 health issues such as chronic flooding, poor stormwater
22 quality, and just due to dense urbanization, a lack of
23 recreational parks, open space, and natural habitat.

24 Our project site is located at the northeast
25 corner of Tujunga Avenue and Strathern Street and it's a

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1 46-acre property that was previously operated as a
2 construction debris landfill by a private property owner.

3 The Flood Control District acquired this
4 property back in March 2010, specific for the Strathern
5 Wetlands Park. One of the key aspects of our project is
6 just the collaborative effort that has gone in not just
7 through the planning process but also the design phase.

8 Earlier this year, we hosted a community
9 workshop to solicit input from the residents as to what
10 recreational amenities they wanted to see in their park.
11 And just working closely with our project partners from
12 the City of Los Angeles, local stakeholder groups, and
13 again with the residents, we were able to develop the
14 project concept for the Strathern Wetlands Park. I just
15 want to highlight some of the few project elements that
16 you can see from this screen.

17 It's going to feature a detention pond that will
18 provide flood alleviation from the surrounding areas. It
19 will also feature 10 acres of wetland areas that will
20 naturally treat the stormwater that's collected in the
21 pond and then also provide a natural habitat for various

22 plant species and small animals. And then finally, it's
23 going to feature 15 acres of recreational space and
24 that's going to allow for both passive and active
25 recreation.

0063

1 This (indicating) is what the property currently
2 looks like. Again, this is looking at the northeast
3 direction of Tujunga and Strathern, and this is an
4 artist's rendering of what the project would look like.

5 The next slide is again looking at that same
6 property but from the opposite side and, again, we have
7 an artist's rendering kind of highlighting what that
8 recreational area would look like.

9 So as you can see, it's definitely a highlight
10 of the multi-benefit approach that the Flood Control
11 District is trying to implement with a lot of these
12 projects.

13 We're currently in the design phase and we hope
14 to finish design plans by next fall and hopefully begin
15 construction by fall 2013.

16 And if you have any questions about the project,
17 my contact information was up on the screen, but we look
18 forward to providing you an update again in the near
19 future. Thank you.

20 MS. DIAMOND: I think this would be a good time for a
21 break. So we'll take a 15-minute break and then we'll
22 come back with Item Number 14.

23 Is that correct, Sam, the Basin Plan Amendment?

24 MR. UNGER: Yes.

25 MS. DIAMOND: Okay.

0064

1 MR. UNGER: Oh, we have to do the uncontested item
2 calendars.

3 MS. DIAMOND: Sorry. The uncontested items, but if
4 you're going to take a break, I'm sure you're not here
5 for the Uncontested Items.

6 MR. UNGER: Do you want to --

7 MS. DIAMOND: No. No. No.

8 MS. LUTZ: I move the uncontested items.

9 MS. GLICKFELD: Second.

10 MS. DIAMOND: All those in favor?

11 MS. GLICKFELD: Aye.

12 MR. STRINGER: Aye.

13 MR. BLOIS: Aye.

14 MS. MEHRANIAN: Aye.

15 MS. DIAMOND: It passes. We'll be back with the
16 Basin Plan Amendment.

17 (Recess)

18 MS. DIAMOND: Welcome back. We're about to -- we're
19 going to resume now with Item Number 14, which is a Basin
20 Plan Amendment, and so I'm going to ask Ms. Moffett to
21 open up the hearing, please.

22 MS. MOFFETT: This is a public hearing for
23 consideration of a proposed Basin Plan Amendment to

24 administratively update Chapter 2 beneficial uses by
25 incorporating previously adopted amendments and updated
0065

1 surface and groundwater maps and corresponding beneficial
2 use tables. Copies of the proposed resolution were sent
3 to the Environmental Protection Agency, the State Water
4 Resources Control Board, and other interested agencies,
5 persons and organizations.

6 All persons appearing before the Board today
7 should leave written copies of their testimony, if
8 available.

9 Madam Chair, will you now please open the
10 hearing and administer the oath.

11 MS. DIAMOND: Yes. Will all those who are going to
12 testify on this matter please stand and raise your right
13 hand. That's everyone for Item Number 14.

14 (Whereupon all prospective witnesses were
15 collectively sworn)

16 MS. DIAMOND: Thank you. So we'll begin with our
17 staff.

18 DR. AMAH: Thank you. Good morning.

19 Can you hear me?

20 Good morning, Board members. My name is Ginachi
21 Amah. I am an engineer with the Basin Planning Program.
22 With me is Thom Siebels, our GIS analyst, who is
23 responsible for the bulk of the GIS work conducted for
24 this project. He will be making part of the
25 presentation. I would also like to acknowledge the
0066

1 contributions of others --

2 MS. DIAMOND: Excuse me. I'm probably going to have
3 to remind you more than once. Slow down, slower and
4 closer.

5 MS. LUTZ: Slow down.

6 MS. DIAMOND: We can't hear you very well.

7 DR. AMAH: And again -- can you hear me now?

8 Okay. I would also like to acknowledge the
9 contributions from other staff involved in this project;
10 in particular, Joe Luera, Theresa Rodgers, and our
11 student intern Manasi.

12 Item 14 is a proposed amendment to
13 administratively update Chapter 2 of the Water Quality
14 Control Plan for the Los Angeles Region, also known as
15 the Basin Plan. The Basin Plan is our regulatory
16 guidance and planning document and an essential tool in
17 supporting our mission to preserve and protect water
18 quality. The Basin Plan has both regulatory and
19 nonregulatory elements. This is an administrative update
20 that focuses on the nonregulatory aspects of Chapter 2 of
21 the plan, incorporating previously adopted amendments and
22 updating maps and beneficial use tables.

23 This is the first nonregulatory amendment since
24 the current version of the Basin Plan was adopted in
25 1994. With this amendment, we are not creating any new

0067

1 regulations nor are we modifying or deleting any
2 regulatory requirements from the Basin Plan. But you
3 will be asked to adopt a resolution to amend the Basin
4 Plan. Upon your adoption of this amendment, State Board
5 approval and OAL concurrence with its nonregulatory
6 status will be required before it becomes effective.

7 Administratively updating the Basin Plan was
8 identified as a priority project in the 2008-2010
9 Triennial Review, recognizing that an updated plan would
10 provide a more current resource for use by Regional Board
11 staff, the regulated community, and other stakeholders.

12 We have a change sheet for this item. It is a
13 reference map for the Eastern Santa Clara Groundwater
14 Basin, to be included in the Appendix of the Basin Plan,
15 and it's supposed to be placed right behind page 14-88 in
16 your package. I will go into the details and the need
17 for the change later in our presentation.

18 Next slide. With this slide, I would like to
19 provide a little background information on our Basin
20 Plan. The Basin Plan is designed to preserve and enhance
21 water quality and protect the beneficial uses of all
22 regional waters. It designates beneficial uses for
23 surface and groundwaters, it sets narrative and numerical
24 objectives that must be attained or maintained to protect
25 the designated beneficial uses, and it describes

0068

1 implementation and monitoring programs to protect all
2 waters in the Region. In addition, the Basin Plan
3 incorporates, by reference, all applicable State and
4 Regional Board plans and policies and other pertinent
5 water quality policies and regulations.

6 The current Basin Plan when adopted by the
7 Regional Board on June 13, 1994 and subsequently approved
8 by the State Board, the State Office of Administrative
9 Law, and the EPA. Since 1994, several Basin Plan
10 amendments have been adopted and more current background
11 and geographical information has become available, but
12 these changes have yet to be reflected in the Basin Plan.

13 The administrative updates of the Basin Plan
14 have been conducted in phases, the first of which covers
15 the update of Chapter 2.

16 Chapter 2 of the Basin Plan is titled,
17 "Beneficial Uses" and it lists and provides standard
18 definitions for the beneficial uses supported by
19 waterbodies in the Los Angeles Region. It also contains
20 beneficial use tables in which major surface waters,
21 groundwater basins, coastal features, and wetlands are
22 listed with their designated beneficial uses. Detailed
23 maps of these features are included in this chapter.

24 The amendments to Chapter 2 incorporate the
25 language from three previously adopted amendments to

0069

1 beneficial uses, Regional Board Resolution 98-018,

2 Regional Board Resolution Number 2003-010, and State
3 Board Resolution Number 2005-0015. I will discuss these
4 in detail in the upcoming slides.

5 The proposed update also includes updates to the
6 surface water, groundwater, and coastal features maps
7 contained in Figures 2-1 to 2-22 of Chapter 2. These
8 updated maps are created from more current, higher
9 resolution data sets.

10 In addition, the beneficial use tables, Tables
11 2-1 to 2-4, in Chapter 2 have also been updated to align
12 them with the higher resolution maps.

13 Finally, new geographical information has
14 allowed identification of previously unnamed waterbodies.
15 These waterbodies have been added to the tributary table
16 contained in Appendix 1 of the Basin Plan.

17 Addition of these waterbodies to the tributary
18 table is for informational purposes only and does not
19 have any new regulatory implications. I will go into
20 this in more detail when I discuss the comments.

21 This update to Chapter 2 of the Basin Plan is
22 nonregulatory in nature and does not involve changes to
23 beneficial use definitions, nor does it assign, modify,
24 or delete beneficial uses of any surface or groundwaters
25 within the Los Angeles Region.

0070

1 In November 1998, the Regional Board adopted an
2 amendment to the Basin Plan that de-designated the
3 municipal and domestic beneficial use from two areas of
4 the West Coast groundwater water basin and eight
5 channelized surface waters. This amendment also assigned
6 additional beneficial uses to three surface waters and
7 removed the cold freshwater habitat from portions of
8 three surface waterbodies.

9 The amendment was approved by the State Water
10 Resources Control Board, but subsequently was disapproved
11 by the Office of Administrative Law in July of 1999 on
12 the grounds that the proposed amendments to beneficial
13 users of the surface waters did not meet the standards
14 for approval.

15 However, OAL did find that the two areas of the
16 West Coast Groundwater Basin met the requirements for
17 de-designation of the municipal beneficial uses.

18 Therefore, in December 1999, State Board
19 resubmitted modified provisions of the amendment, which
20 only contained modifications to the municipal beneficial
21 use of the two areas in the West Coast Groundwater Basin.
22 This was approved by OAL in February 2000. These areas
23 are in Figure 2-15 on page 14-53 of the package.

24 In July 2003, the Regional Board adopted an
25 amendment to the Basin Plan incorporating the suspension

0071

1 of recreational beneficial uses in engineered channels
2 during unsafe wet-weather conditions.

3 The amendment also identified 39 waterbodies

4 within Los Angeles County to be covered by the high-flow
5 suspension and directed that a new Table 2-1a in the
6 Basin Plan should be created to contain all the
7 recreational beneficial uses. This table is provided in
8 your package starting at page 14-23.

9 The photo or slide depicts the conditions in
10 some engineered channels during significant storm events.
11 It was taken in Ballona Creek at Overland Avenue, right
12 behind the Culver City Library.

13 The high-flow suspension applies to
14 water-contact recreational activities associated with the
15 swimmable goals of the REC-1 use, the noncontact water
16 recreation involving incidental water contact under the
17 REC-2 -- sorry. I'm trying really hard to slow down --
18 the noncontact water recreation involving water contact
19 under the REC-2 use, and the associated water bacteria
20 objectives set to protect those activities.

21 Water quality objectives set to protect other
22 recreational uses associated with the fishable goals of
23 the REC-1 use and other REC-2 uses, such as those
24 involving the aesthetic aspects of water, remain in
25 effect at all times for the 39 waterbodies identified.

0072

1 In June 2003, the Regional Board rejected a
2 proposed amendment to the Basin Plan to modify the
3 recreational beneficial uses of Reaches 1 and 2 of
4 Ballona Creek.

5 The Regional Board's action was later reviewed
6 by the State Water Board and determined to have been in
7 error. The State Water Board subsequently adopted the
8 proposed amendment through State Board Resolution Number
9 2005-0015, thereby adding a subcategory of water contact
10 recreation to the Basin Plan.

11 This subcategory, Limited Water Contact
12 Recreation, was defined as "Uses of water for
13 recreational activities involving body contact with
14 water, where full REC-1 use is limited by physical
15 conditions such as very shallow water depth and
16 restricted access and, as a result, ingestion of water is
17 incidental and infrequent."

18 The new beneficial use was applied to Reach 2 of
19 Ballona Creek, while the swimming component of the
20 potential REC-1 use was removed from both Reach 1 and
21 Reach 2 of Ballona Creek. And as a clarification, I
22 would like to point out that REC-1 has a fishable and a
23 swimmable component. The swimmable component applies to
24 the potential for ingestion of water during recreation,
25 while the fishable component applies to the consumption

0073

1 of aquatic organisms obtained through recreational
2 fishing.

3 At this point, I would like to turn the
4 presentation to Thom, who will present this work done to
5 update the maps and beneficial use tables.

6 MR. SIEBELS: Next slide, please.

7 Good morning, Board members. My name is Thom
8 Siebels and I'm going to talk to you about the GIS
9 portion of this project that I performed. You've seen
10 some of my maps before. This is the first time I'm
11 presenting myself, so I'm going to take advantage of my
12 15 minutes of fame and talk to you about all the surface
13 and groundwater in the entire region, and you'll see what
14 I mean as we go through this.

15 The Basin Plan was last updated in this manner
16 In 1994. A lot has happened in the 17 years since then.
17 Specifically in the areas of technology, there's been
18 many developments that allow us to better understand and
19 represent the water features in our region at this time.

20 In this project, we use technology called
21 Geographic Information Systems, commonly referred to as
22 GIS. GIS is the system that we use to map and analyze
23 features in our database. GIS was in its infant stages
24 in 1994. The software was difficult to use. In fact,
25 some of the maps were actually drawn by hand at that time

0074

1 and there wasn't a lot of good data available.

2 At this time, the software has been greatly
3 improved, there's a lot of sophisticated mapping and
4 analysis tools at our disposal, and there's a lot more
5 accurate data available that we can use for our analysis.

6 For example, we can be working on something and
7 display recent aerial photography in the background to
8 assist in our research.

9 For this project, there were three specific
10 things that needed to be updated in order for us to do
11 our GIS work.

12 The first was the hydrologic unit codes. A
13 hydrologic unit is a way of organizing hydrologic data.
14 Typically it could be defining drainage areas and
15 watersheds and so forth. There might be many hydrologic
16 units within a specific watershed. Each hydrologic unit
17 is assigned a code and that's what we use in our tables
18 to identify where things are in the region.

19 Also, we needed to analyze and update our
20 surface water features. This includes streams, lakes,
21 wetlands, things of that nature; and in the process of
22 using more recent data, we were able, as Ginachi referred
23 to, to identify some new features and we were also able
24 to make some changes in the way things were mapped based
25 on Basin Plan amendments that defined certain reaches a

0075

1 certain way.

2 The last thing we had to update was the
3 groundwater basins, which of course refers to the storage
4 of groundwater below the surface, and we updated those as
5 well with more recent data.

6 Once we had all of these things and did our
7 analysis, we were able to create updated tables,

8 specifically the Beneficial Use Table in Chapter 2 and we
9 were also able to update all of the maps. There was a
10 total of 22 maps in Chapter 2 that were updated.

11 Next slide.

12 In the beginning of a GIS project, it's
13 important to select the data that you're going to be
14 using. The key data elements are commonly referred to as
15 base layers. As you can see on this slide, we had
16 different base layers before than we have now and in
17 choosing the base layers, we were careful to choose -- to
18 be -- for consistency, we chose layers that were derived
19 from the original data that had been used in 1994 and
20 also data that was used by the State Water Resources
21 Control Board and the EPA.

22 As you can see on this slide, for example, the
23 hydrologic unit layer in 1994 was called Cal Water 1.0.
24 It has undergone a couple of revisions and it is now
25 known as the Watershed Boundary Dataset, and that's what
0076

1 we used for this project. Likewise, the EPA Reach File 3
2 for surface water features has undergone several
3 revisions and is now known as the National Hydrography
4 Dataset, and the groundwater basins from the Department
5 of Water Resources underwent one major update and we are
6 using that current version.

7 Next slide.

8 In this slide, I'm going to explain a little bit
9 more about the hydrologic unit issue.

10 As I mentioned, hydrologic units are used for
11 organization of hydrologic data. They can represent both
12 natural and man-made watersheds and drainage areas. In
13 the previous version that we used in 1994, they used an
14 eight-digit code to identify hydrologic code units, two
15 digits for each of four categories that were region,
16 subregion, hydrologic basin, and hydrologic sub-basin.
17 In this current update, the code is now a 12-digit code,
18 hydrologic unit code, and that represents those four and
19 an additional two, which is watershed and sub watershed.

20 In this slide, we have an example of some of the
21 reasons why we needed to do this update. On the left you
22 see the version of hydrologic units that was used in
23 1994, indicated by the brown line that runs across there
24 and as you can see, there were some issues with that. It
25 considered not only scientific but administrative
0077

1 boundaries. There wasn't as much data available to make
2 it accurate.

3 So you can see in this case, this unit here
4 (indicating) that's bounded by the brown line includes
5 Dominguez Channel, Los Angeles River, part of
6 Los Cerritos Channel, and even a little part of
7 San Gabriel River, which have their own distinct
8 watersheds.

9 You can see on the right the more recent version

10 outlined in green now clearly defines drainage areas for
11 Dominguez Channel, separate drainage area for Los Angeles
12 River, Los Cerritos Channel, and so forth. So it's much
13 more accurate. You can also see down along the coastal
14 harbor features, you can see that there's more accuracy
15 in the way things are mapped and more completeness for
16 things that have been built in the years since then.

17 I need to point out one other thing about this
18 hydrologic unit issue, which was we obtained this data in
19 May of this year. We did all of our analysis, created
20 all our tables and sent it out for public comment, and in
21 September, right after we released that for public
22 comment, a new version of the hydrologic -- what is known
23 as the Watershed Boundary Dataset, the current Hydrologic
24 Unit layer, was released. What had happened was that the
25 United States Geologic Survey, the USGS had developed

0078

1 this layer and they turned it over to State officials to
2 be the stewards of that data for the State of California.
3 After review by the State officials, some changes were
4 made that were only -- there were only two or three very
5 small edits to the actual boundaries, but there were
6 several changes in the numbering system along the coastal
7 regions and in the San Gabriel River Watershed.

8 So we had to go back and make those changes to
9 the most current version that had been released in
10 September. So when you look in your packets, you're
11 going to see a lot of red numbers in the tables and the
12 reason for that is because of that update that came out,
13 and it looks a little funny to see so many red numbers
14 but it's because we were even using the most recent data
15 as of September of this year.

16 Next slide, please.

17 I talked about the hydrologic units. The next
18 thing we needed to analyze was the surface water
19 features. Again, that includes things like streams,
20 lakes and wetlands.

21 In 1994, we used a layer called the EPA
22 Reach 3 -- Reach File 3 for the storm -- for the Stream
23 Network and now we're using the National Hydrography
24 Dataset again that was developed by the USGS.

25 The previous layer was mapped at about a scale
0079

1 of 1 to 100,000. It had some errors. It wasn't very
2 complete in naming features and a lot of that has been
3 improved and updated in this new version. You can see in
4 these two examples side by side in the Arroyo Seco area.
5 You can see on the right that there's a number of new
6 streams included now that have been mapped and you can
7 also see from the labeling that there are many more
8 streams that have been identified and labeled in the
9 updated version, and that is what Ginachi was referring
10 to earlier, that we were able to add those to the
11 Tributary Tables to help us get a more complete inventory

12 of what is in our Region.

13 You can also see, for example, in this area
14 right here (indicating) where the stream was not
15 completely edited to connect to that one and over here
16 they've corrected that and updated the editing. You can
17 see previously they interrupted the streams as they went
18 through larger waterbodies and here they've made one
19 continuous network. And so those are improvements that
20 needed to be included.

21 In addition to that, I don't know if you can see
22 it here, but this named segment is the Arroyo Seco and in
23 the new version, what we've done is defined that this
24 is -- below the dam is Arroyo Seco Reach 2 and above the
25 dam is Arroyo Seco Reach 3. We made those changes based
0080

1 on Basin Plan amendments, TMDLs, and so forth that have
2 defined reaches in specific ways that have occurred since
3 then, and we wanted to reflect that in our mapping and in
4 our tables to make it clear for people.

5 In total, there are over 4,000 miles of named
6 reaches in our region and we looked at every one of them
7 and we were able at the end of that to add 660
8 waterbodies to our tributary tables.

9 Next slide, please.

10 The last thing we had to look at was the
11 groundwater basins. The groundwater basin boundaries
12 that we use, again to be consistent with the EPA and the
13 State Water Resources Control Board, are provided by the
14 Department of Water Resources in what they call
15 Bulletin 118. In the previous version, the update was
16 Bulletin 118-80 from the year 1980; and in the current
17 version, it's Bulletin 118-update 2003, when that was
18 updated.

19 These boundaries are based on an evaluation of
20 the best available geologic and hydrologic information.
21 You can see that there were some significant differences.
22 Things happened like on the left -- I don't know if you
23 can see those faint lines, but this area (indicating) was
24 divided into sub-basins and on the right it's now blended
25 into one large basin. These sub-basins down here in the
0081

1 yellow have been separated into distinct basins. The
2 shape like in this area here has changed somewhat based
3 on more recent data in some cases. You can see also that
4 here this was -- this was formerly split. It was
5 combined together, and in this area down here it was one
6 area that's been split. We had to address all of those
7 issues and resolve all of them, but in all cases we took
8 care to maintain the current Beneficial Use Designations
9 and line them up with the new data.

10 Next slide, please.

11 Maybe the most important part of this project
12 was to update the tables in Chapter 2, especially the
13 Beneficial Use Table, which you can find in your packet

14 on page 14-13, and with the beneficial uses, as stated
15 before, since this was a nonregulatory update, care was
16 taken to preserve the current beneficial use
17 designations. We were very careful -- even though there
18 were some name changes and hydrologic unit changes, we
19 were careful to look on the map and make sure that we
20 matched each physical segment of a stream in the old and
21 the new with the same beneficial uses.

22 We also made some improvements to the Beneficial
23 Use Table. As I mentioned before, we listed things
24 according to the way reaches have been defined in TMDLs
25 and so forth. For example, the Los Angeles River used to
0082

1 be just listed as Los Angeles River and Hydrologic Unit
2 A, Los Angeles River Hydrologic Unit B, et cetera. It's
3 now known as Los Angeles River Reach 1 and Los Angeles
4 River Reach 2, and so forth.

5 We're using the new, as I mentioned, 12-digit
6 hydrologic codes. We also added descriptions. The maps
7 that we provide are at too large of a scale to get detail
8 on exactly where reaches begin and end, so we thought it
9 would be helpful to provide descriptions. As you can see
10 in this example, instead of just listing Santa Clara
11 River 1, we added the description that it is from the
12 estuary to the Highway 101 Bridge.

13 It was important to be able to compare the old
14 tables with the new tables, so we created a
15 cross-reference table. The cross-reference table lists
16 things in the exact order and name that they appeared in
17 the previous Basin Plan update, and then alongside of
18 that we have the new name and the new hydrologic unit
19 that is used in this update so that people would be able
20 to refer back and forth between them.

21 And finally, as I mentioned, we updated the
22 Tributary Table and we were -- based on our GIS work, we
23 were able to add 660 named waterbodies to those tributary
24 tables to make a much more robust reference; and since
25 they made the table longer, we decided to organize it by
0083

1 watershed so it would be more user friendly.

2 And as an example, there's a Coyote Creek in
3 multiple watersheds so now when you look at the table,
4 you'll know which one you're talking about. Again, these
5 new reaches included in the Tributary Table, none of them
6 were added to the Beneficial Use Tables. None of them
7 were assigned beneficial uses during this process.

8 Next slide, please.

9 Here is an example, a shot from the screen shot
10 from the Beneficial Use Table and you can see how it's
11 organized by watershed, you can see the new names,
12 including things like Los Angeles River Reach 1 and the
13 descriptions like Dominguez Channel, for example,
14 "Estuary ends at Vermont Avenue." The next reach is
15 "Estuary to 135th Street," and so forth that we added for

16 clarification. And we have here the 12-digit hydrologic
17 unit codes that we now use and then the table goes on to
18 list all the current beneficial use designations from the
19 Basin Plan.

20 Next slide, please.

21 The fun part of this project was to create the
22 new maps. We used -- we updated all 22 maps in
23 Chapter 2. We used the same basic format from the
24 previous chapter. It had a nice, simple, and useful look
25 to it, so we maintained that format. It also had the
0084

1 little insets that identified where this map is within
2 our Region, as you can see up in the upper left corner
3 there.

4 In the previous version, we had all the surface
5 water features mapped. In this version, we added a
6 couple little details. We included, as you can see in
7 green here, the hydrologic unit boundary and we also --
8 for some geographic orientation, we added the freeways in
9 our Region to the maps. And this is an example from the
10 Malibu Creek watershed.

11 Next slide, please.

12 In the process of updating the maps, we also did
13 some editing in GIS to better represent certain features
14 in our regions, such as harbors and marinas. In this
15 example, you can see how we digitized things around the
16 L.A. and Long Beach Harbor area and we added things like
17 breakwater, bridges, harbors and marinas to better
18 represent what is going on in that area.

19 In summary of this part of the presentation,
20 this was a very complex project that involved extensive
21 use of GIS, looking at a large amount of data. When I
22 told you I was going to talk about all the surface water
23 and groundwater in our region, now you know what I meant.
24 We did look at all of that.

25 We are the first region who has taken on this
0085

1 project because it is kind of complicated and time
2 intensive. State Board has hired consultants to do this
3 for other regions and we are in discussions with them to
4 compare notes on what we did here.

5 At this time I'm going to turn it back over to
6 Ginachi, who will talk about the public comments and
7 conclude the presentation.

8 DR. AMAH: Thank you, Thom.

9 That was a lot of work. Thom has been working
10 very hard for over seven and a half months to get that
11 together. I am going to try and match his nice measured
12 tones, so I am going to be really slow.

13 In all -- next slide -- it all, we got seven
14 comment letters from the County Sanitation Districts of
15 Los Angeles County, the Calleguas Creek Watershed
16 Management Plan, Los Angeles River Metals Jurisdictional
17 Group 1, County of Los Angeles and Los Angeles County

18 Flood Control District, the City of Oxnard, the City of
19 Los Angeles, and the private citizen Theresa Jordan.
20 Responses to all comments received on the
21 August 19th, 2011 draft documents for this proposed
22 amendment are provided starting at page 14-111 of your
23 package. I will present some of the comments in the
24 following slide.

25 The County Sanitation Districts of Los Angeles County,
0086

1 Calleguas Creek Watershed Management Plan, and the City
2 of Los Angeles had comments regarding the appropriateness
3 of deleting certain language pertaining to the
4 application of the municipal use designation in
5 determining effluent limitations. This language was
6 deleted from the Basin Plan as part of the incorporation
7 of Regional Board Resolution Number 98-018, which removed
8 the municipal designation from two areas within the West
9 Coast groundwater basin.

10 In response, as previously mentioned, Resolution
11 98-018 had been adopted by the Regional Board and
12 subsequently approved by the State Water Board before
13 portions of it were disapproved by the Office of
14 Administrative Law. The Basin Plan language initially
15 approved by the Regional Board removed a provision in
16 Chapter 2 stating that no effluent limitations would be
17 placed in Waste Discharge Requirements as a result of the
18 municipal use designation ensuing from the State's
19 Sources of Drinking Water Policy until such a time as the
20 Regional Board conducted a detailed review to determine
21 which waters should be excepted from the municipal
22 designations.

23 Upon a thorough review of the administrative
24 record for this particular amendment, staff came to the
25 conclusion that the language in question should be

0087

1 reinstated, as its deletion was not included in the
2 portion of the amendment that was eventually approved by
3 the OAL.

4 County Sanitation Districts of Los Angeles
5 County also commented about the potential for changes to
6 beneficial uses as a result of modifications to reach
7 boundaries for surface waters and sub-basin boundaries
8 for groundwater basins.

9 In response, staff has tried to clarify that it
10 is not the intent of this update to modify or assign any
11 beneficial use changes. This update was conducted in
12 such a manner as to ensure that the surface water reaches
13 of segments and groundwater sub-basins retain the
14 beneficial use designations contained in the 1994 Basin
15 Plan, in spite of the new delineations -- this is -- we
16 are trying to do this in spite of the new delineations.
17 Revisions were made to the draft Beneficial Use Tables to
18 correct any errors noted and confirmed by staff.

19 Next slide.

20 The County of Los Angeles and the Los Angeles
21 County Flood Control District commented that the addition
22 of newly named waterbodies to the Tributary Table in
23 Appendix 1 of the Basin Plan constituted a regulatory
24 change, since these tributaries would be subjected to the
25 Tributary Rule of the Basin Plan and be assigned to the
0088

1 beneficial uses of the waters to which they are
2 tributary.

3 Staff's response is that the Tributary Rule
4 covers all waters of the state, whether or not they are
5 explicitly identified in the Basin Plan. As such, these
6 waterbodies have always been assigned the same beneficial
7 uses of the waters to which they are tributary. Thus,
8 their inclusion in the tributary tables does not have any
9 new regulatory implications and was done simply for
10 informational purposes.

11 Next slide.

12 The County of Los Angeles and the Los Angeles
13 County Flood Control District made comments regarding the
14 appropriateness of some of the language in previously
15 adopted Basin Plan amendments, specifically Regional
16 Board Resolution Number R03-010, which suspended
17 recreational uses and associated bacteria objectives in
18 engineered channels during unsafe wet-weather conditions,
19 and State Board Resolution Number 2005-0015, which
20 modified the recreational use designations for Reaches 1
21 and 2 of Ballona Creek.

22 Staff's response is that comments concerning the
23 appropriateness of previously adopted amendments are
24 outside the scope of the proposed nonregulatory amendment
25 and that making changes to specific language adopted by
0089

1 the Regional Board or State Board and approved by the
2 State Board and U.S. EPA would constitute a regulatory
3 change, which is not the purpose of this administrative
4 amendment.

5 Calleguas Creek Watershed Management Plan, the
6 City of Los Angeles, and the County Sanitation Districts
7 requested that, given the complexity and the level of
8 detail associated with this update, provisions should be
9 made to allow for the correction of inadvertent errors
10 identified at a future date.

11 Staff has responded that the Tentative
12 Resolution allows for nonsubstantial changes to be made
13 during the approval process and that other avenues exist
14 for the correction of errors after final approval,
15 including making corrections to during the other phases
16 of this administrative update or as part of a separate
17 Basin Plan amendment.

18 The Los Angeles River Metals TMDL Jurisdictional
19 Group 1 expressed concern that Compton Creek is depicted
20 to tributary to Reach 2 of the Los Angeles River based on
21 boundary definitions in the Beneficial Use Tables. Their

22 concern is that this conflicts with the L.A. River Metals
23 TMDL which, for implementation planning purposes,
24 considers Reach 1 as extending to the confluence with
25 Compton Creek.

0090

1 In response, while Compton Creek is in Reach 2
2 of the Los Angeles River, for TMDL purposes, Reach 1 is
3 extended to the confluence with Compton Creek and,
4 therefore, Compton Creek is considered a tributary of
5 Reach 1. This is due to its proximity to the Reach 1
6 boundary and the greater potential for its discharge to
7 impact the water quality of Reach 1 rather than Reach 2.

8 The location of Compton Creek in relation to
9 Reach 1 is shown on the map. Reach 2 is about 19 and a
10 quarter miles long and Compton Creek comes in at the last
11 half-mile just upstream of the boundary with Reach 1.

12 We did consider formally extending the Reach 1
13 boundary to include Compton Creek as part of this update
14 but wanted to preserve the administrative nature of this
15 Basin Plan Amendment. We expect to make this change
16 sometime in the near future.

17 Next slide.

18 Finally, the County Sanitation Districts of
19 Los Angeles commented that the 2011 update did not
20 contain some of the sub-basin delineations in the Eastern
21 Santa Clara groundwater basin maps, as had been provided
22 in the 1994 Basin Plan. They requested that these
23 delineations be provided for the purpose of determining
24 where water quality objectives apply.

25 The 2003 DWR bulletin on which the updated maps

0091

1 are based combined the sub-basins in the Eastern
2 Santa Clara Groundwater Basins into a single large basin.
3 While the previous sub-basins are preserved in the
4 Beneficial Use Tables for the purpose of maintaining
5 their beneficial uses, they are no longer included in the
6 updated maps. However, in recognition of the need to
7 distinguish between groundwater sub-areas where different
8 beneficial uses apply, staff has provided a reference map
9 making these distinctions.

10 This map is to be included in Appendix 2 of the
11 Basin Plan as an updated change sheet for this item.

12 When we conduct the update of Chapter 3 of the
13 Basin Plan which contains the water quality objectives,
14 we intend to create additional reference maps where we
15 find that delineation of sub-basins are necessary to
16 distinguish between sub-areas with different water
17 quality objectives.

18 The Board has the following alternative actions:
19 To adopt the proposed Resolution and amendment, which
20 will administratively update Chapter 2 of the Basin Plan;
21 to modify the proposed Resolution based on the changes
22 proposed, and adopt; or to decline to adopt the proposed
23 Resolution, in which case Chapter 2 will remain as-is.

24 Staff recommends that the Board adopt the
25 proposed administrative update to Chapter 2 of the Basin
0092

1 Plan with the changes provided in the change sheet in
2 order to provide a more current for use by staff, the
3 regulated community, and stakeholders.

4 This concludes my presentation.

5 MS. DIAMOND: Thank you. Thank you. We have three
6 cards and I'm going to call them. The first person is
7 John Hunter.

8 MR. HUNTER: Thank you. My name is John Hunter. I'm
9 the chair of the Jurisdictional Group Reach 1 Metals TMDL
10 and I've got a very brief slide presentation on this.

11 I just wanted mainly to come up here to thank
12 staff for working with us on this. We did have a concern
13 on this because the Reach 1 of the L.A. River goes almost
14 to Compton Creek and then it becomes Reach 2 and then we
15 get to Compton Creek. So essentially what we end up with
16 is we as Jurisdictional Group 1 flow into Compton Creek
17 and then that runoff goes into Reach 2 and then it comes
18 back into Reach 1. And it's just -- it's not a clean
19 situation. It looks like we're having problems with the
20 slide, and I'll be done with my presentation before they
21 get the slides squared away.

22 But, yeah, I just wanted to thank staff for
23 working with us to get that done.

24 They've said that Compton Creek is now going to
25 be a tributary of Reach 1, so we can begin working with
0093

1 that, that area.

2 So should I wait until they have the slide
3 presentation up?

4 MS. DIAMOND: Do you know how long that will take to
5 get up?

6 MR. CARLOS: Less than a minute.

7 MS. DIAMOND: Should we take the next person and then
8 have you come back afterwards?

9 So Ann Heil for the L.A. Sanitation Districts of
10 L.A. County.

11 MS. HEIL: Well, good morning. My name is Ann Heil
12 and I'm representing the County Sanitation Districts of
13 Los Angeles County today.

14 I want to start first by thanking all the Board
15 members for approving the update of this Basin Plan as
16 part of the 2008-2010 Triennial Review. We really think
17 it was an excellent undertaking and very valuable to
18 bring the Basin Plan up to modern standards and we really
19 think it's going to be a lot more user friendly and a lot
20 more clearer to everybody when we're done with it.

21 And I also want to take this time to thank the
22 staff that's been working on this, particularly Ginachi
23 and Thom Siebels. It really -- I don't know that you
24 appreciate what a monumental undertaking this whole thing
25 was with all those maps and all those groundwater basins

0094

1 and all those tables. And, you know, even just checking
2 it was a major effort on the part of my staff, just
3 looking at our watershed and making sure that each reach
4 exactly matched up. They could not have been, to use
5 Board Member Lutz's phrase, more collaborative and more
6 cooperative in the process; very professional, very eager
7 to get their work done, you know, exactly right of high
8 quality.

9 It was just truly a pleasure to work them on
10 that. There were some really tricky issues that we had
11 to sort through about the MUN issue and they were
12 willing. They went back and they requested records from
13 the State Board, very thorough in doing their work to
14 make sure that they had everything just right.

15 You know, as we got near the end, what we really
16 found -- people were really overlooking at first -- were
17 those groundwater basins ended up being really tricky
18 because the maps of them where B.U.'s apply isn't linear
19 like on a stream where it's from here to here
20 (indicating). It's spread out, you know, in two
21 dimensions. So they were really good with us in working
22 with that and we are really glad that for the one basin
23 where we were concerned about where B.U.'s applied, they
24 brought the change forward that delineates this update
25 where it applies.

0095

1 So we just request that when you adopt it, be
2 sure to include that change sheet.

3 Thanks so much and we look forward to working
4 with your staff as they move forward on the other ones.
5 They're really doing an excellent job.

6 MS. DIAMOND: Thank you, Ann.

7 We'll go to the last card before we come back to
8 you.

9 Mark Pumford.

10 MR. PUMFORD: Good afternoon, Chair, Members of the
11 Board. Mark Pumford for the City of Oxnard.

12 Ours is also picture-dependent and we have only
13 one issue we're debating. We did work through all of our
14 issues with staff. One remaining problem was related to
15 the Oxnard industrial drain.

16 This is a graphic showing the Oxnard industrial
17 drain as it goes through the Halaco property and ends up
18 at the ocean. In response to comments, the staff agreed
19 that the Oxnard industrial drain is an indigent channel
20 going through where a historical slough existed, but the
21 Oxnard industrial drain is not a natural channel. It was
22 dug out in the late 1880's to transport sugar bead waste
23 to the ocean and if you look at the table -- the next
24 slide -- it's listed as a Ventura coastal stream
25 tributary to the Ormond Beach wetlands.

0096

1 Go ahead, Alex.

2 There are reasons why labeling the Oxnard
3 industrial drain as a stream would have disastrous
4 effects on our future plans for the drain.

5 This (indicating) is a graphic from the
6 California Coastal Conservancy's Restoration Feasibility
7 Study for the Ormond Wetlands. They and I would like to
8 redirect the flow of the Oxnard industrial drain to the
9 headlands of the Ormond Wetlands, providing a freshwater
10 gradient through the system. This would mimic the
11 original slough structure.

12 MS. DIAMOND: Mark, can you get a little closer?

13 MR. PUMFORD: Sure. If the Oxnard industrial drain
14 is called a stream or waters of the United States, this
15 would not be allowed nor would any trash removal devices
16 that we are proposing in concert with the Watershed
17 Protection District be allowed. We recommend removal of
18 the Oxnard industrial drain from the Table 1 to clarify
19 that it is not a natural stream, but a stormwater
20 conveyance system.

21 Thank you very much for your consideration of
22 this request.

23 MS. DIAMOND: Thank you.

24 I think -- John, do you want -- do you have
25 anything more to say?

0097

1 MR. HUNTER: No. Technical difficulties.

2 MS. DIAMOND: Thank you. Sorry about that.

3 Okay. Those are all the cards, so at this point
4 we can go to questions from the Board. I'll start with
5 Mr. Stringer.

6 MR. STRINGER: I just have actually just one question
7 on that last comment about the Oxnard industrial drain,
8 if you could address that point.

9 MR. UNGER: We're going to ask Deb to help with that
10 question.

11 MR. STRINGER: Okay. Thank you.

12 MS. SMITH: This is Deb Smith. Staff can add some of
13 the detail because I haven't been involved in all of the
14 conversations about this, but just from my viewing of
15 this and hearing about this issue, I would view this as a
16 regulatory change that would go above and beyond what
17 we're doing here today, which is just an administrative
18 update to the Basin Plan, bringing in existing
19 information that's already been adopted by the Board or
20 enhancing maps for reference, and we cannot -- I believe
21 we cannot consider this today, but we can certainly take
22 a look at it, my gut reaction.

23 MR. STRINGER: So are you suggesting that we remove
24 that piece of it from the --

25 MS. SMITH: No. I'm suggesting that we leave it as

0098

1 staff has proposed. You know, if it's identified as a
2 drain in the Basin Plan now that goes to the wetlands, it
3 should remain so.

4 MS. DIAMOND: Speak up, Deb. Everybody, please speak
5 up.

6 MS. LUTZ: It's really difficult to hear.

7 MS. DIAMOND: It's really hard to hear.

8 MS. SMITH: I'm recommending that making any such
9 change would be a regulatory change which hasn't been
10 agendized here, that we're just doing nonregulatory
11 administrative changes.

12 MR. STRINGER: I understand.

13 MS. DIAMOND: Okay.

14 MS. SMITH: So --

15 MR. STRINGER: Okay.

16 MS. SMITH: -- we can get into the substance of it
17 after the meeting.

18 MR. STRINGER: Okay. I get it. Thank you.

19 Was there more, though?

20 MR. UNGER: No. That's it.

21 MR. STRINGER: That was my only question.

22 Just a comment, it looks like really fabulous
23 work and congratulations to everyone who worked on it.
24 It appears to be an enormous amount of work that was done
25 and anything that could be done to get better, more
0099

1 accurate information to ensure that decisions are being
2 made on a scientific rather than sort of political
3 boundary kind of basis is obviously the best thing for
4 the resources, and just thank you and commend you for
5 your work.

6 DR. AMAH: Thank you.

7 MS. GLICKFELD: Thank you, Madam Chair. I just also
8 want to add a commendation as a member who's been here
9 for three years waiting to see these maps, I'm really --
10 I've been asking and asking, "When are we going to get
11 them?" So I really appreciate it. I also know how much
12 work it is. I work with GIS all the time and I also know
13 it's going to be of great help to the regulated community
14 and the other stakeholders.

15 I have just a couple of questions and it relates
16 to the one that Board Member Stringer asked.

17 I'm a bit confused. As I understand it, all of
18 these tributaries, all of the mapped waterbodies, are
19 defined as waters of the United States. Is that correct?

20 DR. AMAH: Well, all the maps are waters of the
21 state.

22 MS. GLICKFELD: Waters of the state. So when
23 something is formed like the industrial drain which
24 actually is still water that used to flow through some
25 other water that was of the United States, does it become

0100

1 not the waters of the United States?

2 DR. AMAH: Well, we don't believe so --

3 MS. GLICKFELD: A little slower and louder.

4 DR. AMAH: We don't believe so because waterbodies
5 have actually been diverted and straightened and

6 engineered and have become drains.

7 MS. GLICKFELD: So we're still counting anything
8 that's open and has been engineered as a water of the
9 United States?

10 DR. AMAH: Yes.

11 MS. GLICKFELD: So why is it that we decided that
12 when arbitrarily instead of making it an open channel a
13 City decides or the County decides to put a storm drain
14 underground, why does it disappear from the map?

15 DR. AMAH: Well, because I guess it becomes a closed
16 drain, but you'd be able to tell from the storm drain
17 maps and that sort of thing what actually happened.

18 MS. GLICKFELD: So I just don't understand why storm
19 drain water is not waters of the United States if
20 agricultural drain waters are, and I'm glad that the
21 attorneys decided to step up.

22 MS. FORDYCE: Hi. Jennifer Fordyce.

23 I think I want to clarify. All waters of the
24 United States are waters of the state, but not all waters
25 of the state are considered waters of the United States.

0101

1 So in terms of the Oxnard industrial drain, the
2 Oxnard industrial drain is considered a tributary to the
3 Pacific Ocean. The Pacific Ocean is considered a water
4 to the United States. Therefore, Oxnard industrial drain
5 is considered a water of the state. I wanted to
6 clarify -- am I not speaking close enough?

7 MS. LUTZ: No. Just slower. See, we're having to
8 concentrate very carefully to hear what you're saying, so
9 if you speak slower, we can understand it better.

10 MS. FORDYCE: Okay.

11 MS. LUTZ: Thank you.

12 MS. FORDYCE: So I just want to echo what Deb had
13 said previously is that this item has been noticed as an
14 administrative update, nonregulatory. So I understand
15 that the request has been to remove the Oxnard industrial
16 drain.

17 MS. GLICKFELD: That's actually not my question. My
18 question is Why are the storm drained waters where
19 arbitrarily a City or County decides to underground their
20 drain, as opposed to leave it open to the surface, why is
21 that not qualified to be on this map?

22 MS. PURDY: Okay. I'm going to try to answer the
23 question.

24 The areas that you're talking about where there
25 is an enclosed storm drain are waterbodies -- those are

0102

1 not considered waters of the U.S., and I understand what
2 you're saying. You're saying that there may be
3 situations where there may be a water of the U.S. that is
4 open, but then it's put into a storm drain and it's
5 enclosed and it's put underground and --

6 MS. GLICKFELD: And, you know, one of the ones I
7 noticed, all of the drainages that come across from the

8 Santa Monica mountains like the Pico Kenner drain, not on
9 this map. That was a stream at one time, so why isn't it
10 included here?

11 MS. PURDY: Right. And I think that is somewhat of a
12 legal issue and I might let Jennifer come back up to
13 the -- but my -- my position is from my understanding,
14 that because it's in an underground storm drain, it is
15 not considered a water of the State or a water of the
16 U.S. I understand what you're saying. It used to be,
17 but it's now been put into a storm drain and it no longer
18 exists as a surface water; it exists as a storm drain.

19 And so those are -- I think to further get at
20 what you're asking, the mapping of those storm drains is
21 something that a number of agencies within the region are
22 doing and do have GIS data layers for, but they're not
23 the -- it's not the type of information that's reflected
24 in our Chapter 2 because what our Chapter 2 is doing is
25 identifying all the surface and groundwaters to which our
0103

1 water quality standards apply in the Los Angeles Region,
2 and the water quality standards do not actually apply to
3 the storm drains, per se. They apply to the waters to
4 which the storm drain discharges.

5 MS. GLICKFELD: Okay. That -- I don't think I want
6 you to go any further on that.

7 MS. MEHRANIAN: I wanted to possibly think if I can
8 shed some light on this because as a planner, I worked
9 with GIS data and for a lot of time before and after GIS,
10 and in my experience, because it's so layered -- when you
11 have a flat map, everything is in that flat map. When
12 you go to GIS, because it's layered, some of the
13 underground water or -- that becomes on the second layer.
14 So if it's not on the layer that they already converted,
15 you would not see it on the surface for layers. It could
16 be a technical issue more than a legal issue, I'm
17 thinking.

18 MS. GLICKFELD: I think it's really more of the
19 other. I don't want to belabor this. I don't think we
20 can make any changes to this. It would not be
21 administrative if we did, but I would hope that at some
22 point somewhere in the Basin Plan, since we do regulate
23 storm drains, we do regulate storm drains through the
24 municipal permit, we regulate them through the TMDLs, it
25 would be nice to have a map that had all the major storm
0104

1 drains on it. So it doesn't have to be this one, but it
2 should be another one.

3 MR. UNGER: May I suggest that perhaps we compose --
4 we get a memorandum to your specific question and as soon
5 as we can, get that to you?

6 MS. GLICKFELD: Again, you know, I don't think it has
7 to be to me or to the Board, but this issue of what is a
8 water of the state and whether, in fact, there's a
9 substantial legal difference between, yes, an open canal

10 is and, no, a closed drain is not doesn't sound terribly
11 good to me. It would be good that you looked at that,
12 but report back to the whole Board rather than to me.

13 I think I have just one other question about
14 this. So one of the maps that I see and that our staff
15 identified was we created a new watershed. The
16 Los Cerritos watershed wasn't even included on the prior
17 maps and now it does include it, so my question to you is
18 does this change -- prior to this map, was the area that
19 was formerly looked at as part of the L.A. River that's
20 now the Cerritos area, were they subject to the L.A.
21 River TMDLs and are they now not or do we need to do new
22 TMDLs for the Los Cerritos? What happens here?

23 DR. AMAH: No. The Los Cerritos Channel has always
24 had its own watershed and so the L.A. River TMDL's not
25 applied directly to the Cerritos watershed. They have

0105

1 their own distinct --

2 MS. GLICKFELD: We have our own TMDLs for the
3 Los Cerritos area?

4 DR. AMAH: Yes.

5 MS. GLICKFELD: And they know where they are even
6 though our maps don't show it?

7 DR. AMAH: Yes.

8 MS. GLICKFELD: That's my second question.

9 My third one is you mentioned in the report that
10 we're going to give people pdf's of the maps that are now
11 in this plan, the revised maps, and I want to make sure
12 that they can get to the data layers themselves. Is
13 there a problem with them getting to the data layers so
14 they can use it for their own planning?

15 DR. AMAH: We have the data layers available on our
16 website.

17 MS. GLICKFELD: Okay. That's it. Thank you.

18 MS. DIAMOND: Ms. Lutz?

19 MS. LUTZ: Thank you.

20 Well, I first want to commend you for a great
21 job. This was -- I mean, I was going through this just
22 looking at these maps and marvelling and looking at how
23 you were doing this.

24 Great explanation, Thom. I appreciate that very
25 much.

0106

1 It is a difficult thing and I'll tell you what.

2 Knowing that we requested this to be updated, I don't
3 think I anticipated it to be as comprehensive as you've
4 done. So I really want to commend you on that and the
5 work that we are hearing, that you collaborated with
6 everybody else, that's -- it's just great. We love to
7 see that.

8 My question is -- you know, I don't have any
9 real questions about anything. You've answered the
10 questions I had, but the one question I have is, you
11 know, when I first became a Water Board Member blah,

12 blah, blah years ago, they gave me this beautiful binder
13 of our Basin Plan and so I would like to request that we
14 all receive the new documentation so we can slip it into
15 that beautiful binder we have.

16 DR. AMAH: Okay. Yes. And perhaps you might want to
17 hold off on it, though, because we are doing a phased
18 update of the Basin Plan and the next one is Chapter 7
19 that does not physically exist in the plan but exists up
20 there on our website, and we're going to compile
21 everything in December, I believe, and we're going to
22 present Chapter 7.

23 MS. LUTZ: So we'll have new beautiful binders.

24 DR. AMAH: We're going to have brand-new. You may
25 still keep the front page, but the contents will be
0107

1 different and we're going to do a lot of the other
2 chapters early next year. So sometime before the summer
3 we hope to present you with a new beautiful binder.

4 MS. LUTZ: Great. I know people hear me talk about
5 this. I say it's the bible and we kind of go from there.
6 So it's great to have the most updated one that we can
7 get. I very much appreciate that.

8 The other thing that I would ask is that as you
9 go through and you work with the MUNs that we be given as
10 much information as we can as that process goes through,
11 seeing as what happened in the past and I know that now
12 you've got a whole lot more data to be able to get the
13 information that is needed so that those things can take
14 place and hopefully won't be, you know, kicked back like
15 they were before. So I appreciate that you're doing that
16 and if we can just be kept up-to-date on that.

17 DR. AMAH: We will keep you up-to-date.

18 MS. LUTZ: Thank you.

19 MS. MEHRANIAN: I just want to let you know that I
20 appreciate what you've done because I have worked before
21 and after GIS numbers, maps, and what happens is that the
22 hardest part is the conversion. After you convert, you
23 have this great resource; but to get the pre and post GIS
24 to read with each other, it's just a massive, massive
25 effort.

0108

1 I know that some of the questions we might bring
2 up might have to do with how would it translate from one
3 to the other and I think it's a matter of time for all of
4 us to clarify on that.

5 DR. AMAH: Well, we are trying to make sure that it
6 is an easy transition between the two because we provided
7 the cross-reference tables that will allow you to match
8 up every single waterbody for both the groundwater and
9 the surface water and all the other features.

10 MS. MEHRANIAN: Congratulations.

11 MR. BLOIS: Great questions have already been asked,
12 but I just wanted to make sure. My main concern in
13 looking at all this is I think everyone in this room

14 recognizes that this is an imperfect document and I
15 wanted to make sure, I guess, that all of our
16 stakeholders are convinced, because they're not objecting
17 here today, that we have in place a process to correct
18 administratively any typos or errors or things that have
19 come up or that are "Oh, gotcha's" and I want to make
20 sure that that has been done and are going forward.

21 Second of all, you know, when I get my packet
22 and do my homework, you call it comments. I really look
23 at comments as being objections. So I want to commend
24 staff on reducing 235 pages of objections down to just
25 one and so thank you very much and thank all the

0109

1 stakeholders, too, for working with our staff because I
2 think that, as my colleagues have said, this is a work
3 product that is really quite excellent.

4 But just for my own edification, I want to be
5 sure that what we have now before us and what we are
6 about to incorporate into the Basin Plan is literally the
7 same page as all the other people who deal with water,
8 the State Water Resources Board, the EPA, Regional Board,
9 are we all on the same page literally?

10 DR. AMAH: Yes, we are, because even as we speak, and
11 I think as Thom mentioned, State Board is trying to do
12 exactly what we've done and will be consulting with Thom
13 as an expert to figure out how to reconcile the new
14 layers with the previous layers. So they're probably
15 going to take a few pages from our Basin Plan.

16 MR. BLOIS: When we subcontract Thom out to the State
17 Board, make sure that we add in our overhead and profit
18 margin.

19 DR. AMAH: I have been considering that.

20 MR. UNGER: He's not being subcontracted from the
21 State Board.

22 DR. AMAH: To answer your question --

23 MS. DIAMOND: This isn't subcontracting.

24 MR. BLOIS: So then to the point that City of Oxnard
25 made on the Oxnard industrial drain, my only other

0110

1 question -- and I understand that we can't do what they
2 want to do, but my question really is where does that
3 leave the City of Oxnard to do what they want to do in
4 the future? Is this going to be a huge admin- -- a huge
5 deal for them to change it? Is this going to require a
6 change in the Basin Plan for them to make what they want
7 to do work?

8 DR. AMAH: Yes. It would require a Basin Plan
9 amendment.

10 MR. BLOIS: And we have no choice?

11 DR. AMAH: Well, any change to the Basin Plan would
12 require it because even updating the Basin Plan requires
13 an amendment, which is what we're doing today. So every
14 change that we make requires some form of an amendment.

15 MR. BLOIS: Sam, does -- I guess I need to ask Sam.

16 MS. FORDYCE: Can I just interject for one quick
17 second? I think what you're asking is what would need to
18 be done is a legal determination about whether the Oxnard
19 industrial drain is, in fact, a water of the State or a
20 water of U.S. or both. That's a preliminary
21 determination first and foremost and then once that --
22 based on that legal determination, then there's different
23 avenues on how to implement that. Basin Plan Amendment
24 which would likely require U.S. EPA approval and all the
25 way up.

0111

1 MR. BLOIS: My concern is I want to make sure by
2 doing this for all the right reasons we're not throwing
3 up an additional hurdle that's not there now in the way
4 of the City of Oxnard.

5 MR. UNGER: Well, I'm not sure it is an additional
6 hurdle because the hurdle is already there. It's the
7 same burden that they would have right now, we believe.

8 And what I'm going to suggest is we have our
9 retreat planned in January. We can talk about calendar
10 issues, too, and I have some suggestions there as well;
11 but what we can do is we can prioritize that Basin Plan
12 amendment if it's a high priority to do that and we can
13 be sure that it's done in a timely manner. That would be
14 my response.

15 MR. BLOIS: Okay.

16 MR. UNGER: We don't think it's additional because
17 they have the burden right now, we believe.

18 MR. BLOIS: All right. Well, as long as we're not
19 adding any regulatory burdens to the City of Oxnard on
20 this issue of their industrial drain, then I'm okay with
21 that.

22 MS. FORDYCE: This is Jennifer. I think what I want
23 to make sure is clear is this Basin Plan amendment is the
24 status quo. We're not changing anything.

25 MR. BLOIS: Okay. That's the only questions I have.

0112

1 MR. UNGER: Steve, let me add one other thing, if I
2 could.

3 What we would like to do is look into the
4 legalities of this, number one, some of the issues that
5 Madelyn brought forth, number one, and then number two,
6 meet with the City of Oxnard. We'd like to do that
7 before we have our retreat in January and then I'd be
8 able to scope it for you and give you a much more
9 informed answer as to what we can do.

10 MR. BLOIS: Great. I'd appreciate that. Thank you.

11 MS. DIAMOND: I just want to add my kudos to all of
12 you for the work you did. It doesn't look as hard as it
13 was. Once you open this up and get to look at what you
14 actually did, it is really monumental and fortunately
15 you're not unsung heroes because we're singing your
16 praises today and want to thank you so much for doing
17 this. And once again, the L.A. Regional Water Quality

18 Board is the first to do something very important in an
19 area that I think will be done by the other regions and
20 we'll be -- we are leading the way. So thank you so much
21 for that.

22 And I think I'd like to entertain a motion for
23 the passage of this proposed amendment to the Basin Plan.

24 Madelyn?

25 MS. GLICKFELD: Yeah. I'd like to move approval for
0113

1 this Basin Plan amendment, subject to the Change Sheet
2 for Item Number 14 that was given to us. Is that an
3 adequate motion? Thank you.

4 MR. STRINGER: Second.

5 MS. DIAMOND: Is there a second?

6 MS. LUTZ: Charlie just did.

7 MS. DIAMOND: Sorry. I didn't hear you.

8 Everybody in favor?

9 MR. BLOIS: Aye.

10 MS. MEHRANIAN: Aye.

11 MS. LUTZ: Aye.

12 MS. GLICKFELD: Aye.

13 MR. STRINGER: Aye.

14 MS. DIAMOND: Thank you very much.

15 Before we break for lunch, we're going to have
16 an announcement by Jennifer about our Executive Session
17 and then we will break for lunch.

18 Sam, do you want to add something?

19 MR. UNGER: I may want to suggest that perhaps we
20 consider hearing the informational item, because I
21 don't -- for State Board. I think it's about a 20-minute
22 item and I understand that lunch may not be delivered
23 until 12:30 anyways.

24 MS. DIAMOND: That's fine.

25 MR. UNGER: So then we can focus the afternoon on
0114

1 calendar issues and I also wanted to discuss before we
2 broke, in deference to Mary Ann's schedule, because the
3 MS4 is after lunch, you may not be here -- I'm not sure
4 what her plans are. I had a proposal you may want to
5 entertain for the calendar issues, too, to get us to the
6 first part of the year.

7 MS. DIAMOND: Okay. Sorry. I jumped the gun.

8 MR. UNGER: With that, I think I'd like to turn it
9 over to Mr. Borkovich.

10 MR. BORKOVICH: Good afternoon. Louder? Can you
11 hear me now?

12 MS. DIAMOND: Yes.

13 MR. BORKOVICH: Good afternoon. My name is
14 John Borkovich and I am the GAMA Program Manager at the
15 State Water Resources Control Board. That's part of the
16 Division of Water Quality.

17 Today I'll be providing you with an overview
18 of -- next slide, please -- what the GAMA Program status
19 and background is and then give you an overview of our

20 groundwater information system called GeoTracker GAMA.
21 So I'm already snowing you over with acronyms, but bear
22 with me.

23 GAMA is the Groundwater Ambient Monitoring and
24 Assessment program. Next slide, please.

25 GAMA was created due to the concern by the

0115

1 Legislature and the public about groundwater quality and
2 as a result of the Budget Act in 2000, the State Water
3 Board undertook creating ambient monitoring and
4 assessment, a program for groundwater in the state.

5 Subsequent to the initiation of the original
6 GAMA program, the Assembly Member Liu sponsored a bill,
7 AB 599, Groundwater Quality Monitoring Act of 2001, which
8 enhanced the GAMA program. There were two critical
9 pieces to that law. One was to make publicly available
10 groundwater quality information in the state accessible
11 to the public and to comprehensively monitoring
12 groundwater. So it's a statewide program, comprehensive
13 groundwater monitoring program.

14 And subsequent to that in 2008, Senator
15 Caballero of Salinas sponsored AB 2222, which there are
16 two pieces of that legislation. First was to identify
17 future funding sources for the program and also
18 continuing the program.

19 Next slide, please.

20 So part of our main function at the Water Board
21 to do GAMA is to coordinate with other water agencies,
22 collecting new data -- and I'll go into more detail later
23 on that -- combine new and existing data or water
24 quality, water level, contaminant sources, assess
25 groundwater quality, and serve this information to the

0116

1 public.

2 Next slide, please.

3 So this slide depicts what I call the Wheel of
4 GAMA. There are four active current projects within the
5 program. One is the Special Studies Project -- and I'll
6 go into more detail later; the Priority Basins Project;
7 our Domestic Well Project; and GeoTracker GAMA, which
8 I'll elaborate on in the future. But I want to emphasize
9 that the sampling for GAMA program, specific sampling,
10 not all the data -- all the data that we have we've
11 shared with multiple entities, but the sampling that we
12 conduct and our contractors conduct are done in voluntary
13 cooperation with participants. So people volunteer to
14 have their wells sampled as a result of this program.

15 Next slide, please.

16 Our Priority Basin Project is -- the technical
17 lead is run by the U.S. Geological Survey. It's the
18 first statewide sampling cycle done in the state. It's
19 nearly complete. There have been over 2200 wells
20 sampled. Primarily those wells are public water supply
21 wells, since the emphasis was on the zone that was used

22 in groundwater for purposes of consumption, so drinking
23 water wells.

24 They've issued dozens of reports and
25 informational fact sheets and a four-page document that
0117

1 members of the public, legislators, Board members can
2 understand what happened in the sampling as a result of
3 what the USGS did and also using other sources of data
4 that are available.

5 Next slide, please.

6 Our Special Studies Project, the lead on that is
7 the Lawrence Livermore Lab. They study groundwater
8 quality concern -- areas of concern. So in other words,
9 a big issue on the statewide level is nitrate in
10 groundwater as a result of contamination sources that
11 include dairies, fertilizer, and wastewater. So they've
12 innovated different types of analysis as a result of this
13 study using isotopic analysis, age dating to determine
14 how old or young the waters are. So that would help us
15 to identify if recharged projects are mining water that's
16 older or if the actual recharged water that's being used
17 is actually getting to where it needs to go.

18 Next slide, please.

19 Our Domestic Well Project is run by State Water
20 Board staff. It runs out of our GAMA program at the
21 State Water Board. We've sampled nearly 1100 wells since
22 2003.

23 For the first five study -- groundwater focus
24 areas, County focus areas, our results have indicated
25 that approximately 28 percent of the wells have tested
0118

1 positive for total coliform. So what that would indicate
2 is that if there is -- if you're getting coliform, that
3 there's some sort of connection possibly with surface
4 activities. Then if we get a positive for total
5 coliform, then we'd test it for fecal coliform.

6 Nitrate: Average, 10 percent of the wells have
7 tested above the maximum contaminant levels for nitrate.
8 However, when we sampled in Tulare County, nearly over 41
9 percent of the wells tested above the MCL.

10 Of interest, when we sampled in San Diego
11 County, we had been testing for radionuclides. We
12 weren't really -- it wasn't really on our radar, so to
13 speak, but we were encouraged to test for it and in
14 San Diego County, a third of the wells tested positive
15 above the MCL for radionuc's.

16 And we just recently completed Monterey County
17 so these statistics will be updated in the near future,
18 and all of our results will be posted on our website.

19 So today I'd like to spend a little more time
20 talking about our groundwater information system. As you
21 recall, when I was speaking about the creation of GAMA,
22 AB 599 identified that we were to develop a central data
23 system for groundwater quality data.

24 So we shared data with what we call the
25 Inner-Agency Task Force. It's the California Department
0119

1 of Public Health, U.S. Geological Survey, Lawrence
2 Livermore National Lab, the Department of Water
3 Resources, the Department of Pesticide Regulation, and
4 the State and Regional Water Boards.

5 So coupled with the data that we collect for
6 groundwater quality in the state, from all these
7 disparate databases, we collect them into one system and
8 we believe that it's important to also have an idea of
9 what the water quantity, if at all possible, as to
10 associate it with water quality. They go hand in hand.

11 So we've incorporated water levels into our
12 system as well as contaminant sources and any other
13 groundwater publications that are in the area of study.

14 So groundwater quality data collected with the
15 State funds -- okay. That's -- that bullet is basically
16 to represent that eventually we'd like to get all the
17 data, that anything that's been collected using State
18 funds would be uploaded to our system and we can expand
19 the system even more.

20 Next slide, please.

21 So groundwater quality information -- next
22 slide. This is our home page on the State Water Board
23 site for GAMA and it provides you with an
24 informational -- basically, the background that I just
25 provided you and also a gateway into the groundwater
0120

1 information system. So easy access and we identify who
2 is sharing data with us.

3 Next slide, please.

4 So when you go click on the link to go to the
5 site, there are multiple choices that you can make. You
6 can either type in your address or your Zip code into the
7 Google-like interface and hit "enter" or you can look for
8 other databases that are related to surface and
9 groundwater studies in the area or you can do a mass data
10 download -- we call that the big red button -- where you
11 can sort things by county, and I'll show a slide of that
12 in a second, just to emphasize that we have data from all
13 different sources.

14 Next slide, please.

15 So this is the big red button. Essentially what
16 we've done is broken it down by county, and every dataset
17 that's shared with us or the data that we collect is
18 obtainable by county individual of that dataset or all of
19 the above. So there are over 100 million analytical
20 results that are in this dataset.

21 Next slide.

22 So some of these files are so large, especially
23 for L.A. County, and in this area in particular there's
24 so much data that have been collected that it's too large
25 for a lot of -- not the most recent version of Excel that

0121

1 we send it to a text delimited format so you don't get a
2 truncated table. There are literally millions of results
3 that we have in the system.

4 And so just to go back for a second, I want to
5 emphasize on that one. So we show that all this data can
6 be imported into our GIS system and map or anyone who's
7 doing any kind of studies in the future associated with
8 the analytical results.

9 Next slide, please.

10 So this map is a zoomed-out version of what you
11 would see if you were to type in "Los Angeles," for
12 instance, and I took the liberty of zooming out just to
13 show you that we have over 221,000 individual well points
14 in the system.

15 Next slide, please.

16 So our default query -- the default's on
17 nitrate. Nitrate's one of the most prevalently found
18 groundwater contaminants in the state. So some of the
19 features that you have in this view -- and I'm going to
20 be giving you a high-level view of it, but if you dig
21 into it you can get a lot more out of it.

22 You have access to groundwater quality reports
23 up on the left-hand side. Also, there are additional
24 tools. As I mentioned, we have water levels so we have
25 boxes that you can check for depth of water,

0122

1 depth-to-water changes, the delta -- not the delta up
2 north, but the actual changes in the level, groundwater
3 elevations as well.

4 And then also in the arrow that's below the map,
5 it identifies how many wells are in that field of view
6 that have a concentration above whatever your query is
7 asking for.

8 So in this particular case, it's identified
9 results that are above the comparison concentration. I'd
10 just like to take a second.

11 A lot of -- we have over 200 chemicals. I have
12 concerned constituents that are in our dataset that have
13 been mapped across all these disparate datasets and so
14 what we've done is a lot of these chemicals do not have a
15 maximum contaminant level, so we've determined the
16 concentration. So if there is an MCL, there will be --
17 it will be compared against the MCL. If there is no
18 primary MCL, we go to the secondary MCL and so on.

19 In some cases, there's not even a DLR, the
20 detection required for reporting that sets up, so we do
21 an 80th percentile.

22 So there are GIS layers that you can choose. We
23 have it sorted by counties and in this particular case,
24 it's Sacramento County. It shows the border of
25 Sacramento County and at the border, again I've

0123

1 identified there are 11 matching wells for nitrate that

2 are above that concentration. So it's a quick snapshot
3 view. You can zoom in, click on the well, get the data
4 out. You can scroll down to the bottom of the page. You
5 can't see the bottom of it on this view, but you can also
6 extract the data directly from the bottom.

7 So go ahead and go to the next slide, please.

8 So if you export this information, you can
9 export it to Excel and use it in a map-making program.

10 Next slide, please.

11 Also, we have hydrographs and a
12 concentration-over-time graphs. So these are generated
13 instantaneously with the results that are in the system.

14 So it provides you with a snapshot of what we
15 have available within the system on that particular well.

16 Next slide, please.

17 Other groundwater data that we have, as I
18 indicated, we have water levels, but we also have
19 well-boring logs. Our sister site, GeoTracker, that was
20 used for site cleanups across -- for all the Regional
21 Boards to use and County and local oversight programs,
22 those well logs that were collected don't fall under the
23 restrictions associated with a log that's on the books
24 where we can't post public -- for wells that have been
25 used for purposes of site cleanups. We can post that
0124

1 information. So that's what we're using here.

2 If a law were to pass where we could show the
3 water wells, we would be able to serve that up on the
4 system.

5 Next slide, please.

6 And so this is an example of what you would see
7 if you were to click on an individual well from our map
8 view.

9 This view shows the L.A. Basin and if you were
10 to click on the depth of water, it gives you a relative
11 idea what the water levels are, of course divorced from
12 any idea of what the elevations are at that point, but it
13 gives you a snapshot of over time in that same time
14 period.

15 So, for instance, at the bottom arrow, it points
16 out where it shows you the depth to water and those are
17 for environmental monitoring wells. These are all the
18 site cleanup sites that are regulated by the Regional
19 Boards in the area and for that particular quarter for
20 2010, you can get the data from our system to be able
21 to -- next slide, please -- and also we flipped it around
22 and for groundwater elevation where we've tied it to
23 actual elevations that have been surveyed in that same
24 quarter to give you an idea of what the water elevations
25 are.

0125

1 So you can zoom in, click on one of the circles,
2 it will bring you to a site, and that site has multiple
3 levels on it. So this is not a median, but it's the mean

4 of the water levels for that particular quarter.

5 Next slide, please.

6 So here's the one where I intimated before about
7 the actual changes. So like a streetlight, if it's green
8 that means it's coming up, if it's yellow it's staying
9 about the same, and if it's red that means it's dropping.
10 So these dots represent actual wells in this particular
11 instance for the area in view around the Glendale area.
12 So there's 255 matching wells in that area and you can
13 choose any time frame.

14 If you want to go from as far back as we have
15 actual data for this in the -- I think it started to be
16 collected in the early 2000's, you can pick all the way
17 through the present and it will give you a map.

18 Next slide, please.

19 Also, if you click on a well, you'll get a
20 hydrograph map for the water levels that have been
21 measured for that specific well.

22 Next slide, please.

23 Other uses of GAMA: We've used this data to
24 overlay on our website. We have what we call the
25 Hydrogeologic Vulnerable Areas Map and this is

0126

1 essentially Water Table conditions. There are other
2 areas outside of these areas that are also vulnerable but
3 not as vulnerable as what we would have under Water Table
4 conditions.

5 So what we did is we overlaid the nitrate
6 concentrations above MCLs and you'll see a pretty good
7 association between where the hot spots for nitrate are
8 and where these hydrogeologically vulnerable areas are in
9 the state.

10 Next slide, please.

11 Also, we use the data -- the first slide showed
12 drinking wells from the CHP database. This is showing
13 the monitoring wells from the Regional Board and local
14 oversight program and regulating sites and these are
15 typically completed in shallower conditions, so you'll
16 see that some of the wells that had concentrations for
17 nitrate that were above the MCL are outside of the
18 hydrogeologically vulnerable areas, but there are quite a
19 few that are still within it.

20 Next slide, please.

21 So in summary, the Legislature wanted us to get
22 going on collecting groundwater quality data for the
23 State. We've created the GeoTracker GAMA informational
24 system for the public to use. We have over 100 million
25 analytical results mapped across multiple disparate

0127

1 datasets. We also have quote, unquote, "non Water
2 Quality" functionality like well logs and water levels
3 and we've colocated those locations on GoogleMaps
4 interface for easy use.

5 And -- next slide, please -- that completes my

6 presentation.

7 MS. DIAMOND: All I feel like saying is "Wow."

8 That's amazing. It's amazing to have your presentation

9 right after the last presentation.

10 MR. BORKOVICH: We're hoping that anything that we do

11 for this program, that people, not just the public, but

12 the Regional Boards can use and we're getting closer and

13 closer to having something, I believe, where the Regional

14 Boards can use it for Basin Plan amendments.

15 There's a lot of data in the system, and any

16 suggestions that Regional Board folks have to make

17 revisions or refinements to the system, we meet on a

18 weekly basis with our I.T. folks to make the changes.

19 MS. DIAMOND: Thank you so much. I know we have

20 comments from our Board, but we all want to thank you.

21 Steven, do you want to start? Do you have any

22 comments?

23 MR. BLOIS: No. I'm blown away. That's great work.

24 I'm going to go on and check it out.

25 MS. DIAMOND: It sounds like fun.

0128

1 MS. MEHRANIAN: I don't have comments. I'd like to

2 see it, but I don't have comments. I'll go and check it

3 out.

4 MS. LUTZ: Same thing. Just great work and I can't

5 wait to go home to the computer and play.

6 MS. GLICKFELD: Well, I have been sort of playing

7 with this for a few months now so now I understand what

8 I'm playing with a little bit more.

9 First, could I get your PowerPoint? Could we

10 all get your PowerPoint?

11 MR. BORKOVICH: Sure. Absolutely.

12 MS. GLICKFELD: Second, one of the things that we've

13 been struggling with here is how we're going to clean

14 stormwater and a lot of the discussion or some of the

15 discussion is about capturing stormwater, infiltrating or

16 injecting it into groundwater. What kind of a use -- how

17 could this data which shows groundwater quality and

18 groundwater levels help us in that effort?

19 You know, one of the things we don't want to see

20 happen is clean water put into dirty water and then have

21 to be treated to come back up again, so I'm sort of

22 interested in this as a guide to our dischargers who may

23 develop projects to comply with their stormwater permits

24 to infiltrate their water. How can we help them with

25 this?

0129

1 MR. BORKOVICH: Well, what I would suggest is that

2 staff or those folks look at the system and get an idea

3 of what the analytical results are showing for compounds

4 or chemicals of concern in those areas.

5 The data that are in there is pretty extensive,

6 so if there's a specific area that you're concerned with,

7 I would just -- if it's in a particular basin, I would

8 choose that GIS layer, click on that, and then download
9 the data and then start looking at the data to see what
10 story it's telling; and also, being able to sort it by
11 chemical to find out what those chemicals of concern you
12 would be interested in.

13 So that would provide you with a baseline before
14 the water would be added and then you could compare the
15 quality of the water that's going to be used to recharge
16 the aquifer and see what you'd have. So that would be my
17 suggestion with the system.

18 MS. GLICKFELD: So my second question is about, you
19 know, another application of this, we have many POTWs
20 that are moving more and more towards recycling water.
21 We really encourage them to do that and indirect
22 recycling involves storage and groundwater basins again
23 and there's been some discussion among POTWs that they
24 don't want to store in groundwater basins because they
25 have to treat it, it's too expensive, and they may as

0130

1 well go with direct potable.

2 I think that from when we saw this in
3 Sacramento, we saw the USGS person that made the
4 presentation to the Boards seemed to indicate that a lot
5 of what his results showed was that it wasn't as polluted
6 as people thought it was. So this may on the other hand
7 help people who want to do indirect storage.

8 MR. BORKOVICH: Well, there's two ways of looking at
9 that -- and that was Ken Belitz. He's awesome.

10 The USGS portion of their -- what we call the
11 Priority Basin Project is focusing on the aquifers that
12 are being used for drinking water purposes; so in other
13 words, public water supply zone.

14 Even though they've sampled other types of
15 wells, primarily they've sampled from public supply wells
16 and typically what we find -- and he's right -- the data
17 that we have currently being collected by the different
18 water systems that submit their data to the California
19 Department of Public Health, and that's the dataset we
20 have incorporated into our system, is closely matching
21 the results that USGS has. There have been some cases
22 where there have been some areas where there have been
23 differences, but for the most part by and large it's been
24 a close match.

25 So I think -- having heard Ken speak several

0131

1 times, I think what we might have been intimating there
2 is the difference that the data that we have in
3 GeoTracker GAMA is that that's a raw water quality
4 essentially. The water that's served to the public, over
5 95 percent of it is being served by a public water entity
6 that's typically treated. Sometimes it's not because
7 it's cleanup and they're required to test it. It's the
8 other 5 percent in the State like the state's smalls or
9 private domestic well owners, they're responsible for

10 maintaining the quality of their water that they consume.

11 So there are receptors out there, if you will,
12 that may come in contact or may greatly benefit from
13 learning more about what the conditions are, ambient in
14 the ground.

15 So I have -- I think that what I'd like to say
16 is that the water from stormwater, if it's of less
17 quality than what's already in the ground, then maybe the
18 Regional Board would have to look at that of course, but
19 I think you can use our system to make that type of an
20 evaluation and get a better idea of what the conditions
21 are ambient prior to making any kind of a decision with
22 respect to that.

23 MS. GLICKFELD: Just my last question: Did I
24 understand you right? For instance, today we looked at
25 Ujima Village, which is an old tank site which has

0132

1 polluted soil and polluted groundwater. We have required
2 hundreds of water quality tests and soil quality tests.

3 Do those go into this system or is that something
4 separate?

5 MR. BORKOVICH: If it's the result of any data being
6 collected by the Regional Boards and it's uploaded to the
7 GeoTracker system, then we would have it incorporated in
8 these systems. So yes, it would be there.

9 MS. GLICKFELD: Wow. Okay.

10 MS. DIAMOND: Mr. Stringer.

11 MR. STRINGER: Yes. I do have a question about how
12 you are collecting the data. Is it all the public wells
13 or are you also collecting data -- are you collecting
14 data from private wells in addition?

15 MR. BORKOVICH: Well, thank you. That's a good
16 question. The private domestic well project that we
17 have, those are the only data that we have from private
18 domestic wells, because the State of California does not
19 regulate water quality for private domestic well water.

20 So what we've done as part of our public
21 outreach, we identify a county, we work with the County
22 Public Health entities. So far we've sampled in
23 San Diego County, Tujana County, Yuba County, El Dorado
24 County, most recently in Monterey County, and we've also
25 sampled in Tulare.

0133

1 So we work with Public Health officials in those
2 areas and they have datasets for people that have
3 domestic wells, and some data systems are better than
4 others.

5 So we send a pamphlet out and ask people if they
6 want to have their well sampled for free and those are
7 the data that we have right now for private well water in
8 the system.

9 MR. STRINGER: So have you been getting good
10 participation rates with people who --

11 MR. BORKOVICH: It depends. We most recently sampled

12 in Monterey County and in Monterey County it was
13 relatively low compared to other counties we've sampled
14 in. San Diego County, we had a pretty high participation
15 area.

16 MR. STRINGER: What about in the agriculture
17 community? Are you getting well data from irrigation
18 districts and farmers?

19 MR. BORKOVICH: For instance, we've been working with
20 some to try to get the data for that and we've been
21 unsuccessful up to this point to get those data because
22 we do not have any type of data from irrigation districts
23 in our system.

24 MR. STRINGER: So the irrigation --

25 MR. BORKOVICH: If we could get it, we would include
0134

1 it.

2 MR. STRINGER: So they've chosen not to participate?
3 Is that what you're saying?

4 MR. BORKOVICH: I think a better way of saying it is
5 that I don't think they -- I think on one hand, we
6 probably haven't really formally asked them for it is a
7 better way of asking, except in one case and they didn't
8 share it with us.

9 MR. STRINGER: So your data from the Central Valley,
10 for instance, that's all from public wells?

11 MR. BORKOVICH: Public wells and in the counties
12 where we sampled, it includes public -- private domestic
13 well water as well as the site cleanup well.

14 So a good analogy -- analog to shallower
15 groundwater conditions in the state, you could use the
16 cleanup site wells data that we have collected to compare
17 because typically domestic wells are completed in a
18 shallower zone so they're technically more vulnerable to
19 contamination than public supply wells because they're a
20 lot deeper typically.

21 MR. STRINGER: Thank you.

22 MS. DIAMOND: Thank you very much. It's very
23 informative and very helpful and great.

24 Okay. Sam, do you want to talk about the
25 calendar before we break?

0135

1 MR. UNGER: Yeah. I think real briefly and then if
2 we can't get to a resolution on this real quickly, maybe
3 we'll break for lunch.

4 What I was going to suggest is that we look
5 ahead and we just adopt the calendar as it was sent out
6 to the Board members through May and with the suggestion
7 of changing the May 3rd meeting to May 10th and then we
8 come back next month and we finish off the calendar for
9 2012. So if we can -- if that can work for now, then
10 I think that would -- no, that doesn't work?

11 MS. DIAMOND: So you --

12 MR. UNGER: So should we leave it May 3rd?

13 MS. GLICKFELD: What's wrong with May?

14 MS. DIAMOND: Would you want to say why you're
15 suggesting we do this change?

16 MR. UNGER: Yeah. I'm sorry. My e-mail last night
17 was a little oblique. Basically, as you know, we share
18 Francis with Region 3 and it turns out Region 3 has
19 adopted their 2012 calendar in September and so before we
20 were even thinking about ours -- I hate to say, and that
21 won't happen again next year -- with that being said,
22 Francis has a lot of conflicts later in the year. Her
23 conflicts -- she doesn't have any conflicts early in the
24 year and we thought we could get through May -- only
25 April. We could adopt through April what we have. We
0136

1 have the March 15th Proposed Panel Hearing and then we
2 can come back and send another proposal out to you next
3 month to finish off the year. So if you thought that
4 that could work, we could do it. If it requires a lot of
5 discussion, I would suggest maybe we table that until
6 next month.

7 MS. DIAMOND: Well, let's just -- is there anyone
8 today that does not -- on the Board that doesn't know
9 whether May 10th will work?

10 MS. MEHRANIAN: I can't do May 10th. I know I can't.

11 MS. DIAMOND: You can't do it on the 10th?

12 MS. MEHRANIAN: No.

13 MS. GLICKFELD: I recommend that we go through April
14 and then see what we can sort out after that. I would
15 also like to -- on the panels, I think that it's great we
16 have some dates set aside for the panels. Only I can't
17 make the March 15th date and I just wanted to make sure
18 that there would be enough other people that could.

19 MS. LUTZ: I agree with the panels, but I think we've
20 always had to kind of as they come up see who's available
21 for the panels.

22 MS. DIAMOND: So then maybe what we should just do is
23 adopt the calendar through April and --

24 MR. UNGER: Good.

25 MS. DIAMOND: -- then next month we'll --
0137

1 MR. UNGER: Ronji and I will then send out to you
2 next week or the week after at the very latest a proposed
3 schedule for the rest. We will try to match it as
4 Francis's schedule becomes clear.

5 MS. GLICKFELD: Madam Chair --

6 MS. DIAMOND: Yes.

7 MS. GLICKFELD: -- you know, one of the other issues
8 I wanted to discuss, you know, we noted that we're
9 actually going dark for January as we usually do and for
10 August and -- oh, we do have an October meeting. We had
11 that added.

12 MS. DIAMOND: Yes. We added an October.

13 MS. GLICKFELD: Thank you.

14 MS. DIAMOND: So can I have a motion for the calendar
15 from January through April?

16 MS. LUTZ: I move we adopt the tentative calendar as
17 effective January, February, March, and April months.

18 MS. DIAMOND: Second?

19 MR. BLOIS: Second.

20 MS. DIAMOND: All those in favor?

21 MS. MEHRANIAN: Aye.

22 MS. LUTZ: Aye.

23 MS. GLICKFELD: Aye.

24 MR. BLOIS: Aye.

25 MR. STRINGER: Aye.

0138

1 MR. UNGER: And our closed session will be upstairs
2 right off the elevator.

3 MS. DIAMOND: Second floor.

4 MR. UNGER: Second floor, yes. Just take the
5 elevator.

6 MS. FORDYCE: During Closed Session, the Board will
7 discuss Items 17.1, 17.9 and 17.11 subdivision (b).

8 MS. DIAMOND: Thank you. Shall we say 2:00 o'clock?
9 That gives us enough time to begin?

10 MR. UNGER: We think we have a short Agenda. We can
11 probably -- do you want to say --

12 MS. DIAMOND: Okay. 1:45?

13 MR. UNGER: 1:45?

14 MS. DIAMOND: Okay. We'll be back at 1:45 for Item
15 Number 16.

16 (Lunch recess)

17 (Whereupon Ms. Lutz left the proceedings

18 following Closed Session, before Item Number 16)

19 MS. DIAMOND: Good afternoon, everybody. Welcome to
20 the Regional Water Quality Board. We are going to begin
21 with Item -- we are going to go to Item Number 16, which
22 is the workshop on the issuance of a new Los Angeles
23 County municipal separate stormwater four permit or MS4.

24 Board Member Lutz is not here for the afternoon
25 because she's recused from this item.

0139

1 We will begin with a staff presentation and then
2 after that we have a lot of speaker cards, and times have
3 been discussed with some of you. So we will go over that
4 when we get to your portion of the presentation.

5 So to start with, we are going to begin with the
6 staff presentation.

7 MS. PURDY: Thank you very much. Good afternoon. My
8 name is Renee Purdy and I am the Section Chief of the
9 Regional Program Section here at the Regional Board which
10 oversees the Stormwater Permitting Program as well as the
11 TMDL Program as well as a few others.

12 The purpose of today's L.A. workshop on the MS4
13 permit is twofold -- thank you. Please let me know if
14 you're having difficulty hearing me.

15 First, it is a chance to inform you of where we
16 are with permit development and, in particular, present
17 to you staff's evaluation and conclusions regarding

18 permit structure and describe for you key permit topics
19 that staff has been working on and where we're headed on
20 some of these. Second, it also provides permittees and
21 stakeholders an opportunity to address you with their
22 preliminary comments.

23 While we don't have a draft permit yet, we felt
24 it would be valuable to share some of our conceptual
25 approaches with you earlier, as opposed to later. We are
0140

1 particularly interested today in your feedback on the
2 results of our evaluation of alternative permit
3 structures. We continue to evaluate a number of permit
4 topics and develop approaches to address these. We don't
5 have all the answers for you today, but we look forward
6 to your thoughts on those areas where we have focused our
7 efforts over the past several months.

8 Just to begin, the Los Angeles County Municipal
9 Separate Storm Sewer System, or MS4, is one of the most
10 important permits issued and administered by the Regional
11 Board. The permit regulates the commingled discharges of
12 stormwater and urban runoff from one of the nation's
13 largest municipal separate storm sewer systems covering
14 the jurisdictional areas of 85 permittees plus the MS4
15 facilities owned and operated by the Los Angeles County
16 Flood Control District.

17 Following is an outline of the topics that I and
18 Ivar Ridgeway will cover in our joint presentation this
19 afternoon. First, I'll briefly provide some background
20 on the L.A. MS4 permit for orientation and also give you
21 a status update on permit development and our outreach to
22 permittees and stakeholders over the last several months.

23 Next we'll focus on three main topics. The
24 first is our evaluation of alternative permit structures.
25 We have spent significant effort on this issue since it
0141

1 is critical to how we move forward with permit
2 development and specifically drafting tentative
3 permitting language. Then we'll present staff's
4 evaluation of and proposed path forward for several
5 permit requirements, including some of the core permit
6 elements that we refer to as minimum control measures,
7 including some of the LID provisions and we'll also
8 present to you some tentative approaches on how to
9 incorporate TMDL provisions.

10 Next slide, please.

11 As background, the L.A. MS4 permit was first
12 issued in 1990, then updated in 1996 and again in 2001.
13 The 2001 permit has been reopened three times to
14 incorporate TMDL provisions and was recently amended this
15 past spring in response to a writ of mandate. This
16 update will be the fourth generation of the L.A. MS4
17 permit.

18 The MS4 program has evolved significantly at the
19 local, regional, and national levels over the past

20 decade. The 2012 MS4 permit will reflect these
21 developments, incorporate new requirements, and
22 capitalize on lessons learned.

23 Specifically, we have growing knowledge and
24 experience regarding technologies to control MS4
25 discharges, as seen by the widespread and effective use

0142

1 of low-flow diversions as well as the development of a
2 variety of full-capture trash devices throughout our
3 region.

4 Additionally, although it's an industrial site,
5 you've seen the kind of advances that are possible on
6 your recent tour of the Santa Susana Field Laboratory.

7 Nationally, there's a growing database of BMP
8 performance studies that can be used to identify
9 effective controls and there's also been more widespread
10 research on the use of low-impact development
11 technologies to improve water quality and address
12 hydromodification impacts due to stormwater.

13 EPA is also in the process of assessing the
14 Stormwater Program at the national level through its
15 proposed rulemaking which it initiated in December of
16 2009 and is evaluating options for how to strengthen the
17 program and achieve better water quality outcomes.

18 Lastly, in the past decade, many TMDLs have been
19 developed to address ongoing water quality impairments.
20 Many of these TMDLs have confirmed that discharges from
21 the MS4 are a source of pollutants. These TMDLs, as
22 you've heard many times, are not self-implementing and,
23 therefore, must be included in the MS4 permits to
24 implement the waste load allocations that are assigned to
25 the MS4 discharges.

0143

1 Next slide.

2 Staff has identified four overarching objectives
3 for the new L.A. MS4 permit. These are first to increase
4 the flexibility of provisions in the MS4 permit, while
5 ensuring a consistent baseline level of implementation.
6 This will allow permittees to focus on priorities within
7 watersheds and also individualize requirements based on
8 local initiatives such as some of the local LID
9 initiatives that we've seen through local ordinances.
10 This will also ensure consistent and equitable
11 requirements among permittees.

12 The second objective is to improve our
13 Stormwater Quality Management Program requirements and
14 minimum control measures to achieve water quality
15 standards.

16 The third is to implement TMDL waste load
17 allocations that are assigned to MS4 discharges within
18 Los Angeles County, and the fourth is to clarify
19 compliance determination for permit provisions in a
20 commingled system.

21 With regard to the last objective, permittees

22 have expressed concerns about how their individual
23 compliance will be determined and specifically have
24 voiced concerns that in some cases, one permittee may be
25 held for another co-permittee's discharges.

0144

1 Per Federal regulations, co-permittees are only
2 responsible for complying with permit conditions relating
3 to their own MS4 discharges. This clarification may be
4 made in the updated permit through the permit's
5 monitoring and reporting requirements, provisions to
6 implement TMDL waste load allocations, and possibly in
7 other areas of the permit.

8 Next slide, please.

9 Over the past months, we have conducted a number
10 of activities to support permit development, leading off
11 with a kick-off meeting which we held at the end of May,
12 which was attended by over 90 individuals. We followed
13 this meeting with a web-based survey to solicit more
14 comprehensive input from permittees on the preferred
15 structure for the new permit, as well as on topics for
16 future workshops during the permit development process.

17 Additionally, we've conducted several targeted
18 Municipal Stormwater Program assessments to help inform
19 permit development, including looking at some
20 construction and post-construction stormwater control
21 programs and illicit connection and illicit discharge
22 elimination programs.

23 We've also met upon request with a number of
24 permittees and other stakeholders including several
25 meetings with the Los Angeles County Flood Control

0145

1 District, the City of Los Angeles, the environmental
2 organizations Heal the Bay, Santa Monica Bay Keeper and
3 NRDC, as well as meetings with the City of Downey, the
4 City of Signal Hill, Mr. Ray Tahir representing a number
5 of cities, and most recently the L.A. Permit Group which
6 has a growing membership of 43 co-permittees and are
7 meeting at our meetings; specifically, we met with
8 Monrovia, Santa Clarita, Carson, Agoura Hills,
9 Westlake Village, and Torrance. Throughout, we've been
10 working very closely with U.S. EPA Region 9 and are also
11 being assisted in some areas by one of their consultants,
12 P.G. Environmental.

13 After today's Board workshop, we continue to
14 meet upon request with permittees and stakeholders as
15 well as hold two staff-level workshops on key topics for
16 the permit development.

17 We are currently scheduled to release a draft
18 permit in early March with plans to bring the tentative
19 permit to you for consideration at the May 2012 Board
20 meeting.

21 Next slide, please.

22 So as background, the existing 2001 permit
23 regulates the discharges of stormwater and nonstormwater

24 runoff from 84 cities, Los Angeles County, and the
25 Los Angeles County Flood Control District. In the 2001
0146

1 permit, the District is also named the principal
2 permittee with additional requirements for monitoring,
3 reporting, and coordination on behalf of all permittees.

4 There were a number of reasons for issuing a
5 single permit for the entire Los Angeles County MS4 in
6 2001, most of which still apply today.

7 These are first that the L.A. MS4 is a highly
8 interconnected system across jurisdictional boundaries
9 which receives commingled discharges that are then
10 conveyed by the MS4 to receiving waters.

11 Second, a single permit provided opportunities
12 for cooperation which resulted in efficiencies in areas
13 of public outreach, monitoring, and reporting.

14 Third, as the owner/operator of a large part of
15 the L.A. County MS4, the Flood Control District agreed to
16 serve as principal permittee and assumed special
17 responsibilities with regard to overall coordination and
18 unified monitoring and reporting.

19 Next slide, please.

20 One of the fundamental decisions that staff had
21 to evaluate at the outset was the basic permit structure
22 for the updated permit, and what I mean here really is Do
23 we keep generally the same structure of a single permit
24 as we've had or change it?

25 Staff evaluated three general alternatives for a
0147

1 permit structure, including a single unified permit but
2 with watershed sections, watershed-based permits, and
3 other multiple-permit approaches, including individual
4 permits or permits based on the Reports of Waste
5 Discharge, also known as ROWDs, that were submitted in
6 2006 and later in 2010. And I'll talk about these a
7 little bit later in my presentation.

8 Next, please.

9 Federal regulations identify a couple of
10 possible permitting structures for MS4 permits, including
11 a systemwide permit and a structure that addresses all
12 discharges within an MS4 that discharge to the same
13 watershed.

14 Clean Water Act Section 402(p) and the
15 Implementing Regulations at 40 CFR 122.26 provide
16 flexibility to the permitting authority -- that is, the
17 Regional Board -- to issue permits on a systemwide or
18 jurisdiction-wide basis, taking into consideration a
19 variety of factors, and these include the location of the
20 discharge with respect to waters of the United States,
21 the size of the discharge, the quantity and nature of the
22 pollutant's discharge to waters of the United States, and
23 other relevant factors.

24 In evaluating the structure for the new permit,
25 Board staff considered a number of factors, including the

0148

1 nature of the Greater L.A. County MS4, permittees' input,
2 TMDLs, and also opportunities for collaboration,
3 including the proposed L.A. County Flood Control
4 District's water quality funding initiative. I'll talk
5 about each of these factors in the next four slides.

6 Next.

7 The first factor staff considered was the nature
8 of the Los Angeles County MS4. The Greater L.A. County
9 MS4 is an extensive, interconnected, and overlapping
10 system, the infrastructure of which is controlled in
11 large part by the Los Angeles County Flood Control
12 District, among others. It is the receptacle for urban
13 runoff and stormwater from multiple cities, along with
14 Los Angeles County. The discharges from these entities
15 frequently commingle in the MS4 prior to discharge to the
16 receiving waters.

17 Next slide, please.

18 To give you an idea of the extent of the Greater
19 L.A. County MS4, the Flood Control District area
20 encompasses more than 3,000 square miles and
21 approximately 2.1 million land parcels. The drainage
22 infrastructure within the Greater L.A. County MS4
23 includes approximately 500 miles of open channel, 2800
24 miles of underground storm drain, and an estimated
25 120,000 catch basins. And in this map here (indicating),

0149

1 if you can see the dotted red line which essentially
2 traces the boundary of Los Angeles County, that's the
3 boundary for the Los Angeles County Flood Control
4 District and the slightly shaded areas are all the
5 incorporated cities within L.A. County. The yellow areas
6 are the unincorporated areas of Los Angeles County, and
7 you can see some of the waterbodies represented on the
8 map as well.

9 Next, please.

10 Second, staff considered the results of the
11 online survey regarding permit structure. The results
12 indicated that a majority of permittees support a single
13 MS4 permit for Los Angeles County. A significant
14 minority support multiple watershed-based permits.
15 Overall, 85 percent of permittees support either a single
16 MS4 permit or watershed-based permits. A small number of
17 permittees support alternative groupings other than
18 watershed-based groupings. Only four permittees
19 expressed a preference for individual MS4 permits.

20 Staff also considered the 2006 and 2010 Reports
21 of Waste Discharge, or ROWDs. Eight permittees submitted
22 individual or small-group ROWDs. These included
23 individual ROWDs from the cities of Signal Hill and
24 Downey and a small-group ROWD submitted by five cities in
25 the upper San Gabriel River watershed. All of these were

0150

1 submitted in 2006. Additionally, an individual ROWD from

2 the Flood Control District was submitted in the fall of
3 2010. Staff, at the time, found these ROWDs to be
4 inadequate. We can discuss staff's evaluation of these
5 ROWDs in greater detail during your questions, if you
6 desire.

7 Additionally, in its 2010 ROWD, the District
8 requested that if the Board does not issue an individual
9 permit to the District, that it is relieved of its
10 principal permittee responsibilities.

11 Next, please.

12 Staff also considered the requirement to
13 implement waste load allocations from 29 TMDLs in the new
14 permit and these are included in your Board package as
15 one of the attachments to the brief paper that was
16 included. This will likely be the most significant
17 addition to the L.A. MS4 permit. These TMDLs are largely
18 watershed-based. Aggregate waste load allocations are
19 assigned to MS4 permittees within the same watershed and,
20 as such, implementation actions as well as monitoring are
21 watershed-based. TMDLs are well-suited to implementation
22 through a single permit with watershed sections,
23 particularly given the significant efforts that have been
24 undertaken by many permittees to develop watershed or
25 sub-watershed-based TMDL implementation plans.

0151

1 Next, please.

2 Lastly, staff considered the opportunities for
3 collaboration that could be promoted by a single permit.
4 During the adoption of many TMDLs, we've discussed that
5 regional solutions populated throughout a watershed may
6 be the most cost-effective both for structural BMP
7 implementation as well as for programs such as
8 monitoring, implementation planning, and public education
9 and outreach. Opportunities for collaboration during the
10 coming permit term may also be enhanced by the passage of
11 the 2010 act to amend the Los Angeles County Flood
12 Control Act. This is referred to as Assembly Bill 2554.

13 This statute allows the District to assess a
14 parcel tax for stormwater and clean water programs;
15 funding is subject to local voter approval under
16 Proposition 218. 50 percent of the funding would be
17 allocated to nine watershed authority groups, or WAGs, to
18 implement collaborative water quality improvement plans.

19 Next slide, please.

20 So after evaluating the factors that I just
21 discussed, staff intends to propose a single permit for
22 the Greater L.A. County MS4. The permit will include
23 watershed-based requirements in separate sections,
24 relying upon the Regional Board watershed management
25 areas, but with flexibility to reflect the water quality

0152

1 funding initiatives, WAGs, once those are established.

2 A single permit would include baseline
3 provisions that are applicable to all permittees, but

4 with opportunities for tailoring provisions on the basis
5 of watershed priorities or local initiatives, and I do
6 want to mention that Federal regulations give the
7 permitting authority the discretion to specify different
8 conditions relating to different discharges covered under
9 the permit, including different management programs for
10 different drainage areas or watersheds.

11 A single permit would provide continued and
12 potentially new opportunities for collaboration,
13 resulting in more cost-effective monitoring, reporting,
14 and implementation of other requirements such as TMDLs
15 and public information and education.

16 Staff is not currently proposing to designate a
17 principal permittee. The Flood Control District would be
18 treated as a co-permittee, though it may have some
19 different requirements as compared to jurisdictional
20 areas. We know this is of concern to some of the other
21 permittees; however, we have seen through TMDL
22 implementation planning some permittees assume a
23 leadership role and we believe that this will continue
24 and be further supported by the institutional structure
25 that may be created through the water quality funding

0153

1 initiative and the WAGs.

2 A single permit would include revised compliance
3 monitoring provisions to address, in part, concerns
4 regarding how an individual permittee's compliance with
5 permit provisions is determined. And I spoke about that
6 a little bit earlier under the objectives for the new
7 permit.

8 Staff is not planning to propose watershed-based
9 permits because this would result in some permittees
10 having multiple permits. For example, the cities of
11 Downey, Los Angeles, the County of L.A. are some examples
12 where they would need to be covered under three or four
13 permits in that situation and could result also in
14 undesirable inconsistencies among permits within the
15 Los Angeles County area.

16 Staff is also not planning to propose individual
17 permits or other grouped permits except in the case of
18 Long Beach, which has had its own permit since 1999 and
19 has a well-established and robust individual monitoring
20 and reporting program. We are planning to propose that
21 Long Beach continue to have its own permit and we intend
22 to undertake renewal of the Long Beach permit as soon as
23 the Los Angeles County MS4 permit is completed, but while
24 we intend to propose an individual permit for Long Beach,
25 the permit will be similarly organized by watershed.

0154

1 Long Beach actually falls within four watershed
2 management areas such that actions taken by Long Beach
3 can align with watershed-based efforts of L.A. MS4
4 co-permittees where appropriate.

5 A single permit is consistent with the direction

6 of other regions in California, including San Diego,
7 Riverside, and the Bay Area, and also I want to mention
8 that EPA has expressed support for a single permit as
9 we're recommending.

10 At this point I want to turn over the
11 presentation to Ivar Ridgeway to talk about the
12 Stormwater Quality Management Program and some of the
13 permit's minimum control measures and then I'll be back
14 to discuss TMDLs and a few other key areas of permit
15 development.

16 MR. RIDGEWAY: Good afternoon. I'm Ivar Ridgeway of
17 the Stormwater Permitting Unit and I'm the Unit Chief.

18 I'd like to briefly describe some of the
19 requirements staff is considering to incorporate into the
20 upcoming L.A. MS4 permit.

21 As part of the Phase I MS4 application
22 requirements, the U.S. EPA required proposed management
23 programs which would require a description of priorities
24 for implementing controls. The proposed management
25 programs are minimum control measures consisting of the

0155

1 six programs listed in the slide.

2 I'll briefly describe some of the proposed
3 requirements for each of these measurements, which are
4 described in your Board package in greater detail
5 beginning on Tab 16.8, page 16-33.

6 Generally, the Stormwater Management Program is
7 intended to reduce discharges of pollutants in stormwater
8 to the maximum extent practicable and achieve water
9 quality standards.

10 For the industrial/commercial minimum measure,
11 staff proposes to incorporate provisions almost identical
12 to the Ventura MS4 requiring BMP implementation or
13 source-control BMPs identified in the CASQA
14 industrial/commercial BMP handbook. The rationale for
15 referencing the CASQA manual is to ensure appropriate
16 BMPs are implemented for the various activities conducted
17 at industrial/commercial facilities and hopefully serve
18 as guidance for permittees who want to utilize effective
19 measures for potential pollutant-generating activities.
20 The CASQA manual includes numerous BMPs, ranging from
21 simple source-control BMPs to media filters similar in
22 operation to what Board members observed during their
23 Boeing field trip.

24 The inspection frequency proposed is identical
25 to what's in the current 2001 L.A. MS4 permit and also

0156

1 the current Ventura MS4 permit: two inspections per
2 designated facility within five years.

3 Next slide, please.

4 For the Development Construction Minimum
5 Measure, as required in the current Ventura MS4 permit,
6 staff proposes to require an electronic inventory of
7 grading permits, encroachment permits, and building and

8 construction permits within a permittee's jurisdiction.
9 Prior to issuing a grading or building permit, an Erosion
10 and Sediment Control Plan must be submitted for permittee
11 approval prior to land disturbance. The Erosion and
12 Sediment Control Plan must include the elements of a
13 Stormwater Pollution Plan, or an SPP. Controls for the
14 various construction activities must be consistent with
15 the applicable CASQA best management practices handbook
16 or the CalTrans handbook for public
17 transportation-related projects and must be tailored to
18 the risks posed by the project.

19 Next slide, please.

20 For the Illicit Connections, Illicit Discharges
21 Elimination Minimum Measure, which addresses in part the
22 control of nonstormwater discharges to the MS4, staff are
23 proposing to have permittees identify priority areas in
24 the MS4 and identify a minimum number of stations within
25 the priority areas identified at which field

0157

1 observations, field screening, monitoring and possible
2 analytical monitoring will take place.

3 Staff, in conjunction with permittees, plan to
4 develop and implement protocols for investigating and
5 eliminating illicit connections and discharges. This
6 will be in contrast to the requirements in the current
7 L.A. MS4 order where illicit connection screenings was
8 required for stormwater pipes of a given size. The
9 proposed requirement would identify areas for permittee
10 follow-up actions.

11 Next slide, please.

12 For the Public Agency Activities Program, or
13 minimum control measure, staff is proposing to require an
14 inventory and map of all permittee owned or operated
15 facilities. Staff is recommending the mapping to be done
16 in GIS. Staff intend to continue permit requirements
17 such as catch basin cleaning, open channel maintenance,
18 and street sweeping.

19 Next slide, please.

20 The first slide for the new and redevelopment
21 minimum measure describes a requirement that addresses
22 water quality issues. Staff intend to propose an LID
23 design storm similar to the current Ventura MS4 permit
24 and current L.A. MS4 SUSMP sizing. Designated new
25 development and redevelopment projects would retain

0158

1 on-site the stormwater runoff volume resulting from the
2 85th percentile 24-hour storm or the three-quarter-inch
3 24-hour storm, whichever is greater. The reference for
4 the 85th percentile storm would be taken from the 2004
5 Los Angeles County Hydrologic Manual.

6 Staff is proposing to shift from a strict
7 percent effective impervious area in the Ventura order to
8 a volume capture approach. The draft permit encourages
9 designs that minimize impervious areas because the

10 stormwater volume is related to the amount of impervious
11 surface.

12 Next slide, please.

13 The following two slides address the impacts of
14 stormwater runoff on the geomorphology of natural
15 drainage systems. Staff are proposing to incorporate
16 hydromodification requirements for natural drainage areas
17 in the upcoming L.A. MS4 permit. Final hydromodification
18 requirements may be developed in coordination with the
19 permittees based on pending studies to be approved by the
20 State Board. Each of the proposed requirements in this
21 slide will satisfy the hydromodification requirements for
22 sites less than 50 acres.

23 An example is the on-site retention of the
24 volume of the runoff resulting from the 95th percentile
25 24-hour storm. This requirement was derived from the

0159

1 U.S. EPA's stormwater requirement for Federal facilities.

2 Next slide.

3 For sites over 50 acres, the proposed
4 requirements are similar, with exception of the volume of
5 runoff from a larger hydromodification design storm
6 event, which is required to be retained on-site, and
7 hydrologic modeling is required to demonstrate the
8 matching of predevelopment and post-development
9 conditions.

10 Next slide, please.

11 For the Public Information and Participation
12 Minimum Measure, staff is proposing that permittees
13 conduct a stormwater pollution prevention advertising
14 campaign and distribute stormwater pollution prevention
15 public educational materials to potential
16 pollutant-contributing entities within the watersheds.
17 Examples are automotive parts stores and home improvement
18 centers.

19 In addition, staff are proposing that permittees
20 develop or implement or continue the implementation of a
21 watershed-wide reporting hot line to serve as the general
22 public reporting contact for reporting illicit discharges
23 and dumping. The proposed approach would allow each
24 permittee to establish their own hot line if preferred.

25 I would now like to return the presentation back

0160

1 over to Renee.

2 MS. PURDY: I'd like to move on to TMDL provisions
3 now and to start out with, I want to just give you some
4 background, which is that, as you know, there are a
5 number of TMDLs that have been adopted by this Board or
6 established by EPA for the region; and specifically in
7 Los Angeles County, there are 29 TMDLs that have been
8 adopted and are either in effect or will soon be in
9 effect that contain waste load allocations for discharges
10 from the L.A. County MS4. The updated L.A. permit is
11 required to include effluent limitations and other

12 provisions to implement these waste load allocations.

13 Next, please.

14 Specifically, Federal regulations require that
15 NPDES permits contain effluent limitations that are
16 consistent with the assumptions and requirements of all
17 available waste load allocations. Therefore, as part of
18 the update of the L.A. County MS4 permit, Board staff
19 will be developing numeric effluent limitations and other
20 provisions to implement the TMDL waste load allocations
21 assigned to permittees regulated by the L.A. County MS4
22 permit.

23 Staff intends to propose inclusion of all
24 interim and final allocations, even if beyond the
25 five-year term of the permit. This is consistent with

0161

1 the Board's incorporation of all interim and final
2 effluent limitations for the L.A. River Trash TMDL, which
3 extended beyond the current permit term and was adopted.
4 That reopener was adopted by the Board back in 2009.

5 The Regional Board has some flexibility when
6 establishing permit provisions to determine compliance
7 with the numeric effluent limitations that are derived
8 from the TMDL waste load allocations. Broadly, the
9 Regional Board may either require a demonstration that
10 permittees are complying with the numeric effluent
11 limitations through monitorings such as outfall
12 monitoring or, alternatively, may allow permittees to
13 propose and implement control measures to achieve the
14 numeric effluent limitations, which I'm referring to
15 today as an action-based compliance demonstration; and
16 this can be provided where there is reasonable assurance
17 in the record that the proposed actions and the schedule
18 will achieve the numeric effluent limitations within the
19 required time frame.

20 Next, please.

21 The Regional Board has previously established
22 the numeric effluent limitations when it reopened the
23 L.A. County MS4 permit in 2009, as I just mentioned, to
24 incorporate permit provisions to implement the
25 Los Angeles River Trash TMDL. In that case, numeric

0162

1 effluent limitations are included in the permit for all
2 permittees that are subject to the L.A. River Trash TMDL;
3 however, permittees have the option to employ any of
4 three general compliance strategies to achieve the
5 numeric effluent limitations.

6 Depending on the strategies suggested, the
7 permittees may demonstrate compliance either by
8 documenting the percentage of area addressed by full
9 capture of trash systems, and this is where I'm referring
10 to an action-based compliance demonstration, or by
11 calculating their annual trash discharge to the MS4 and
12 comparing that directly to the numeric effluent
13 limitation, which I'll refer to as a direct compliance

14 demonstration based on monitoring data.

15 This approach allows permittees the flexibility
16 to comply with the numeric effluent limitations using any
17 lawful means and establishes appropriate and enforceable
18 compliance metrics, depending on the method of compliance
19 and level of assurance provided by the permittee, that
20 the selected method will achieve the numeric effluent
21 limitations that are derived from the TMDL's waste load
22 allocations.

23 Next, please.

24 As described in the last two slides, staff
25 intends to propose a similar dual-path compliance

0163

1 determination approach to developing permit provisions
2 for the other TMDL waste load allocations. Staff intends
3 to propose numeric effluent limitations that are
4 consistent with the waste load allocations, but with an
5 alternative to pursue an action-based compliance path
6 where there's adequate demonstration that the actions
7 will achieve the effluent limitations.

8 This gives permittees flexibility regarding
9 compliance demonstrations but ensures accountability for
10 action-based approaches through, first of all, a
11 requirement to provide an Implementation Plan for E.O.
12 approval that provides reasonable assurance that the
13 actions will achieve the numeric effluent limitations and
14 validation monitoring to confirm that the expected BMP
15 performance and/or water quality outcomes are being
16 achieved at critical implementation milestones.

17 Next, please.

18 So finally what I'd like to do is touch on four
19 other key permit areas and ones that you'll likely hear
20 about from permittees and the environmental community
21 today. These permit areas are not as fully vetted as the
22 ones we've just discussed, but they are still very
23 important and are topics that staff is actively working
24 on.

25 The first of these is nonstormwater discharge

0164

1 prohibitions. Section 402(p)(b)(3) of the Clean Water
2 Act, which specifies requirements for permits for
3 discharges from MS4's, requires an effective prohibition
4 on nonstormwater discharges.

5 The current L.A. permit relies most heavily on
6 two elements of the Stormwater Management Program to
7 address these nonstormwater discharges and Ivar described
8 these briefly. These are the Illicit Connection, Illicit
9 Discharge Elimination Program and Public Outreach
10 Education Programs such as catch basin stenciling. While
11 these programs have had some success, nonstormwater
12 discharges continue to cause or contribute to dry-weather
13 impairments in our region's waterbodies. As a result,
14 we're exploring new directions to address nonstormwater
15 discharges as Ivar described. We'll continue to evaluate

16 and vet these with permittees and stakeholders in the
17 coming months.

18 The next significant area relates to the
19 permit's receiving water limitations language in part two
20 of the permit. Per 40 CFR Section 122.44(d)(1), the
21 receiving water limitations section of the 2001 permit,
22 as well as all MS4 permits in California, contains a
23 requirement that prohibits discharges from the MS4 that
24 cause or contribute to a violation of water quality
25 standards.

0165

1 This section of the 2001 permit also contains
2 provisions that establish an iterative process whereby
3 certain actions are required when exceedances of water
4 quality standards occur. This iterative process includes
5 submitting a Receiving Water Limitations Compliance
6 Report, revising the Stormwater Quality Management
7 Program and its components to include modified BMPs, and
8 an implementation schedule and additional monitoring to
9 address the exceedances.

10 Many permittees believe that if they fully
11 comply with the iterative process in response to
12 exceedances of water quality objectives or standards,
13 then they should have -- excuse me -- they should not be
14 in violation of the discharge prohibitions in the
15 Receiving Waters Limitation section of the permit,
16 meaning part 2.1.

17 The Regional Board has held that compliance with
18 the iterative process as outlined in the 2001 permit is
19 not a safe harbor for compliance with water quality
20 standards or objectives.

21 In evaluating the receiving water limitations
22 language for the updated permit, we are exploring
23 potentially different approaches for waterbodies subject
24 to TMDLs and those that are not subject to TMDLs. Staff
25 is also looking at how other Regional Water Boards are

0166

1 dealing with this issue in their MS4 permits.

2 Next, please.

3 Water quality-based effluent limitations, or as
4 they're sometimes called WQBELs, are those limitations
5 established to achieve compliance with water quality
6 standards. Numeric WQBELs are derived from water quality
7 standards or TMDL waste load allocations. WQBELs are
8 routinely expressed as numeric thresholds for effluent
9 quality needed to achieve water quality standards.

10 Recently, U.S. EPA revised its guidance on the
11 use of numeric WQBELs in MS4 permits, recommending
12 that -- and I'm quoting -- "NPDES permitting authorities
13 use numeric effluent limitations where feasible, as these
14 types of effluent limitations create objective and
15 accountable means for controlling stormwater discharges."

16 As I discussed earlier, it may be possible for
17 compliance determination to translate numeric WQBELs into

18 action-based equivalents where reasonable assurance is
19 provided that the actions will achieve the numeric
20 WQBELs.

21 In discussions with several permittees to date,
22 there is not a common understanding among permittees
23 about the use of WQBELs in MS4 permits. Staff will
24 continue to vet various options regarding the use of
25 numeric WQBELs in the L.A. MS4 permit as applied to
0167

1 discharges that are subject to TMDL waste load
2 allocations, nonstormwater discharges, and stormwater
3 discharges.

4 Lastly, I want to touch on monitoring.
5 Specifically, I want to go over four objectives that
6 we've identified for the updated monitoring program in
7 the new permit.

8 These are, first of all, to establish a linkage
9 through the monitoring program between the MS4 discharges
10 and receiving water quality. The second is to determine
11 compliance with TMDL provisions that will be included, as
12 well as any other numeric WQBELs. The third is to target
13 implementation actions and improvements in the Stormwater
14 Water Quality Management Program, and the fourth is to
15 validate performance and outcome expectations in cases
16 where action-based compliance demonstrations are being
17 pursued. And an ancillary objective may also be to
18 develop a monitoring program that will help clarify
19 individual compliance in a commingled system, as I
20 discussed earlier.

21 To achieve these objectives, the updated permit
22 will likely need to include a combination of receiving
23 water and outfall monitoring with a greater focus on
24 outfall monitoring. Additionally, the Monitoring Program
25 design will need to take into account TMDL compliance
0168

1 monitoring plans that have been developed and the program
2 will likely end up being somewhat similar to the Ventura
3 County MS4 permit which does rely largely on outfall
4 monitoring. But given the extensiveness of the
5 Los Angeles County MS4, the monitoring program for this
6 updated permit will likely need representative or some
7 sort of stratified random sampling of outfalls.

8 We will be working with the permittees to gather
9 the information that's necessary to establish an
10 appropriate monitoring program for the updated permit.

11 Next slide -- next and last slide.

12 In conclusion, we feel like we have a viable
13 option for permit structure with a single unified permit
14 containing watershed sections that strikes an appropriate
15 balance between consistency within the region and
16 flexibility to address watershed priorities and pursue
17 local initiatives.

18 We're also well under way on permit requirements
19 for the minimum control measures, as described by Ivar,

20 including new and redevelopment and low-impact
21 development. We intend to more fully vet these at a
22 staff-level workshop in the near future and we're looking
23 at potentially a mid-December time frame for that.

24 Finally, we also believe that we have a sound
25 approach to incorporating TMDL waste load allocations
0169

1 which meets Federal requirements and direction to include
2 effluent limitations yet gives permittees the flexibility
3 to use action-based approaches for compliance
4 demonstration if there's a reasonable assurance that such
5 actions will achieve the effluent limitations.

6 So I know that we've covered quite a bit of
7 ground today and we haven't even covered all the ground
8 there is to cover, but we're looking forward to your
9 input on what we have presented today and particularly
10 any feedback that you might have on the permit structure
11 in particular since that is critical to how we will be
12 moving forward over the next several months.

13 And with that, thank you, and I'll close.

14 MS. DIAMOND: Thank you, Renee and Ivar.

15 So at this time -- do you think we can get the
16 lights back on?

17 Anyway, we're going to move on to our speaker
18 cards. I do have two people, one elected official who
19 I'm going to call up first, Council Member Ili from the
20 City of South El Monte.

21 Would you please announce yourself, for the
22 record.

23 MR. ILI: Good afternoon, Chair and Members of the
24 Board. My name is Willhans Ili. I am a Council Member
25 for the City of South El Monte. To make things go a
0170

1 little bit quicker, I'm going to ask the independent
2 cities that are in the audience that are trying to
3 request an extension for the permit, please rise and be
4 counted.

5 Thank you.

6 We are all here requesting that the Regional
7 Board extend the adoption date for the MS4 NPDES permit
8 from March 2012 to December 2012. The cities feel that
9 the Regional Board's deadline to adopt this document is
10 unreasonable for the following reasons: One, the draft
11 permit has not been issued yet; two, the four months is
12 not enough time for us to review and adopt this permit;
13 and finally, the Regional Board gave Ventura County two
14 years to review and negotiate their permit.

15 The additional time is needed in order to
16 analyze the permit. The additional time is needed for
17 our cities to analyze the permit and to see how they will
18 affect our cities.

19 Thank you for your time, and I hope you guys
20 consider our request.

21 MS. DIAMOND: Thank you. I have Ms. Susan Reyes,

22 representing Senator Ed Hernandez.

23 MS. REYES: Hi. Good afternoon, Chair and Members of
24 the Board. I'm here -- my name is Susan Reyes. I'm here
25 on behalf of Senator Ed Hernandez to read a statement,
0171

1 but before I do that, if I may, I'd like to thank Member
2 Madelyn Glickfeld for coming out to West Covina last
3 month and meeting with the San Gabriel cities and other
4 cities from L.A. County. So thank you for making that
5 effort to listen to us. Thank you.

6 So I'm going to go ahead and read the statement.

7 MS. DIAMOND: Would you please -- I don't want to
8 interrupt you, but please speak into the mike because
9 it's really hard to hear in all parts of the room.

10 MS. REYES: Okay. Can you hear me now?

11 MS. DIAMOND: Can people hear in the back? Thank
12 you.

13 MS. REYES: I'd like to thank the L.A. Regional Board
14 for offering this public workshop that gives cities the
15 opportunity to state their comments and concerns
16 regarding the reissuance of the MS4 permit.

17 As chair of the San Gabriel Valley Legislative
18 Caucus, I realize the importance of water quality and I
19 value the work that this Board does to regulate
20 stormwater. I have followed this issue for the last 16
21 months and I understand that cities are currently
22 operating under the previous MS4 permit that expired
23 nearly six years ago.

24 Given this long period of uncertainty and the
25 history of litigation, there are a number of concerns
0172

1 that need to be addressed. I encourage the Regional
2 Board to continue hosting public workshops and work
3 towards a process that allows stakeholders to have their
4 concerns addressed.

5 Cities in my district need more time during this
6 negotiation process as well as more time to carefully
7 review the draft permit once it is issued, even if it
8 means extending the adoption date of the new permit.
9 It is important cities have the opportunity to analyze
10 the regulations adopted in the permit and develop
11 strategies to help ensure their full compliance before
12 the regulations are made effective.

13 I look forward to continuing my involvement in
14 this process and the development of a reasonable permit.

15 As always, my office is here to assist if
16 needed. Thank you from Senator Ed Hernandez.

17 MS. DIAMOND: Thank you.

18 The next card I have is -- and I'm just going to
19 confirm with you, Mr. Unger -- Heather Maloney, Heather
20 Merenda, John Dettle representing the L.A. Permit Group
21 and they've asked for 20 minutes.

22 MR. UNGER: That's correct.

23 MS. DIAMOND: The L.A. Permit Group and I'm sure

24 you're going to tell us exactly who you are and make sure
25 that you're right on top of the mike.

0173

1 MS. MALONEY: Is that good?

2 MS. DIAMOND: Yes, and speak loud.

3 MS. MALONEY: Yes. Everybody's up here.

4 Good afternoon, Madam Chair and Regional Board
5 members. My name is Heather Maloney. I am with the City
6 of Monrovia and also the chair of the L.A. Permit Group.
7 Myself and two other members of the L.A. Permit Group's
8 negotiating committee, John Dettle and Heather Merenda,
9 will be speaking and presenting comments on the MS4
10 permit development on behalf of The L.A. Permit Group.

11 The L.A. Permit Group has reviewed this
12 presentation and has approved its contents.

13 Next slide, please.

14 So currently the L.A. Permit Group includes 51
15 cities who have been working collaboratively to develop
16 comments on the MS4 permit, the names of which of all
17 these cities are listed up on the screen there, and
18 several additional agencies have been attending meetings
19 such as L.A. County Flood Control, L.A. County, City of
20 Los Angeles and elected officials' staff, and all cities
21 have been invited to join The L.A. Permit Group and
22 meeting attendance is continually growing.

23 There are many more cities that are attending on
24 a regular basis that are not listed on this screen so we
25 anticipate this list will continue growing.

0174

1 The L.A. Permit Group was established in
2 partnership with Vice Chair Mary Ann Lutz back in January
3 2011 and we have been actively meeting and working on
4 permit commitments or comments since last February and
5 our purpose here today is to deliver the general
6 consensus of the larger group.

7 Next slide.

8 The L.A. Permit Group identified four initial
9 priority focused areas of concern for the development of
10 the new permit: TMDLs development programs, monitoring
11 and reporting, and then technical subgroups were
12 established for each of these subject areas. And you can
13 see the subcommittee chairs are listed there on the
14 screen as well.

15 The subgroups then report back to The L.A.
16 Permit Group and the general consensus of the group is
17 represented by the negotiating committee.

18 MS. GLICKFELD: Excuse me. Do we have a copy of this
19 PowerPoint?

20 MS. MALONEY: You have it.

21 MR. UNGER: You can send it to us.

22 MS. MALONEY: Yeah. It's on the laptop and --

23 MS. GLICKFELD: So is it possible that we can get a
24 copy delivered to our staff, who can then deliver it to
25 us?

0175

1 MS. MALONEY: Absolutely.
2 So the negotiating committee contains
3 representatives from each of the watershed management
4 areas throughout the County and our negotiating committee
5 members are up front here with us today and I'm going to
6 read off their names and the watersheds that they're
7 representing.

8 We have Heather Merenda from the Santa Clara
9 River watershed, John Dettle from the Santa Monica Bay,
10 and Joe Bellomo from the Malibu Creek and rural
11 watersheds, as well as Patricia Elkins from the Dominguez
12 Channel. We have Ray Tahir from the San Gabriel River,
13 Rene Bobadilla from the L.A. San Gabriel River, and then
14 myself from the L.A. River, and John Hunter from the L.A.
15 River watershed.

16 Next slide.

17 So we're requesting that additional time be
18 allowed for the MS4 permit development for several
19 reasons. The first, it takes time to organize a large
20 amount of agencies, 80-plus for this permit, which are
21 very unique and individual municipalities.

22 To put this in context, you know, we tried to
23 imagine, you know, getting 80 different State agencies to
24 work together, which takes a while to get collaboration.

25 And then the MS4 permits on average take at

0176

1 least two years throughout the State to negotiate with
2 permittees and stakeholders, so the proposed time line
3 allows significantly less time to do that, and then the
4 over 28 TMDLs are expected to be incorporated into the
5 permit and this will be challenging in a timely process
6 that needs time to do it right.

7 In regards to the EPA TMDLs specifically, many
8 of the EPA TMDLs are still in draft form and are not
9 expected to be released until March 2012. We haven't
10 even seen the final TMDLs yet and we'd like to have the
11 time to digest and analyze these EPA TMDLs and prepare
12 Implementation Plans for them. Therefore, the TMDLs will
13 be released rather late for sensible incorporation based
14 on the time frame proposed.

15 Some of the EPA TMDLs will not be adopted until
16 later as well. I believe a few of them got extensions to
17 2013 and a permit reopener would be needed in order to
18 incorporate these into the permit.

19 As we've seen with many of the MS4 permits
20 around the State, if rushed, several complications can
21 occur after adoption. Instead, we're proposing to extend
22 the adoption time to work through the issues
23 collaboratively through the permit development phase.

24 In addition, we'll need time to bring the permit
25 drafts to our elected officials' attention as well. This

0177

1 will be important that time is allowed for this process

2 so that they can understand the permit requirements as
3 well as the financial implications for implementing the
4 permit.

5 Regional Board staff has indicated that they are
6 encouraged by the L.A. County Flood Control's proposed
7 funding initiative. We are proposing that the permit not
8 be based on the funding initiative; however, if it is the
9 Board's desire, it is proposed that the permit would be
10 based -- that the permit would be based on the funding
11 initiative, the permit adoption should be extended; and
12 in addition to knowing what extent of the revenues will
13 be available for the permit adoption, there are several
14 challenges that still need to be addressed in the funding
15 initiative structure, as currently proposed, and will
16 make compliance very challenging if those aren't
17 resolved.

18 For all these reasons, we're requesting the
19 permit adoption date should be revised to at least
20 December 2012.

21 Next slide.

22 The permit should allow variability and
23 implementation in each of the sub regions to accommodate
24 the unique and varying nature of L.A. County's subregions
25 as well as the TMDLs that will be incorporated. While we
0178

1 are hopeful that the L.A. County Flood Control funding
2 initiative will be successful, we should not base a
3 permit on revenues that do not yet exist. Rather, the
4 permit should be based on existing resources and sound
5 science.

6 Next slide.

7 Each of the subgroups have gone through a great
8 deal of technical analysis and have prepared some
9 examples of our comments for our presentation today. We
10 look forward to future workshops to discuss all of these
11 topics as well as other aspects of the permit.

12 So I'm going to hand the presentation off to
13 Heather Merenda and John Dettle, who will be providing
14 the subgroup comments.

15 MS. MERENDA: Good afternoon. Is this -- can you
16 hear me? I can speak loud. That's something I can do.

17 MS. DIAMOND: Speak loud.

18 MS. MERENDA: So thank you for the opportunity to
19 speak with you this afternoon. I appreciate your time
20 and efforts.

21 So if I could have the next slide, please, as
22 the slide said, I'm the chair of the TMDL subcommittee,
23 so we have been working on language and things of that
24 nature. But to date, the consensus of our group is that
25 we believe that the attainment of water quality standards
0179

1 and waste load allocations should be accomplished through
2 an iterative approach. This will ensure that
3 municipalities have the structure necessary to provide a

4 process that would otherwise result in a lot of
5 regulatory uncertainty. It will also allow for
6 reasonable and effective processes to attain water
7 quality standards.

8 With municipalities facing historically limited
9 resources, the iterative process would provide a
10 structure for cities to concentrate very limited
11 resources toward attainment of the water quality
12 standards and waste load allocations rather than through
13 litigation. This process is allowed for in all MS4
14 permits throughout the state and most throughout the
15 United States.

16 Furthermore, receiving water limitation language
17 should be revised to ensure the retention and inclusion
18 of the iterative process. Waste load allocation
19 attainment should be allowed through best management
20 practices and in order to establish the structure and
21 process in the permit, detailed implementation plans will
22 support and inform the iterative approach. An integrated
23 watershed monitoring program, which we will talk about
24 later in the presentation, will provide vital feedback to
25 the iterative approach.

0180

1 Next slide, please.

2 Development programs, this would include the
3 construction and planning programs -- we consolidated it
4 into one slide.

5 Development programs should be based on the goal
6 of improving stormwater quality but not on specific
7 methodologies. Specifically, they should be tailored to
8 our unique characteristics in Los angeles County in our
9 watersheds in our sub-drainage areas. Development
10 programs should be based on a design storm and each
11 municipality should be able to prioritize best management
12 practices in these programs based on the unique
13 characteristics of the site, the unique characteristics
14 of the area, and related TMDLs.

15 And with that, I will pass the presentation on
16 to John Dettle.

17 MR. DETTLE: Hi. I'm John Dettle from the City of
18 Torrance, engineering manager, and I'll be speaking on
19 monitoring and reporting. Can you all hear me? All
20 right.

21 Next slide, please.

22 The permittees recognize the benefits of having
23 integrated watershed monitoring plans that would address
24 all the TMDLs within the watershed and this is because
25 with 84 cities and now 29 TMDLs, it results in too many

0181

1 plans and too many annual reports for the permittees and
2 the Board staff to manage. With an integrated watershed
3 monitoring plan, it would eliminate redundancy on the
4 monitoring and would help to fill in data gaps and this
5 would also give you the big picture for watershed health

6 for each watershed.

7 The purpose of the integrated watershed
8 monitoring plans should be to focus on identifying the
9 problems within each watershed and to give the agencies a
10 chance to select the proper BMPs without the concern that
11 those monitoring results would trigger enforcement
12 actions.

13 Next slide, please. Next slide.

14 We request that the current permit reporting
15 system be streamlined. We'd recommend an on-line
16 reporting system for the Annual Report submission such as
17 the Smart system or any Internet-based system.

18 We'd also like to see once a milestone or
19 requirement is documented and met that the item would be
20 removed from the report so that you don't have to report
21 on it again each year.

22 We'd also like to have the questions in the
23 Annual Report correspond directly to the language in the
24 report, also, again just streamlining the reporting
25 process.

0182

1 In conclusion, we are asking for an extension of
2 the permit time line. We are asking for the permit to be
3 economically reasonable and have flexibility within it.
4 We are proposing the coordinated monitoring for each
5 watershed. We do support the iterative process. We are
6 requesting that the Annual Reports be streamlined and
7 that the development programs be tailored to the unique
8 characteristics of L.A. County. Thank you.

9 MS. GLICKFELD: Madam Chair, before this goes
10 further, I've heard two people testify and talk about a
11 development program. If the next person who is going to
12 testify could explain what you mean by a development
13 program, it would help me.

14 MS. MERENDA: I'm sorry. Heather Merenda, City of
15 Santa Clarita.

16 MS. DIAMOND: We can't hear you.

17 MS. MERENDA: I'm sorry.

18 When we are talking about the development
19 program, we essentially are talking about the
20 development, construction, and development planning model
21 programs. I'm sorry. I tried to clarify that and didn't
22 do it, apparently.

23 MS. GLICKFELD: Okay. Got it. Thank you.

24 MR. DETTLE: Questions?

25 MS. DIAMOND: We'll take questions at the end after

0183

1 we've heard from everybody. Thank you.

2 I have Daniel Pankau from the City of Calabasas.
3 You're already -- you also identify yourself from the
4 L.A. Permit Group, but do you want to testify with
5 something different, Daniel Pankau?

6 Okay. Then we'll go on.

7 Daniel Wall. Is Daniel Wall here?

8 MS. SMITH: I think he was with that larger group.

9 MS. DIAMOND: Daren Grilley?

10 MS. MERENDA: I think he was part of that large
11 group.

12 MS. DIAMOND: How long did you anticipate each one to
13 have if they've not requested special time? Was this
14 three minutes?

15 MR. UNGER: Three minutes.

16 MS. DIAMOND: We're with the regular three-minute
17 reports from all three here.

18 Are you Daren?

19 MR. GRILLEY: Yes, I'm Daren, but I think my -- I was
20 just requesting a postponement until December 2012, so at
21 the risk of being redundant, there's no reason for
22 anything else.

23 MS. DIAMOND: Okay. Thank you very much.

24 I'm going to assume that the same is true for
25 John DiMario 'cause you've indicated on your card that
0184

1 you're here to request that the Board extend the date of
2 adoption to December 2012. Since I don't see you and
3 you've written that, we note that comment.

4 Lisa Bugrova from the City of San Dimas.

5 MS. BUGROVA: Requesting an extension of the time
6 line to December 2012.

7 MS. DIAMOND: Thank you.

8 Vivian Castro from the City of Covina?

9 MS. CASTRO: Also requesting extension of time line.

10 MS. DIAMOND: If you don't come up and you stand up,
11 I'll assume that your request has already been given.

12 Jose Espinoza? Okay.

13 John Beshay?

14 MR. BESHAY: Also requesting an extension.

15 MS. DIAMOND: Thank you.

16 Sean Hagerty?

17 MR. HAGERTY: Same.

18 MS. DIAMOND: I should mention City of Claremont.

19 We already heard from this speaker.

20 Julie Hegvold.

21 MS. HEGVOLD: Same, requesting extension.

22 MS. DIAMOND: Thank you, from the City of Lawndale.

23 John Oskoui from the City of Downey. I

24 apologize.

25 MR. HUNTER: He had to leave for a meeting and he
0185

1 asked me to read his statement in.

2 MS. DIAMOND: Can we just have you hand in the
3 statement and we will -- rather than read it?

4 MS. FORDYCE: I think he should read it.

5 MS. DIAMOND: I'm sorry. Please come up and read it.

6 MR. HUNTER: Thank you. I apologize. I was just
7 handed this script, so I'm going to read it verbatim.

8 I'm John Hunter. I'm a consultant to the City of Downey.

9 MS. DIAMOND: Just speak to the mike.

10 MR. HUNTER: Is that better? As I said, John Oskoui
11 had to leave for another meeting. He's the Public Works
12 Director of the City of Downey.

13 "Just as some background, the City of Downey
14 filed an ROWD in 2006 for coverage under an industrial
15 MS4 permit. That application was returned as incomplete
16 but indicated that meetings between the City and the
17 Regional Board staff would be initiated to work out
18 differences. For the next five years, these meetings
19 never took place and the City of Downey continued to
20 request an individual permit.

21 "Before continuing with my comments, I'd like to
22 take a moment to thank the Executive Officer Sam Unger
23 and his staff for meeting with us, along with the City of
24 Signal Hill and County Flood Control District, on
25 October 31st, to discuss this and other related permit

0186

1 issues. The result of that meeting was that we continued
2 to disagree but are willing to keep a dialogue open.

3 "The reasons the City of Downey is requesting a
4 separate permit is simple. The city is bordered on the
5 east and west by the Los Angeles and San Gabriel Rivers
6 respectively and the Santa Ana Freeway on the north, so
7 there is very little run-on from other co-permittees
8 flowing onto and through the city of Downey. Downey has
9 embarked on a significant effort which includes an 89
10 percent compliance with the trash TMDL, 60 percent being
11 required this previous year, and the installation of
12 approximately 1,000 infiltration systems, including the
13 Discovery Park infiltration facility that has been shown
14 to this Board on several prior occasions and by itself
15 accepts runoff from a 15-acre drainage area.

16 "The City of Downey has been and will continue
17 to be committed to be on the leading edge of implementing
18 the MS4 permits.

19 "With the unique characteristics of the City of
20 Downey and the level of effort that has been put forth
21 over the past decade, Downey does not wish to be tied
22 into a permit system of joint and several liability with
23 33 permittees of the Los Angeles River and over 28
24 permittees of the San Gabriel River.

25 "The City of Downey feels that cities should

0187

1 have the ability to respond -- to be responsible for
2 their own discharges if they request so. This request is
3 supported by 40 CFR Section 122.26 (a)(b). We have no
4 objections to other cities operating under a single
5 countywide permit or forming watershed and sub-watershed
6 groups if they wish now that the City of Downey
7 understands that the primary reason for the
8 recommendation to issue a single MS4 permit is that we
9 are all part of a unified or a joint system, but we don't
10 think that the referenced CFR section has been put in
11 place in absence of considering similar scenarios.

12 "Furthermore, even within our system, the
13 precedent has already been established with the issuance
14 of separate permits.

15 "We also understand that in recommending
16 issuance of a single permit that results of -- based on
17 the results of a survey involving entities within this
18 broader system, and it has been signed just recently, as
19 you're aware, apparently most of the cities involved have
20 voted to go under a single permit, but Downey was one of
21 the few that voted to go under an individual permit and
22 hereby requests that we be allowed to operate under a
23 single MS4 permit."

24 MS. DIAMOND: Thank you. Would you hand that to the
25 court reporter, 'cause she may need to look at it.

0188

1 THE REPORTER: Could I get his name?

2 MS. GLICKFELD: Repeat his name, please.

3 MR. UNGER: This is John Hunter.

4 MS. DIAMOND: He's reading it for someone else.

5 Shahram Kharaghani, with the City of
6 Los Angeles. The City of Los Angeles requested and was
7 given ten minutes.

8 MR. KHARAGHANI: Good afternoon.

9 MS. DIAMOND: Mr. Kharaghani, we need you to speak
10 really close because the speaker system isn't so great.
11 It's hard to hear.

12 MR. KHARAGHANI: Good afternoon, Madam Chair, Board
13 members. Shahram Kharaghani, City of Los Angeles.

14 Before I start my presentation, I want to take
15 this moment to thank Mr. Sam Unger, Ms. Smith, Ms. Purdy,
16 and also Mr. Ridgeway for meeting with us, with the City
17 of Los Angeles, to go over some of the issues that we
18 had.

19 I have prepared a presentation for you that I
20 should be able to complete in ten minutes. It's a lot of
21 pictures, so you don't have to look at so many words.

22 The outline I would say is regarding the MS4
23 Permit, City of Los Angeles City Green Initiatives that
24 we have implemented in the City regarding our
25 Proposition O that, Madam Chair, you have helped us a lot

0189

1 on that program, and then the TMDL implementation plans,
2 and funding.

3 As Renee, your staff, described, the City of
4 Los Angeles also supports the city single permit,
5 watershed-based. These are the chapters of the same
6 permit and we would like to talk about some of the
7 program flexibility regarding outreach, inspection,
8 construction, development, and monitoring that I will be
9 referring to.

10 The City of Los Angeles, as you know, we share
11 four large watersheds: Los Angeles River, Santa Monica
12 Bay, Ballona Creek, and Dominguez Channel, and these
13 watersheds have lots of discharges and we have to work

14 with lots of people in the L.A. County.

15 We are very much proud of our public outreach.
16 As you know, we have been using more and more our social
17 media and we have used what we call "It Takes Everyone
18 for us to Improve Water Quality," a lot of blogs on our
19 website, and we do also have a newsletter every month,
20 and right now we have about 7,000 subscribers, becoming
21 more and more every month.

22 Our public agency activities, we work with 44
23 City departments and we are very proud to mention to you
24 that all the 44 departments have been trained on new
25 construction and new site requirements and most of our
0190

1 staff within the 44 departments have been qualified as
2 either QSP or QSD.

3 Now, the Green Initiative that we are very much
4 pleased with, these are some of the ones and I will go
5 over them briefly. We have created a series of various
6 manuals under green standards. We have green street
7 standards. These are the streets within the City of
8 Los Angeles that anyone who wants to improve the street,
9 they have to have a green element as part of that.

10 Green standards are the way to systematize or
11 institutionalize everything that happens in the public
12 right-of-way. We have 52 sheets of the green standards
13 for the City that are online, and this is the first in
14 the nation. We have our LID ordinance that we passed and
15 it was adopted back on September 27th.

16 We have rainwater harvesting that I will
17 go over, the effect of that within the city. We are also
18 very pleased to have worked with Heal the Bay, Dr. Gold,
19 and others and created a water quality and matrix
20 standards for the use of rainwater as a resource; and
21 last but not least, we are working with a lot of our
22 friends on stream protection.

23 So I'll show you some of the pictures of those
24 green initiatives and what those things are that we are
25 accomplishing right now.

0191

1 As you can see, the Green Streets manuals are
2 the manuals that we have created for both public and
3 private. They have been completed and right now we are
4 working on the Rainwater Harvesting Program and urban
5 greening policies and the deadline would be for those
6 2013.

7 Residential Parkway Landscaping is another
8 manual that we have, and all of these are on our websites
9 that people can reach.

10 The Green Streets Master List Database, this is
11 all of our capital improvement programs. All of the
12 streets that we have within the City of Los Angeles,
13 anytime somebody wants to improve the street, they have
14 to have a green element as a part of that improvement.

15 The standard plans, as I mentioned, these are 52

16 sheets within the city. Public or private, when they
17 want to improve a development within the city and they
18 want to use public right-of-way, they have to add a green
19 element.

20 These are some of the standards. Again, these
21 are on our website. Our standards go by numbers. I
22 wanted to just show to you what are the standards. Put
23 in simple terms, that means if they are going to use the
24 public right-of-way, the parkways, make them green for
25 them to receive rainwater.

0192

1 Now, LID impact development, after a most
2 exhaustive discussion with all our friends, within the
3 City of Los Angeles, we were able to pass the low-impact
4 development within the City and some of the benefits, as
5 you can see right now, these three slides that you see,
6 obviously it is going to deal with the polluted water, it
7 is going to increase water supply, and also it is going
8 to be not having as much -- as much reliance on the water
9 from far, far, faraway places when we have the rainwater
10 in our local places.

11 Low-impact development we are going to
12 prioritize. As you see, the three integration of those
13 circles basically says any development within the City,
14 we are going to concentrate first on infiltration.
15 That's recharging our groundwater. If the source
16 condition or basin does not accept that, we will have the
17 capture and use. And last but not least, it will go
18 through biofiltration and retention. Those are some of
19 the examples that you see as far as rain gardens and rain
20 barrels and planter boxes.

21 The ordinance was accompanied by a handbook.
22 Again, that was put through a stakeholder-driven process
23 and was prepared as one of the handbooks that is easy to
24 understand and follow and is available on the website and
25 is a companion to our LID ordinance to make sure

0193

1 everybody knows what to do within the city.

2 These are some of the scale residential BMPs.
3 As you can see, everyone can do something, you know,
4 whether it is a rain barrel on the left-hand side, dry
5 wells, whether it is permeable pavement and driveway,
6 rain gardens or planter boxes, there is almost a tool for
7 everyone within the city when they are doing
8 redevelopments.

9 Rainwater Harvesting Program. We did receive a
10 million-dollar grant and we were able to retrofit 600
11 properties and the desire within the City was so much
12 that I have still 2400 applications that they are asking
13 me for rainwater and we are looking for different sources
14 to provide them also with that request.

15 These are some of the examples that you see
16 right now as far as our rainwater harvesting and the
17 strong support that we had within the City.

18 These are some of the examples within the City,
19 what people can accomplish of every site. Site is
20 specific. These are the pictures. Lowe's, they're using
21 infiltration. We have Elmer Street. That was done with
22 partnership with a nonprofit and the community to create
23 a street that was full of flooding and right now you can
24 see everyone is proud of that.

25 And so when there is a will, there is a way and
0194

1 I think we have shown it in the City. Again, you see the
2 rainwater barrels that we have. This is our rainwater
3 harvesting. This is the example of that. This is
4 capture and use, a Proposition O program, Temescal Canyon
5 Park that Madam Chair is fully aware of this. This is
6 what we're going to use huge 3 million-gallons system and
7 a 1-and-a-half million-gallons system in Temescal Canyon
8 to capture the rain and use it in the summer months when
9 we need the water.

10 Green streets right now: One street at a time,
11 we are making every street in the City of Los Angeles
12 green. We started with Oros Street, which you see in the
13 picture on the right-hand side. Then we went to
14 Riverdale Avenue to make that street green. You know,
15 these were all dry and no plantations and no landscaping.
16 Then Elmer and then South Park and all of these are
17 examples of what can be done in the city and we hope to
18 duplicate that throughout the city.

19 Oros is before and after, just to see what are
20 the BMPs we are capturing the water, infiltrating, and at
21 the end the water goes to a park that we have at the end
22 of the street.

23 Elmer Street is a street that was flooding,
24 flooded every year. We took the opportunity to work with
25 everyone within the committee and nonprofit and others
0195

1 and we were able to make that flooded street right now a
2 green street that everyone is happy with. As you can see
3 again, before and after pictures, it's just like day and
4 night.

5 Riverdale, another street again, dry, no
6 landscaping in the parking lot and we were able also to
7 receive through a rain garden through that and receive
8 the water and filter that.

9 Stream protection: As we have allowed
10 development to go ahead and embark, there are streams
11 that are so sensitive and these are the last of the
12 streams that we have in the city. We are working on a
13 the Stream Protection Ordinance to make sure we create a
14 buffer zone so the last pieces of the streams that we
15 have in the city are protected.

16 Proposition O, a \$500 million General Obligation
17 Bond that the voters passed, 76 percent, unheard of
18 within the City history, it provided us a down payment
19 for us to improve water quality.

20 I'll go very briefly through some pictures of
21 some of the projects that this proposition is helping us
22 to implement.

23 South Los Angeles: As you see in the picture:
24 A nine-acre bus depot, an eyesore, in the middle of a
25 community that don't have any parks for miles away and
0196

1 once we have that project, you know, converted to a
2 wetlands, you can see what a transformation can take
3 place.

4 Just very briefly, these are a rendering of the
5 project in South Los Angeles, what you will see when it
6 is finished and it should end up at the December of 2011.

7 Echo Park Lake, another resource, \$80 million,
8 Proposition O, the lake that has a number of TMDLs. We
9 are going to have wetlands and are making sure that the
10 lake is also repaired for some of the ignored problems
11 that we have had over the years.

12 Machado Lake is another resource right now that
13 we have in San Pedro and that's the project we are
14 spending \$120 million to make sure we meet all the TMDLs
15 and we make that resource that has been hidden by trash
16 and other pollutants to become the jewel that it is.

17 Strathern Wetlands Park, another pit as you see
18 it on the right-hand side, an inert landfill. We're
19 spending and working with L.A. County and we will have
20 that inert landfill to be converted to wetlands, passive
21 recreation, and savings on a retention basis.

22 These are some of the examples that we have seen
23 with the Proposition O: the L.A.'s Zoo, permeable
24 pavers, as you can see, and other projects that we have
25 talked about.

0197

1 Trash TMDL, a technology base. These are the
2 numbers, as you see: 35,000 screens, 7,600 inserts,
3 70 percent compliance.

4 Number of TMDLs right now -- not to bore you
5 with the details when Rene has already covered these.
6 Our strategy has been to make sure that the TMDLs are
7 based on green infrastructures.

8 And finally, last but not least right now, we
9 have spent the down payment of Proposition O, but we are
10 working with our friends within the L.A. County to make
11 sure that we have a sustainable source of funding and
12 that's the one we refer to as AB 2554.

13 And the last slide, which is my favorite, is our
14 public outreach each year. Just about in June, we go to
15 the Santa Monica Bay and some 7,000 kids come and pick up
16 trash and they create those kind of pictures. That
17 picture says "Help us" or "Kelp us right now" and that
18 happens each year and you are all invited to attend if
19 you wish.

20 That concludes my remarks, Madam Chair.

21 MS. DIAMOND: Thank you very much.

22 Next is Rene Guerrero, City of Pico Rivera.

23 MR. GUERRERO: Yes. The City of Pico Rivera requests
24 the same extension, December 2012.

25 MS. DIAMOND: Thank you.

0198

1 Sarina Morales-Choate, City of Santa Fe Springs.

2 MS. MORALES-CHOATE: Same thing.

3 MS. DIAMOND: Okay. C. Alba? Just requesting I
4 believe -- I'm not sure you're still here, but you're
5 requesting an extension to December 2011 -- I think you
6 probably mean 2012.

7 MR. UNGER: We're happy to do it in '11.

8 MS. DIAMOND: We can do it.

9 Steve Myrter -- sorry. I'm not reading your
10 handwriting. City of Signal Hill?

11 MR. MYRTER: Yes.

12 MS. DIAMOND: Would you like to come up?

13 MR. MYRTER: Yes.

14 MS. DIAMOND: Thank you. I'm sorry if I

15 mispronounced your name. Did we have 15 minutes --

16 MR. UNGER: Do you have a handout to the Board
17 members?

18 MS. DIAMOND: Was there a period of time agreed to?

19 MR. UNGER: I believe it was 15 minutes.

20 MR. MYRTER: 15 minutes. I should be done before
21 that.

22 MS. DIAMOND: Do you need --

23 MR. MYRTER: Between 10 and 15.

24 MS. DIAMOND: Okay. Thank you.

25 MR. MYRTER: I have a slide presentation as well.

0199

1 Madam Chair, members of the Board, today I'd
2 like to be presenting our -- Signal Hill's -- well,
3 first, I should start out Steve Myrter, Public Works
4 Director for Signal Hill. My presentation is essentially
5 why Signal Hill is requesting an individual permit be
6 issued. How's my voice sound?

7 MS. DIAMOND: A little bit louder. Would you repeat
8 that last sentence?

9 MR. MYRTER: Okay. I am here today to request that
10 Signal Hill be issued an individual MS4 permit and my
11 presentation will go into why we believe this would be
12 appropriate for our city.

13 Next slide.

14 Outline or summary of the presentation: City of
15 Signal Hill's case for an individual permit. I'll be
16 presenting a few slides on that. The City's unique
17 factors that we believe warrant an individual permit.
18 The City's actions taken so far in anticipation of
19 receiving an individual permit. And finally, concerns we
20 have with a system-wide MS4 permit.

21 Next slide, please.

22 I'd like to start out with the quote from the
23 U.S. EPA's adopted principles for restoration of the

24 nation's urban waterbodies, June 24, 2011. It simply
25 says:

0200

1 "Be open and honest, and listening to
2 communities. Recognize their values and
3 seek to understand environmental issues
4 through their eyes. We will work from the
5 bottom up rather than taking a top down,
6 one-size-fits-all approach."

7 Next slide.

8 This next set of slides are just simply why we
9 feel that it's appropriate that an individual MS4 permit
10 be issued to City of Signal Hill: Opportunity for the
11 Board to work with a small community that is taking
12 seriously its responsibilities to improve water quality,
13 while addressing our unique circumstances; other cities
14 have grouped together for their own reasons and we
15 respect their decisions. We hope that our decision is
16 also respected.

17 Thank you. Next slide.

18 City of Signal Hill submitted an ROWD back in
19 June 2006. The Executive Officer replied on July 12th,
20 2006 that Signal Hill was proposing some positive changes
21 and that staff looked forward to working out these
22 details with your staff during the MS4 permit
23 reapplication process.

24 Next slide. Regional Board responded
25 approximately five years later, essentially saying that

0201

1 probably was not going to be the recommendation. Absent
2 a response from the Board, Signal Hill has worked to
3 design and implement new programs to ensure compliance
4 with our application and our individual permit.

5 Signal Hill has demonstrated our commitment is
6 at 89 percent trash reduction in the L.A. Trash TMDL and
7 this year we're requiring 60 percent.

8 Next slide.

9 As this slide suggests, Signal Hill has some
10 unique legacy issues. Next, click. Obviously, we're a
11 small town, 2.1 square miles. We have a legacy of oil
12 production since 1924 when it was ushered in. It
13 included heavy industry, oil drilling, oil sumps,
14 pipeline construction, tank farms, and refineries. The
15 City -- at one point, the oil field covered 75 percent of
16 the community. Decades of oil production left a legacy
17 of soil contamination, Redevelopment Agency was formed in
18 1978 to deal with these legacy issues. Agencies have
19 invested over 15 million so far in soil remediation and
20 today we have over 600 active wells and produce over a
21 million barrels of oil annually.

22 Next slide.

23 Of course this oil legacy creates a need for an
24 individual MS4 permit and individually tailored
25 stormwater programs.

0202

1 Signal Hill has applied for an individual
2 stand-alone County Sanitation District to deal with these
3 legacy issues. This District was created many decades
4 ago and it was recognized that Signal Hill was unique in
5 this respect. We believe an individual permit will be
6 more responsive to the unique issues confronting
7 Signal Hill.

8 Next slide.

9 Again, we have unique topography over southeast
10 Los Angeles, so -- click one more click. Of course we're
11 a hill. We raise about 300 feet above feet above
12 Long Beach. We are surrounded by the city of Long Beach,
13 which makes us kind of unique in that respect. Runoff
14 originates in the upper hill portions of the community
15 and drains into the Los Angeles River and Los Cerritos
16 Channel. Signal Hill drains through the city of
17 Long Beach and also through the County Flood Control
18 facilities. The Regional Board is planning on issuing an
19 individual permit to the City of Long Beach.

20 So this is the actions we've taken since 2006.
21 Obviously moving forward, the City Council directed
22 preparation of a Stormwater Quality Master plan.
23 Signal Hill has installed CDS units and 14 trash nets at
24 the Hamilton Bowl, a critical retention basin for our
25 community; completed installation of trash capture

0203

1 devices on 134 trash capture basins so far. They
2 implemented SUSMPs and LIDs in dozens of our development
3 projects. Also, the National Academy of Sciences studied
4 state-of-the-art runoff requirements at a recently
5 constructed Signal Hill concrete batch plant.

6 Next slide.

7 The City has submitted a monitoring plan and an
8 ROWD. The City has initiated its own monitoring program,
9 budgeted installation of two auto samplers. Additional
10 auto samplers plan to be installed and drains leading to
11 the Los Angeles River and Los Cerritos Channel. The City
12 is designing a dry-weather diversion program for L.A.
13 River Metals and Bacteria TMDL.

14 Next slide. The City will continue to
15 participate in the regional efforts, even with an
16 individual permit. We have been leading L.A. River
17 Metals TMDL special studies, leading Los Cerritos Channel
18 Metals TMDL Implementation Plan, participate in L.A.
19 River CMP, and participate in the L.A. County-wide
20 outreach effort.

21 The next set of slides is really kind of our
22 concerns with the systemwide permit. L.A. River Metals
23 TMDL assigns group waste load allocations to
24 jurisdictional groups. The Board's current position on
25 joint and several liability has the practical effect of

0204

1 making one city responsible for all cities. The Board's

2 position is that compliance with the iterative process
3 does not constitute compliance with receiving waters
4 limitation requirements in the 2001 permit.

5 Next slide.

6 The Board has the authority to issue a
7 systemwide permit when requested by the cities. Federal
8 regulations prohibit the Regional Board from forcing a
9 systemwide permit on cities. Cities are allowed to
10 participate with one or more operators.

11 Next slide.

12 Federal Code allows for a distinct permit
13 application which covers the discharges from municipal
14 separate form water sewers for which the operator is
15 responsible. Cities under 100,000 population have the
16 right to choose to be included in a systemwide permit or
17 to apply for an individual permit.

18 Next slide.

19 Federal regulations identify the permit and
20 application process for small MS4 dischargers. Section
21 122.33 outlines the application process, permitting
22 options and specifically allows small cities to obtain
23 individual permits even if they are part of a larger
24 medium-sized MS4 system.

25 Next slide.

0205

1 Numeric limits are also a concern. Regional
2 Board appears to be headed toward incorporating the
3 numeric limits from TMDLs into the MS4 permits. Regional
4 Board appears to be headed toward holding cities strictly
5 responsible for compliance with water quality standards
6 and effluent limits.

7 Next slide.

8 Joint and several liability, receiving waters
9 limitations language in the permit, and the Board's lack
10 of support of BMPs and the iterative process is the
11 beginning of what we believe is the "watershed of
12 litigation" that many have predicted. And below are some
13 of the current litigations.

14 Next slide, please.

15 In conclusion, the City of Signal Hill does not
16 choose to be included in the systemwide permit. The City
17 has unique legacy issues, unique factors, unique
18 topography which require specific programs. The City is
19 proposing a robust monitoring program. The City does not
20 want to be dragged into massive Countywide litigation.
21 The City does not want a top-down, one-size-fits-all,
22 systemwide permit being proposed, and the City looks
23 forward to working with the Board, the City of Long Beach
24 and the Flood Control District in a collaborative process
25 to obtain our individual permit.

0206

1 And that concludes my presentation.

2 MS. DIAMOND: Thank you.

3 Ray Tahir?

4 MR. TAHIR: Good afternoon, Board members. My name
5 is Ray Tahir and I am representing those cities that are
6 representative on the screen to the left of you and
7 behind you.

8 I am here to discuss the following: Target date
9 for issuing the next round of L.A. County MS4 permits is
10 too short. This is something that's been discussed in
11 great detail earlier. There is also a need to resolve
12 the permit structure, single versus multiple permits.
13 There is the need to resolve the compliance point issue,
14 outfall versus receiving water, but I do believe that
15 staff has resolved that. There is also the need to
16 resolve how the iterative process is going to operate in
17 the next permit. And finally, there's a need to revise
18 the nonstormwater discharge prohibition to exclude water
19 courses; and we also need to talk about WQBELs to attain
20 water quality standards and TMDL waste load allocations;
21 this requires clarification. And there needs to be some
22 kind of mechanism to verify information during permit
23 discussions so that misinformation doesn't get into the
24 decision-making stream.

25 Next, please.

0207

1 Well, it's clear that the March target date for
2 issuing the permit is too soon.

3 Next, please.

4 As mentioned, the Regional Board has given
5 Ventura County over two years to negotiate its permit
6 with the Regional Board. As you know, that permit was
7 issued to -- a draft permit was issued in 2007 and the
8 final permit was adopted shortly after 2010.

9 By the way, the CalTrans permit was adopted in
10 1999; it is also overdue. The General Industrial Storm
11 Activity permit is overdue. I should point out that L.A.
12 permits are more complicated and controversial than the
13 Ventura permit. There are more TMDLs than any other
14 permit issued in the state, and it's really not clear at
15 this point how the U.S. EPA-adopted TMDLs will be
16 incorporated into the next permits.

17 And then there's the impact of the Ninth Circuit
18 ruling in NRDC versus L.A. County Food Control District
19 on the next MS4 permits, making it uncertain.

20 The issue of permit structure is not resolved,
21 one versus several permits. The bottom line, there
22 should be no rush. Let's take our time and do it right.

23 All the TMDLs except trash include the receiving
24 water as the compliance point, but the 9th Circuit Court
25 of Appeal ruled that the outfall is where compliance

0208

1 should be determined, not the receiving water. The
2 judges told NRDC that if you want evidence of
3 exceedences, sample at the outfall. The ruling also
4 supports Federal stormwater regulation setting the
5 outfall as the compliance point.

6 Setting the compliance point at the outfall
7 enables better MS4 stormwater management. We'll be able
8 to determine to what extent an MS4 is generating
9 pollutants that exceed water quality standards. Again,
10 this includes TMDLs. The data generated from outfall
11 monitoring would establish a baseline over a five-year
12 period instead of relying on in-stream monitoring station
13 data.

14 BMPs could be focused on intra-MS4 pollution
15 issues instead of issues outside the MS4 in the receiving
16 water where you have commingled discharges from multiple
17 sources, including those that aren't permitted.

18 For example, if an exceedence occurs in a
19 receiving water, all dischargers would be held
20 collectively responsible even if an MS4 permittee did not
21 cause the exceedence, but I thought I heard staff say
22 that that might not be the case.

23 In any case, at this point in time, this is
24 neither fair nor keeping with Federal regulations, nor
25 effective stormwater.

0209

1 Here's a picture, a cartoon picture that
2 illustrates two MS4 systems, each having their own
3 outfall. It's obvious that one permittee should not be
4 responsible for the other permittee's discharges. That's
5 good enough. Thank you.

6 A real big issue here is the conflict between
7 the TMDL and the permit which needs to be reconciled. If
8 the Regional Board places a compliance point at the
9 outfall, this would conflict with the TMDLs' placement of
10 the compliance point in the receiving water. How do we
11 resolve this conflict? You either put language in the
12 permit to override what is in the TMDL or reopen each
13 TMDL to correct the conflict. We recommend that the
14 Regional Board request the State Board's Office of Chief
15 Counsel to help in resolving this conflict by issuing a
16 memorandum on it as soon as possible. Cities will also
17 recommend appropriate language in the Findings section of
18 the new permit.

19 The iterative process: There's some confusion
20 as to how this process would operate in the next MS4
21 permit. In its L.A. County MS4 permit status and
22 development paper, staff says that the iterative process
23 does not protect against enforcement action. We
24 disagree. The iterative process is present in most, if
25 not all, MS4 permits issued in the United States which

0210

1 serve this very purpose if properly followed. The
2 iterative process is required by the State Water
3 Resources Control Board, as mentioned in two
4 precedent-setting Water Quality orders. Contrary to what
5 staff asserts, the 9th Circuit ruling in NRDC versus L.A.
6 County Flood Control District process did not eliminate
7 the iterative process.

8 Next slide. Thank you. Continue.

9 Instead, the Court just said that there is no
10 textual support for the proposition in the current MS4
11 permit, that an exceedance may be forgiven if a permittee
12 implements BMPs in accordance with its SQMP. The Court
13 held that the County could not be afforded the iterative
14 process protection under the Receiving Water Limitation
15 provisions of the current permit because it did not
16 follow the procedure for addressing an exceedance;
17 namely, that is submitting a Receiving Water Limitation
18 report and amending BMPs in its SQMP. There's a reason
19 why that didn't happen. The County wasn't aware that it
20 caused an exceedance because at the time the assumption
21 was that the monitoring stations receiving waters would
22 pick up multiple discharges, not being able to point to
23 the County specifically as causing the exceedance.

24 In any case, we recommend that the Regional
25 Board request the State Board's Office of Chief Counsel
0211

1 to provide an opinion memorandum on the impact of the
2 9th Circuit's decision on this matter.

3 A clearly defined and reasoned iterative process
4 is needed to prevent Regional Board enforcement action
5 and third-party litigation. If a weak iterative process
6 is placed into the next MS4 permit, permittees could be
7 at risk for noncompliance and exposed to third-party
8 litigation. This includes those TMDLs with a 25-year
9 compliance period.

10 In fact, notwithstanding the 25-year compliance
11 period established in the L.A. River Bacterial TMDL, NRDC
12 effectively sued the County of Los Angeles for exceeding
13 the TMDL waste load allocations, recently -- well, not
14 recently; over the last few years, even before the
15 Bacteria TMDL was adopted.

16 The L.A. River Bacteria TMDL language is of help
17 because it is the permit that controls. The cities will
18 propose a revision to receiving water limitation language
19 with clarification in the Findings section of the permit.

20 Now, with respect to nonstormwater discharge,
21 staff's new permit development paper carries over the
22 nonstormwater discharge prohibition from the current
23 permit to include water courses.

24 This exceeds Federal regulations. Staff
25 concludes that Clean Water Act 402(p) as well as all MS4
0212

1 permits in California prohibits nonstormwater discharges
2 to MS4 and water courses. We disagree.

3 Actually, Clean Water Act 402(p) says that
4 permits for discharges from municipal storm sewers shall
5 include a requirement to effectively prohibit
6 nonstormwater discharges into the storm sewers. There is
7 no reference to water courses. As a matter of fact,
8 there's no definition of "water courses" in the current
9 MS4 permit and we are not able to find any other MS4

10 issued in California that asserts that a nonstormwater
11 prohibition extends to water courses. And once again,
12 there's no definition of "water courses" in the MS4
13 permit.

14 Please note that the San Diego Regional Board's
15 Office of Chief Counsel affirmed this in a memo to
16 Chairman Wright and San Diego Regional Board members
17 dated November 5th, 2009. It contained no reference to
18 water courses as being subject to the nonstormwater
19 discharge prohibition.

20 Why is this a big deal? Because including water
21 courses would place permittees in a state of
22 noncompliance for dry-weather discharges to receiving
23 waters -- oceans, lakes, rivers, streams -- which exceed
24 the TMDL waste load allocations. This was, by the way,
25 as you know, justification for issuing 22 notices of

0213

1 violations to those permittees that discharge into the
2 Santa Monica Bay for exceeding the dry-weather waste load
3 allocation for bacteria. Were it not for a procedural
4 error made by the Regional Board, those cities and the
5 County could have been open to the enforcement actions
6 and possible third-party litigation.

7 How then would receiving waters be protected
8 from contaminated from nonstormwater discharge? Through
9 a well-designed and implemented illicit
10 discharge/correction elimination program that prohibits
11 unauthorized discharges to the MS4, as Congress intended.

12 Clearly, more discussion with staff is needed on
13 WQBELs. Generally, WQBELs translate waste load
14 allocations -- water quality standards and TMDL waste
15 load allocations into BMPs. There are two types of
16 WQBELs, numeric and non-numeric.

17 Staff asserts that because the TMDL waste
18 allocations are expressed numerically, numeric WQBELs in
19 MS4 permits are appropriate. However, that should be not
20 be the determinant. California courts have held that
21 WQBELs simply means BMPs. California courts have also
22 said that a waste load allocation, which is inherently
23 numeric, and numeric WQBELs are not the same. One is the
24 problem; the one is the solution. They are different.

25 A numeric WQBELs is a numeric BMP. A numeric

0214

1 waste load allocation does not require a numeric WQBEL,
2 as evidenced by the San Francisco Regional Board's use of
3 a narrative BMP that addresses the waste load allocation
4 metric for diazinon.

5 Next, please, here's that example.

6 Despite the metric for diazinon, which is less
7 than 50 nanograms per liter, what was proposed is a
8 management plan, an implemented pesticide management plan
9 designed to control pesticides caused by toxicity.

10 Next, please.

11 Staff says that the trash TMDL determines it

12 could be a numeric WQBEL. There is nothing in the final
13 trash TMDL, however, or the amended L.A. County MS4
14 permit that refers to the trash TMDL as a WQBEL at all.
15 There's no reference to U.S. EPA's 2002 memorandum on
16 this.

17 To clarify the definition of WQBELs, the cities
18 recommend that L.A. Regional staff invite Tom Mumley of
19 the San Francisco Regional Board to do a presentation on
20 numeric and narrative WQBELs at a workshop devoted to the
21 subject. He could also help with the language with
22 respect to the Receiving Water Limitations.

23 In any case, future workshops are needed to
24 evaluate information for accuracy. As mentioned earlier,
25 proposed requirements need to be vetted for accuracy,
0215

1 water courses being subject to nonstormwater discharges,
2 trash TMDL as a numeric WQBEL, and the iterative process
3 not safeguarding permittees against exceedances. All
4 these issues need to be clarified and accurate
5 information must be presented in order for this Board to
6 make a fully informed decision on them.

7 Thank you very much for your patience.

8 MS. DIAMOND: Thank you.

9 I'm going to first ask our court reporter if she
10 needs a break. You're okay?

11 THE REPORTER: A break would be good.

12 MS. DIAMOND: A break would be good. Ten minutes?

13 Before we break, I have three cities and then
14 some other cards as well. I want to find out if these
15 cities are only going to stand to say they want the date
16 changed.

17 Ed Suher for the City of Industry?

18 MR. SUHER: Yes. The City of Industry requests an
19 extension.

20 MS. DIAMOND: Thank you.

21 Patricia Elkins from the City of Carson?

22 MS. ELKINS: Two minutes.

23 MS. DIAMOND: You need two minutes. Okay. We'll
24 have that. We'll have you for that.

25 And Ron Ruiz, City of San Fernando?

0216

1 MS. MERENDA: He left, Madam Chair. He also requests
2 an extension.

3 MS. DIAMOND: And we also have the City of Vernon,
4 Jerrick Torres.

5 MR. TORRES: We're requesting a time extension also.

6 MS. DIAMOND: I'm sorry. I didn't hear you.

7 MR. TORRES: We are requesting a time extension also.

8 MS. DIAMOND: All right. We're going to take a
9 ten-minute break and then come back.

10 (Recess)

11 MS. DIAMOND: All right. Everybody, if I can get
12 everybody to go back to their seats, we can resume. So
13 we'll start with the remaining cities and see who wants

14 to have some time.

15 Patricia Elkins from Carson?

16 MR. STEVENS: Can we have the lights back on, please.

17 MS. DIAMOND: Thank you.

18 MS. ELKINS: Good afternoon, Madam Chair and Regional
19 Board members. Hopefully you all have a sense of humor
20 for my presentation. Perhaps you've received a card from
21 your grandchild or son or daughter that had a word
22 spelled out one letter above the other, so think about
23 that when you hear my presentation.

24 MR. SPRINGER: What's the name?

25 MS. ELKINS: My name is Patricia Elkins. I'm with

0217

1 the City of Carson. I'm the Stormwater Quality Programs
2 Manager. The city of Carson drains to the L.A. River via
3 Compton Creek, it drains predominantly to the Dominguez
4 Channel, and it also drains to Machado Lake. So we have
5 all of those TMDL's to deal with.

6 I think there's consensus that the permit is
7 very special, so I prepared an acrostic for the word
8 "special" to highlight the important aspects of the
9 permit that we think are important.

10 "S" is for streamline, especially the reporting.

11 "P" is for progressive in terms of technology and
12 science. "E," you can guess, is for economically
13 reasonable. "C" is for coordinate, especially the
14 testing. "I" is for the iterative process; it is most
15 important. "A" is for accommodating, a synonym for
16 flexible. And "L" is of course for Los Angeles County
17 specific.

18 The City of Carson also respectfully requests
19 that additional time be given for the Regional Board
20 staff and the MS4 permittees to develop this special
21 permit; therefore, we recommend the permit adoption date
22 be revised to at least December 2012.

23 MS. DIAMOND: Thank you.

24 James Enriquez from the City of El Monte.

25 MR. ENRIQUEZ: Madam Chair, the City of El Monte is

0218

1 requesting the same extension.

2 MS. DIAMOND: Thank you.

3 Michael Sha, City of Redondo Beach.

4 MR. SHA: Yes. The same extension.

5 MS. DIAMOND: Thank you.

6 Mark Lombos, Los Angeles County Flood Control
7 District.

8 UNIDENTIFIED SPEAKER: He already spoke at the Public
9 Forum.

10 MS. GLICKFELD: Actually, we stopped him.

11 MS. DIAMOND: Well, he got up to speak and he said it
12 was for Item 16 and if he would want to speak --

13 UNIDENTIFIED SPEAKER: No. That was James Enriquez.

14 MS. DIAMOND: Oh, that was James Enriquez.

15 Gary Hildebrand, County of Los Angeles and Flood

16 Control District. And you've requested and received 20
17 minutes.

18 MR. HILDEBRAND: Thank you.

19 Good evening, Madam Chair Diamond, Board
20 members. My name is Gary Hildebrand. I'm with the L.A.
21 County Flood Control District and I'm also here
22 representing the County of Los Angeles this afternoon.

23 First off, I'd like to also thank Sam Unger and
24 the staff for being very accommodating and meeting with
25 us over the last several months. We've had a number of
0219

1 very productive meetings and we look forward to
2 continuing those discussions with Sam as we further
3 develop the permit requirements in the coming months and
4 deal with some of the issues that relate to the Flood
5 Control District and L.A. County.

6 There are about a half dozen issues that the
7 County or the Flood Control District is concerned about
8 in the permit. I'd like to go through those briefly this
9 afternoon with all of you.

10 First, as you heard in the staff report, the
11 Flood Control District is one of the agencies that has
12 submitted a Report of Waste Discharge for its own
13 individual permit. Though the Regional Board staff has
14 indicated it's pursuing a single permit for the County, I
15 would like to go over some of the elements that were
16 included in the Report of Waste Discharge to describe the
17 unique nature of the Flood Control District and why we
18 submitted our own individual Report of Waste Discharge.

19 First off, the District is a special district
20 created by State law. As such, the District has very
21 limited authority and, in essence, there's two key issues
22 that the Flood Control District is responsible for: one,
23 providing flood control or flood-risk mitigation for the
24 communities within L.A. County and providing stormwater
25 capture for groundwater recharge.

0220

1 As such, being a special district, the Flood
2 Control District does not have any authority over land
3 uses that drain into the system, unlike a municipality
4 who does have that type of authority. So when it comes
5 to regulating activities that involve residential and
6 commercial/industrial uses, the District doesn't have
7 authority. Our authority is limited to the facilities
8 that we operate.

9 Now, within that, the District is also in a
10 position where it isn't able to control pollutants that
11 are generated in the watersheds that ultimately drain
12 into our system. Again, we're reliant on the cities that
13 control the watersheds and are able to deal with the
14 regulation of activities that occur in the watershed to
15 deal with those pollutants.

16 The District being a special District and
17 required to provide flood-risk protection, even though

18 there are, say, pollutants that are found in the
19 stormwater discharge, the District is not in a position
20 where it's able to not accept stormwater into its system.
21 Because of our responsibilities to provide public safety
22 and protection of life and property, we're obligated to
23 accept stormwater. So we really have a limited ability
24 to on its own deal with control of stormwater pollution.

25 The next slide, please.

0221

1 There was much discussion this morning regarding
2 the issue of the extent of the Flood Control District's
3 system relevant to the County area served by the District
4 and this slide here basically shows, first off, based on
5 the definition of the MS4, the Federal Stormwater
6 regulations, which basically includes the gutters of the
7 street, storm drains, channels, that entire system, when
8 you look at that, that's the green that's shown in this
9 map. Superimposed on that is the Flood Control
10 District's system itself, which is the red on this map.

11 When you look at the totality of that system,
12 the District itself only controls a little less than
13 10 percent of that entire system. So it gives you some
14 more perspective as to what portion of the flood control
15 system or the MS4 system is actually under the control of
16 the District.

17 Next slide, please.

18 Now, some of the activities the District
19 believes are appropriate, and these were issues that were
20 described as part of our Report of Waste Discharge, is
21 that, again, the District controlling the backbone
22 flood-control system, as part of the existing permit, the
23 District has been handling the mass emissions monitoring
24 which is done in our receiving waters to help
25 characterize the quality of runoff in the receiving

0222

1 waters. The District continues to propose to have that
2 as an ongoing activity under its next permit.

3 We also looked at expanding and conducting
4 monitoring in the tributaries that lead into our larger
5 systems, again, providing more information that can be
6 utilized by the Regional Board and the permittees to
7 better define pollutant loading, pollutant sources, and
8 to improve their programs.

9 The District also is implementing its own
10 Stormwater Management Plan. There are certain elements
11 of that plan that are unique to the District. We are a
12 public agency so the various public agency activities
13 that are required as part of the permit are elements that
14 are implemented by the District. We also have a very
15 aggressive illicit connection to illegal discharge
16 program. That is an area where the District has taken a
17 strong leadership role in the County. The 300,000 and
18 some miles of the flood-control system that's operated by
19 the County, we inspect that on a six-year cycle. We've

20 been very aggressive in identifying discharges and
21 eliminating those dry-weather discharges from our system.

22 And also, we feel our role is also to work with
23 the cities, coordinate with the cities, and participate
24 in regional approaches where appropriate, where we can.

25 Two examples of that -- one was presented this

0223

1 morning in the Public Information session by one of my
2 staff. The Strathern Wetlands Project, that's an example
3 of the type of project where the District will partner
4 with local agencies to develop projects that include not
5 only flood control and stormwater capture but can provide
6 water quality and recreational benefits.

7 Another project that is an example of our desire
8 to coordinate and participate with the various cities is
9 the L.A. River Trash TMDL, the retrofit of catch basins
10 that's ongoing by the numerous cities to be able to
11 satisfy the waste load allocations under that program.
12 We're working with many of the cities to allow the
13 retrofit of catch basins contained within their cities.
14 Many of those catch basins are Flood Control District
15 catch basins so we've been coordinating with them to
16 allow those retrofits to occur.

17 Next slide.

18 You've heard much discussion today about
19 receiving water limitations and some of the impacts to
20 the receiving water limitations from the NRDC versus
21 Flood Control District litigation, and I just want to --
22 I'm not an attorney so I'm going to explain it in
23 laymen's terms what the issue is, but historically under
24 the permit when it comes to the receiving water
25 limitations, the permittees' understanding has been that

0224

1 the iterative process is the process that's followed when
2 there is an exceedance of a water quality standard that's
3 discovered as part of the permit.

4 Going through that process, the permittees
5 demonstrate that they are implementing programs in
6 compliance with the permit and, as such, they are then in
7 compliance with the receiving water limitations.

8 The Court of Appeals, in their recent ruling,
9 basically indicated that the iterative process is
10 separate from the receiving water limitations
11 requirements in the permit. Basically, the need to
12 comply with water quality standards is a separate and
13 distinct process from the iterative process.

14 Now, that of course caused a lot of concern
15 amongst the permittees, as it puts us in a position where
16 it's going to be very difficult or impossible through
17 monitoring results for the permittees to be able to
18 demonstrate they're in compliance.

19 I think one thing to look at is the various
20 TMDLs that have been adopted over the years. Many of
21 them have compliance schedules that go for 10, 15, 20

22 years. Those TMDLs actually recognize it's going to take
23 that long to be able to implement the measures that allow
24 us to be in compliance with the water quality standards.

25 So as we work with the Regional Board staff
0225

1 developing a new permit, clarifying the receiving water
2 limitations issues in the iterative process versus
3 compliance of the water quality standards will be a key
4 issue. We need to be able to have in the permit the
5 ability through demonstration of implementation of our
6 programs and compliance of the permit requirements that
7 we are in compliance with the receiving waters standards.

8 Another issue that we've had discussions about
9 over the years is What is the appropriate role for the
10 District as a responsible party in TMDLs?

11 As I mentioned previously, the District as a
12 Special District has no land use authority. We aren't
13 able to control pollutants that are generated in the
14 watersheds that lead to our systems and as such, we are
15 unable to directly regulate those pollutants. So when it
16 comes to establishing waste load allocations, waste load
17 allocations truly need to be established for those
18 entities that are able to regulate control.

19 So where does that leave the District? We
20 believe we have a role as a responsible party in TMDLs.
21 A good example is the L.A. River Trash TMDL. There,
22 though the District doesn't have a specific waste load
23 allocation, the District is included in the TMDL as
24 recognition that its system will be utilized by the
25 permittees, as I mentioned previously, in compliance with
0226

1 the TMDL waste load allocations for those particular
2 cities.

3 The catch basin retrofits that I mentioned are
4 an example of the Flood Control District's cooperation
5 with cities in dealing with TMDLs.

6 Another role that we see for the District in the
7 TMDLs is our ability to conduct monitoring and
8 investigation in our system. We've done monitoring for
9 many years and the characterization of the pollutant
10 sources in our system and characterization of those
11 pollutants and the availability of that information for
12 the Regional Board for permittees and for program
13 development is an area that the District is proposing to
14 continue to be heavily involved with in the future.

15 Next slide.

16 We also heard this morning or this afternoon
17 much discussion about the issue of joint responsibility
18 or joint liability. I want to explain a little bit what
19 that issue is.

20 First off, many of the TMDLs contain language
21 which requires that the responsible parties are jointly
22 responsible or jointly liable for meeting waste load
23 allocations. What that actually means is that

24 collectively those cities need to be responsible for each
25 other's compliance under that TMDL, and I know the Board
0227

1 is strongly encouraging collaboration among the
2 permittees. We've heard a lot this morning about that
3 being a benefit for a single-permit approach and we also
4 support collaboration and we do believe that
5 collaboration does result in efficiencies and program
6 development, but we need to have a permit that is
7 conducive to collaboration, and joint liability is
8 something that actually discourages collaboration among
9 the permittees.

10 To put it in perspective, if you take a look at
11 a particular TMDL where an Implementation Plan needs to
12 be developed, if you have a number of cities in that
13 watershed and they are now looking at working together to
14 develop a single Implementation Plan and that plan
15 describes regional BMPs to be implemented throughout the
16 watershed in certain locations, actions that will be
17 undertaken by the individual permittees within their
18 jurisdiction, and collectively implementing that plan is
19 then needed for the permittees to be able to demonstrate
20 compliance with that TMDL.

21 Now, when it comes to implementation of that
22 plan, if there are particular cities within that
23 watershed that for whatever circumstances are not able to
24 implement their share of that plan, that then puts the
25 entire plan in jeopardy and the other cities, looking at
0228

1 this joint liability issue, would then be concerned about
2 having to be responsible for the plan's lack of
3 implementation due to the fact that a small number of
4 cities were not able to fully implement their elements of
5 the plan. What that does is make cities step back and
6 say, "Well, if I'm going to be held jointly liable for
7 other cities' compliance, then perhaps to be able to
8 assure that I can demonstrate that I'm clearly in
9 compliance with the plan, developing my own individual
10 plan may be the best way to go. That way, I'm not
11 dependent on other permittees implementing the elements
12 of the plan to be in compliance."

13 That may not be the most cost-efficient way to
14 go, but it does provide the permittee with assurance that
15 by implementing that plan, they are able to demonstrate
16 compliance. So really we're looking at having this issue
17 dealt with in the new permit so it's clear that the
18 permittees are not jointly liable, that permittees are
19 individually accountable, and please -- I mean, don't
20 misunderstand what I'm saying. I mean, we clearly
21 support the fact that permittees need to be accountable,
22 but we believe that they need to be accountable on an
23 individual basis since truly no city has any other
24 authority over another city.

25 So when it comes to being able to have other

0229

1 cities implement certain programs in their jurisdiction
2 that require compliance collectively, if the City isn't
3 enacting, there's really no way to have a City have that
4 happen. So really we're looking at having this joint
5 liability issue dealt with in a manner that it is
6 modified so that cities can collaborate and work
7 together.

8 Next slide, please.

9 On to monitoring. We've heard a lot of
10 discussion regarding monitoring this morning. There are
11 different types of monitoring. Obviously there's
12 monitoring for compliance purposes. There's also
13 monitoring for characterization purposes.

14 Now, the regional mass emissions monitoring
15 that's been done for many, many years is monitoring that
16 the District has done and is something the District
17 proposes to continue to do under the new permit program.
18 However, one of the issues that did arise as part of the
19 NRDC lawsuit against the District is involving the
20 mass-emissions monitoring sites. The 9th Circuit Court
21 of Appeal did determine that exceedances at those sites
22 resulted in liability to the District.

23 Now, clearly over the years, those sites, their
24 purpose has been characterization monitoring and we
25 believe that the need to continue with characterization

0230

1 monitoring to identify pollutant sources, trends, provide
2 information to better our programs is needed; and to be
3 able to comfortably be able to continue that monitoring,
4 we do need clarification in the permit that monitoring
5 for characterization purposes would not be monitoring
6 that would be utilized for the compliance purposes. So
7 we do need clarification of that issue.

8 Next slide.

9 All right. Moving on to the County of L.A.,
10 there's a few issues that the County would like to
11 present.

12 Next slide, please.

13 MS. GLICKFELD: Are you now -- are you still speaking
14 as the Flood Control District or now you're speaking as
15 the County of Los Angeles?

16 MR. HILDEBRAND: Now I'm speaking as the County of
17 Los Angeles. The County has a few issues that it wishes
18 to present. First off, on the issues of TMDLs, as
19 mentioned earlier, there were many TMDLs that were
20 developed many years ago. This chart here shows the 28
21 TMDLs that have been developed and adopted in the past
22 several years. Out of those 28 TMDLs, 11 of those TMDLs
23 have had reopeners or reconsideration dates. Those dates
24 have passed and those dates have passed with no
25 reconsideration actions taken by the Regional Board; and

0231

1 knowing that these TMDLs are now going to be incorporated

2 into the new permit, it's really important that we have
3 these TMDLs be updated so the most recent scientific
4 information, the most recent information on BMP
5 implementation, is reflected in those TMDLs and also that
6 the compliance schedules are truly effective and
7 realistic.

8 So this is, again, a key issue that the
9 permittees are going to be facing with all these TMDLs
10 being brought in and making sure that they are in the
11 most up-to-date situation and contain the most up-to-date
12 information available so we can best develop our programs
13 and best proceed in assuring compliance under these
14 TMDLs.

15 Next slide.

16 Of course it was touched upon earlier as to how
17 TMDLs will be incorporated into the permit and the issue
18 of having narrative nonnumeric standards in the current
19 for TMDL implementation is an issue that the County
20 supports and we'll be working with the Regional Board
21 staff in developing language in the permit to demonstrate
22 that type of compliance.

23 A good example of an approach that was taken in
24 this regard is the L.A. River Trash TMDL where you have a
25 waste load allocation, a numerical standard established
0232

1 for the permittees, and you have a clear narrative
2 description of the compliance requirements to demonstrate
3 compliance with that standard.

4 Low-impact development is also a major issue in
5 the next permit and this is something that the County
6 clearly supports. In fact, it's been very proactive in
7 pursuing. We actually adopted a low-impact development
8 ordinance over a year ago in the County and since that
9 time we've had many other cities, Los Angeles and others,
10 that have gone ahead and adopted LID ordinances. And one
11 of the issues that are of concern to us is that there be
12 sufficient flexibility included in the new permit so
13 those entities that have already adopted LID ordinances
14 can continue with the implementation of those ordinances.
15 So we'll be working with the staff to see how that issue
16 develops.

17 With that, I want to thank you. Thank you for
18 this opportunity to speak this afternoon

19 MS. DIAMOND: Thank you very much.

20 Now we have a joint presentation by the
21 environmental community with Liz Crosson, Mark Gold,
22 Noah Garrison, representing Santa Monica Bay Keeper,
23 NRDC, and Heal the Bay, and you've requested and received
24 40 minutes.

25 MR. GOLD: Good afternoon. My name is Mark Gold and
0233

1 I am the president of the environmental group Heal the
2 Bay. I'm leading off and Liz Crosson will be second and
3 then Noah Garrison, and then I'll be back up here again.

4 I think I'm the only one here -- maybe
5 Deb Smith -- who's worked on each and every one of these
6 stormwater permits in this region. So that started in
7 1990. So we're talking about 21 years that we've been
8 working on stormwater pollution coming from
9 municipalities; and a lot of the very same problems,
10 water quality problems that we had at the beginning of
11 this back in 1990 in response to the 1987 Clean Water
12 Act, we still have today.

13 You know, despite many tens of thousands of
14 trash catch basin screens being put in, dry-weather
15 diversions being put in, other great projects, most of
16 our progress today has been dry weather. We really have
17 not barely scratched the surface on what we're doing in
18 wet weather, so when you go to the beach after the rain,
19 it still looks like a landfill and the water is too
20 polluted for you to go swimming safely.

21 I bring that up just to remind you that this is
22 really what this is all about. We've heard about, "Well,
23 water quality standards can't be met," this, that and the
24 other thing, "It's all too hard," but I want to remind
25 you we're not even close from the standpoint no one can
0234

1 say the past 21 years that there's been a lot of
2 progress.

3 At 21 years, you're an adult, you're a grown-up.
4 In 1990, the permit was in its infancy. All it really
5 required was for everyone to get together, start putting
6 together programs, although it did require for all storm
7 drains to be mapped and presented to the Regional Board.
8 So I thought that was interesting that Board Member
9 Glickfeld asked about that, when that's been a
10 requirement now for 21 years.

11 In 1996, that was probably childhood is the best
12 way to look at that permit. There was a great deal of
13 flexibility within that permit and yet it was also a lot
14 more detailed. It was like your first hundred-page
15 permit, but the end result is that you still had many
16 folks in the regulated community that didn't know what to
17 do with that flexibility and then it ended up being a
18 great deal of litigation and adversity over that
19 particular permit.

20 In 2001 to the present, I guess that would be a
21 very long adolescence that this program has been in. You
22 had the SUSMP program which started creating some
23 accountability for what we're actually trying to achieve
24 on new and redevelopment. Of course it only deals with
25 the new and redevelopment; it doesn't deal with the
0235

1 existing water quality problems that we already have. So
2 that's been a problem.

3 It also made it abundantly clear -- it was
4 actually the Long Beach permit of 1988 or 1989 that said
5 that receiving water limitations needs to be met. That's

6 what this is all about. We're supposed to be protecting
7 public health. We're supposed to be protecting aquatic
8 life and clearly that's not being done.

9 Also, 2001 was the iterative process which
10 you've heard so much about. I would be very interested
11 to see if you called up each and every city that talked
12 about how great the iterative process was, how they've
13 used the iterative process in the last ten years.

14 Believe me, water quality standards are being
15 violated and exceeded on a regular basis during rain, but
16 the iterative process has not occurred for a number of
17 different reasons, including the Regional Board staff.
18 There's not adequate staffing to frankly ensure that it
19 occurs.

20 So it doesn't mean it's a horrible idea. It's
21 in the permit, but it's been in the permit for ten years.
22 This is not a new concept. So I just wanted to make sure
23 that everybody understood that. There's been no
24 enforcement of the iterative process and there's been no
25 implementation of the iterative process either, so I

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1 think that's important.

2 Now, it doesn't mean there haven't been
3 improvements at all. I think in dry weather there have
4 been improvements and I think, you know, you look at City
5 of L.A., you look at City of Santa Monica, and there's
6 been some pretty amazing improvements where we've seen
7 some dry-weather diversions. In L.A. County we've seen
8 some amazing things. Would any of those have happened
9 without Beach Bacteria TMDLS that people thought were
10 enforceable but of course L.A. County sued to get out of
11 the permit? Of course not. But the end result is
12 projects were put in and even the most chronically
13 polluted beaches like Santa Monica Pier are now getting
14 A's on the Heal the Bay's Beach Report Card. Beaches
15 that used to get F's, some of the ten most polluted
16 beaches in the entire state of California are now getting
17 A's on their report card. So it shows you can clean up
18 these beaches if the Regional Board really makes it clear
19 that water quality standards need to be protected.

20 One other thing before I pass this on is that
21 ten years for one permit is ridiculous. We're already
22 ten years into this and you're hearing from every single
23 person who's come up, "We need an extension." Really?
24 Five years' extension is not enough? The permit's only
25 supposed to be a five-year permit and we're ten years

0237

1 out. People are asking all the way to December 2012, and
2 are the funding measures going to keep getting pushed
3 back further and further and originally people talked
4 about 2010, now it's 2012, now it's going to be pushed
5 into 2013?

6 When are we going to start taking this problem
7 seriously enough to do this? That to me is a big

8 question. You guys, when we talked about Beach Bacteria
9 TMDL and not -- trying to deal with how to make it
10 enforceable in the interim by putting it back in the
11 permit, about nine months ago -- perhaps you remember me
12 testifying on that -- I got a very strong reassurance
13 from this Board that we'd have a permit in place before
14 the next beach-bathing season so that we don't have
15 another summer where we have 50 million-plus people going
16 to the beach and not knowing whether or not it's safe for
17 them to swim or not, because we're not moving forward and
18 making the Beach Bacteria TMDL enforceable.

19 So that's been a big problem and I'd hate to see
20 that happen again. How many years is that going to
21 continue? Where's the safe harbor that everyone's asking
22 for, for the swimmers and surfers? They're not getting a
23 safe harbor. So that's a big problem.

24 Now an overview on the permit structure. We
25 strongly support as a group the single permit, as you've
0238

1 heard before. I won't go into detail. You've heard the
2 strong arguments laid out by your own staff. I thought
3 Renee did a wonderful job on that.

4 The nature of the L.A. County MS4, it's large,
5 it's interconnected, and it's an integrated system. We
6 have watershed-based TMDLs in place. We have a
7 stormwater pollution abatement fee draft that's going to
8 be in front of the Board of Supervisors. It's very
9 watershed-based and so saying, Let's have one permit with
10 the watershed components at the end of the permit so
11 there's some watershed-specific requirements, it just
12 makes sense. It's common sense. Your staff came up with
13 the right recommendation there and you even see strong
14 support from your online survey with 85 percent of the
15 cities in support of that.

16 With that, I'll pass it over to Liz.

17 MS. CROSSON: Would you mind going forward a couple
18 of slides. Thanks.

19 Good afternoon. I'm Liz Crosson, from
20 Santa Monica Bay Keeper. Thank you for the opportunity
21 to speak.

22 I want to talk about some of the permit
23 requirements in part one and part two and the monitoring
24 that goes along with that to determine compliance.

25 Next slide, please.

0239

1 So first, parts one and two of the permit
2 include some of the most straightforward, clear
3 provisions of the permit. The nonstormwater discharge
4 prohibitions have been a factor and nonstormwater
5 discharges, as acknowledged by your staff today, this is
6 required by Section 1342(p) of the Clean Water Act. It
7 is something that is critical to meet water quality
8 standards and, as Mark mentioned, critical to meet public
9 health standards.

10 We believe that this provision should remain as
11 is. I understand staff is considering some additional
12 provisions to ensure that it's more effectively applied
13 and that's something that we're open to, but this
14 language as it stands should definitely remain as a
15 strong, clear provision as it's written.

16 And 2.1 and 2.2 are receiving water limitations,
17 both. One is to prohibit discharges that cause or
18 contribute to violations and the other is to prohibit
19 discharges that contribute to pollution. Again, these
20 are both clear provisions. They have been upheld over
21 time in State court and Federal court. The language in
22 the receiving water limitations was challenged and upheld
23 in over five years of litigation in State court and it's
24 litigation that was filed by the County of Los Angeles
25 and has now most recently been upheld in the 9th Circuit

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1 and also in the Federal district court under the
2 litigation under those permits.

3 So we've got these very clear provisions that
4 have been upheld as stand-alone requirements. Since that
5 time in 2005, the State Court found that those were
6 stand-alone requirements, it has been acknowledged that
7 2.3, which requires the receiving water compliance
8 reports, is an additional requirement, not a safe harbor.
9 So what I think we heard from at least one of the County
10 representatives today was that there is some sort of safe
11 harbor or there should be and that this new 9th Circuit
12 decision somehow changed the understanding of the
13 permittees. That's been an understanding since years of
14 litigation, litigation that was filed by the County. And
15 so in my opinion, that's a huge mischaracterization of
16 that case.

17 And yes, 2.3 is still a part of the permit and
18 does include a process, too, for the permittees to reach
19 compliance when exceedances are documented. But that is,
20 again, an additional requirement to the stand-alone
21 requirements to comply with water quality standards.

22 So we urge the Board to keep that language in.
23 This is language that is a success. It's a result of the
24 hard work of the Board and the hard work of the staff of
25 the Regional Board to put this language in, to strive for

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1 water quality compliance and it's defended those
2 positions in Court time after time. It's consistent with
3 your position that you've taken most recently in the
4 amicus brief in the 9th Circuit. These provisions are
5 what we need in order to reach compliance. They're
6 legal, they're consistent, and under the Clean Water Act
7 under regulations. So we urge you to keep those.

8 Next slide, please.

9 As far as monitoring goes, compliance
10 monitoring, now the permit, as you know, is determined by
11 the mass emissions stations and the 9th Circuit did hold

12 that mass emissions stations is a proper point to
13 determine compliance, which we heard some contradictory
14 testimony from County representatives. One of them
15 actually thought that the 9th Circuit decision said that
16 that was not the point of compliance and the other seemed
17 to -- from the District seemed to acknowledge that that
18 is, in fact, what the 9th Circuit held, and it also is
19 consistent with the understanding that every single
20 permit has to have a compliance monitoring mechanism in
21 order for us to ensure that there's a way for permittees
22 to be held in compliance.

23 So the mass emissions stations is a -- it was
24 requested by the dischargers when this original permit
25 came out. It's a successful way to determine compliance,
0242

1 as we've seen recently. It also provides some clarity.

2 We do ask the Board to consider adding
3 additional monitoring, end-of-pipe monitoring, and this
4 is exemplified by your recent Ventura MS4 permit. Each
5 discharger in the sub-watershed should provide regular
6 end-of-pipe monitoring. In my opinion, this really
7 provides not only the enforcement mechanism for the Board
8 that is important, but it also provides clarity for the
9 permittees to determine who is responsible for what and
10 where it's coming from. I think that is a really wise
11 way to move forward and I think that's probably why you
12 moved forward with that in the Ventura permit.

13 Lastly, I would just like to point out something
14 that was in some of the documents that we've received
15 from staff regarding action levels for water quality
16 compliance. The Board should not consider these as a way
17 to achieve compliance with water quality standards. That
18 would be wholly inconsistent with the decade or more of
19 case law that we've seen on how to reach compliance of
20 standards under 2.1 and 2.2. However, if the Board
21 wanted to consider action levels, they could be -- like
22 as interim goals for TMDLs, that might be acceptable as
23 long as they are consistent with the TMDL and included in
24 the permit like every other TMDL requirement.

25 So, again, I appreciate the time and I will pass
0243

1 it on to Noah Garrison.

2 MR. GARRISON: Good afternoon. My name is
3 Noah Garrison. I'm with the Natural Resources Defense
4 Council.

5 Madam Chair, Members of the Board, I'm going to
6 talk mostly about low-impact development standards and
7 the requirements for new and redevelopment in the permit,
8 but first I did want to address sort of broadly some of
9 the contentions that have been made by the County and
10 some of the other permittees that the permittee needs a
11 safe harbor, that they have to have one in order to be
12 able to persist under this permit effectively; and the
13 focus here really needs to not be on how they can evade

14 responsibility, and that is exactly what they have been
15 doing.

16 They have been avoiding responsibility at every
17 turn throughout the ten years that this permit has been
18 in action and really throughout the 20 years that we've
19 had permits for Los Angeles, and there's been much
20 discussion about the fact that they need a safe harbor in
21 order to avoid litigation, but truly it's the County that
22 has been bringing litigation under this permit. When the
23 permit was first adopted, the County sued over it. When
24 you attempted to implement a Trash TMDL, the County sued.
25 The Bacteria and Metals TMDLs, they sued and sued again

0244

1 and the permit was upheld in State court. They didn't
2 like the decision and they attempted to prove it was
3 unfounded mandate and they found another route to have
4 the permit invalidated.

5 The County has attempted to stop this Board from
6 taking action to protect water quality at every turn
7 throughout the ten-year term of this permit, and whether
8 or not a safe harbor is needed to protect one or possibly
9 two lawsuits for the permit for egregious violations of
10 water quality standards is not the issue. The issue
11 needs to be How can the County clean up the water that
12 they are discharging pollution to and how can we move
13 forward to make sure we're protecting water quality in
14 the region?

15 With that, I'd like to turn to low-impact
16 developments and mostly give a little bit of background
17 here with a couple of specifics of things that were
18 mentioned in the documents provided by staff before this
19 meeting, but I did want to start with the basics of
20 low-impact development as a starting point for this
21 permit, which is to say that according to the Ocean
22 Protection Council and according to the United States
23 Environmental Protection Agency, "Low-impact development
24 is a practicable and superior method" of dealing with
25 pollution and runoff in stormwater and it is also a -- it

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1 results in enhanced environmental performance.

2 It is absolutely a superior means of reduction
3 of stormwater pollution and this permit should continue
4 on with the trend that has been showing up in California
5 permits that all of them have been adopting. Low-impact
6 developments is the principal means of dealing with new
7 and redevelopment.

8 Next slide, please.

9 In fact, this Board in the Ventura permit has
10 reached the same finding, that The Implementation of LID
11 techniques in United States and Canada results in more
12 benefits than single-purpose stormwater controls and this
13 is a -- there is a growing acceptance that your changing
14 standards and other means of implementing LID are the
15 appropriate way to address stormwater pollution. So that

16 forms the background.

17 Next slide, please.

18 We also would like to see certain requirements
19 pushed towards offsetting mitigation. I think Mark Gold
20 is going to talk about the existing built environment in
21 a little while. I'll return to this shortly again, but
22 there are opportunities using low-impact development
23 under this permit to begin addressing retrofits. We'd
24 like to see the permit pushed in that direction.

25 One of the concerns we do have -- if I could
0246

1 have the next slide -- is the use of ulterior means of
2 performance, particularly the use of biofiltration.

3 What I have here is a chart looking at the
4 best-performing conventional BMPs, including filter
5 strips and biofiltration against use of low-impact
6 development or treatment of storm runoff on-site, and
7 using low-impact development as a retention practice so
8 that water is either infiltrated into the ground,
9 evapotranspired, or is captured and reused, which in
10 addition provides a water source for a region that badly
11 needs new sources of water.

12 You can retain 100 percent or close to 100
13 percent of the pollution in any volume of water that is
14 retained on-site. That pollution will never reach
15 receiving waters. With the best-performing conventional
16 BMPs, you are looking at between 60 and 80 percent
17 retention of pollutants. So you are still resulting in
18 the discharge of pollutants -- go to the next side,
19 please -- and that's using the best-performing things.

20 For a typical biofiltration system that may not
21 be set up to deal with every specific pollutant, you're
22 looking at retaining between about 60 percent of total
23 suspended solids, up to 80 percent of total copper and
24 when you get to the group such as nitrogen and nitrates,
25 the amount of pollutant that is actually retained on-site
0247

1 prevented from reaching receiving waters plummets to 55
2 to 65 percent of Kjeldahl nitrogen down to 20 percent of
3 nitrate.

4 So there are real reasons to push for the
5 retention of stormwater on-site.

6 If I could have the next slide, please, one of
7 the concerns we have with the documentation that was sent
8 around by staff recently is it includes a provision where
9 it is technically infeasible to retain the water on-site,
10 that sites are directed to use biofiltration for 1.5
11 times the volume of runoff that would have been retained
12 on-site, and that is certainly something we support in
13 terms of the volume, but it doesn't go far enough. It
14 does not ensure that pollutant load will be reduced to an
15 equivalent or even a particularly strong amount.

16 The Ventura MS4 permit went further in this
17 regard. It required that biofiltration be used to treat

18 1.5 times the volume but also 1.5 times the pollutant
19 load reduction, as would have been achieved had you
20 retained the water on-site, and so that absolutely needs
21 to be incorporated into the L.A. permit. We have to
22 ensure -- if biofiltration is to be used at all, we have
23 to ensure that it will achieve an equivalent or greater
24 load reduction of retention on-site. Otherwise, we're
25 just going to continue to pollute our waters.

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1 If I could have the next slide, please, the
2 other thing I'd like to point out is that the language in
3 the current version of the permit sent around by staff
4 says that if it is technically infeasible to retain the
5 runoff on-site, the project must -- it is absolutely
6 required -- to design and operate a biofiltration system
7 to take on 1.5 times the volume of water that would have
8 been retained on-site.

9 We're concerned that this actually precludes the
10 use of off-site mitigation, which is preferable in our
11 view, because you can simply shift the off-site retention
12 to another site. This is a perfect way to start dealing
13 with the existing built-in environment, moving towards
14 retrofits, whether it's either requiring a construction
15 of LID features on another site within the same watershed
16 to retain runoff or whether it's paying directly a fee
17 that can be used to build LID features on another site.

18 The focus here should be on retaining an
19 equivalent volume of runoff and pollutant load rather
20 than just on putting in a biofiltration system. So
21 again, the planning should be the off-site mitigation
22 rather than on putting in a biofiltration to achieve a
23 greater volume of runoff.

24 If I could have the next slide, I also want
25 to -- at the start, I sort of dispelled any outstanding

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1 notions that low-impact development is costly and is not
2 something that can be implemented or is not practicable
3 to be implemented. This has been basically refuted time
4 and time again by studies and actually on-the-ground
5 implementation.

6 Two studies I'll point to here: Of particular
7 relevance are the low-impact study taken on by the U.S.
8 Environmental Protection Agency, which found in the vast
9 majority of cases they looked at, significant savings
10 were actually realized by using low-impact development
11 rather than stormwater treatment.

12 Another study that came out just recently in
13 June 2011 by ECO Northwest pointed out that in surveyed
14 locations, no staff, absolutely none of the staff were
15 aware of any development that was being forced to
16 greenfield rather than conducting redevelopment projects.
17 They found that cities and developers and different
18 projects were finding ways to meet the stormwater
19 standards and there was no evidence whatsoever that

20 development was actually being forced out to greenfields
21 or being forced to redevelopment or from smart growth
22 projects. If anything, they found that stormwater
23 requirements being placed on new developments were one of
24 many factors that went into the consideration of where
25 projects would be sited and it was rarely the defining
0250

1 characteristic.

2 Again, we'd like to highlight -- the City of
3 L.A. was here earlier and they pointed out that retrofit
4 programs, they were bringing in green programs, taking
5 the existing built environment and finding ways to green
6 it so runoff is actually retained on-site rather than
7 continuing to discharge into our sewer systems. This is
8 exactly the opportunity for low-impact development to be
9 used and exactly the opportunity for off-site mitigation
10 to be used, and I think Mark Gold will talk in greater
11 detail about that and some other issues.

12 Thank you very much for your time.

13 MR. GOLD: Next slide.

14 So this topic should be familiar to most of you
15 who were here for the Ventura permit and so this is the
16 issue of BMP performance standards. And just to remind
17 you, the whole concept is you wouldn't build a sewage
18 treatment plant without design criteria and we shouldn't
19 be putting BMPs into the ground without the same sorts of
20 requirements.

21 We're trying to move forward hopefully past
22 adolescence into adulthood on the stormwater permit where
23 the BMPs we're putting into the ground are actually
24 effective.

25 So just as a reminder, this was the sort of

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1 stuff that we had provided in the last Ventura permit and
2 you adopted, which is BMP performance criteria. Looking
3 at a number of different types of BMPs and what the
4 pollutant removal efficiency is, for median values --
5 that's just the median values -- for various different
6 BMPs for a wide variety of constituents and that's using
7 the EPA ASCE database.

8 If you actually wanted to move forward,
9 especially in impaired waters, you would probably want to
10 increase that to the 75 percentile value rather than just
11 the median value, which is the average that's been done
12 across the country.

13 Next slide.

14 On the retrofit concept, I think Noah did a
15 really good job on that. Obviously the LID off-ramp --
16 if you can't do low-impact development on-site, then you
17 can do it nearby. Off-site alternatives are basically
18 retrofit parking lots, green streets. There's a huge
19 opportunity to do that with all the street construction
20 projects where people are redoing streets. Those are the
21 sorts of really high-value, low-impact development sorts

22 of projects we should be encouraging.

23 Also, we've seen through Proposition O and
24 through Measure V a wide variety -- in Santa Monica, a
25 wide variety of other different retrofit projects that
0252

1 are really starting to make a significant difference.

2 And so we think that this permit should push
3 retrofit. It hasn't yet to date. Obviously the 2001
4 permit did not, but you are seeing permits in other parts
5 of the state and in other parts of the country that are
6 moving forward on this concept of retrofit because, let's
7 face it, the existing development has already been
8 demonstrated to cause a wide variety of water quality
9 problems.

10 Next. This you've already seen before. This is
11 just to demonstrate obviously how big the water quality
12 problem is and obviously stormwater is a big part of
13 this. So this is the list of TMDLs, which it seems like
14 most of the folks have been bringing up this similar
15 list. This is really just to show you that stormwater is
16 causing water quality impairments throughout Los Angeles.
17 So this TMDL list wouldn't be so long if we weren't still
18 having the same sorts of water quality impairment
19 problems that we've had for quite some time. So it just
20 demonstrates the scope and scale of the problem and why
21 waste load allocations are so direly needed within the
22 permit.

23 Next up.

24 In addition, you'll see new TMDLs from EPA on
25 lakes for the TMDLs and those obviously would have
0253

1 significant runoff inputs and are of concern there and to
2 a less extent DDT and PCBs where there's some degree of
3 impact, but it's pretty trivial compared to latency
4 pollutants.

5 On the waste load allocation issues, obviously
6 this is just saying -- echoing what's been said earlier,
7 that waste load allocations are clearly needed within the
8 permit to really make a difference in protecting --
9 getting to meet water quality standards. And that's
10 really the point of it.

11 One of the things that we've heard about on
12 TMDLs to date, which was a little bit disturbing to say
13 the least was, quote, "Providing action-based compliance
14 paths" and this is actually a major step backwards from
15 Ventura and ensures that receiving water quality won't be
16 met, from our perspective. It's one thing saying you're
17 going to come up with a functional equivalent for Trash
18 TMDL and I can say this, as being one of the people who
19 helped negotiate the functional equivalent for what a
20 full capture device actually was, but that's a pollutant
21 that you can see and a large -- you know, well-understood
22 BMPs from the standpoint of what those removable
23 efficiencies are and even that took us about nine months

24 to a year to negotiate, just for the Trash TMDL. So keep
25 that in mind. If we're talking about doing something

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1 functionally equivalent for each and every constituent or
2 each and every impairment caused by a TMDL, that's
3 nonsensical from the standpoint of the complexity that
4 would be required there.

5 In talking about plans and models somehow being
6 the functional equivalent of actually meeting water
7 quality standards in some way, that doesn't really make
8 sense either. Even though L.A. County and L.A. City have
9 come a long way in their stormwater modeling, the
10 modeling is not done to actually determine what BMPs will
11 actually lead you to water quality standards attainment
12 in receiving waters. It's really more of a reduction and
13 what's the most cost-effective reduction, but it's not to
14 the point of actually getting you to attainment.

15 So just so you understand the state of the
16 science and the state of the modeling that's being used
17 right now, that's not where we're at. So to put that in
18 a permit and somehow say, Oh, if you have a plan in
19 place -- first of all, you have to make sure you
20 implement the darn plan, but somehow that's going to be a
21 quality of water standards, that's just not reality.

22 All right. Next -- okay. So one more thing.

23 So on Ventura County on the MS4, I bring this up
24 because obviously this group spent two years and two
25 tries at making sure that this was actually the permit

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1 for Ventura County. As you recall, all 11 cities in
2 Ventura County were supportive of that permit. It took
3 nine months of negotiations between the environmental
4 community and Ventura County and the cities to actually
5 come up with those, with the many aspects of the Ventura
6 County MS4 and so to reinvent the wheel in Los Angeles
7 just doesn't make sense. You came up with a good permit
8 that you spent a huge amount of time talking about and
9 that absolutely should be the baseline for Los Angeles
10 County as well.

11 Next. Some of the key elements of that on
12 monitoring in the Ventura County permit or outfall
13 monitoring, receiving water monitoring, both mass
14 emission and others, as has been talked about earlier,
15 bioassessment, toxicity on beach monitoring, and total
16 maximum daily load monitoring.

17 Next. On bioassessment, this was from -- again,
18 was adopted in Ventura. The next few slides are all
19 that. They're tracking trends from year to year; at
20 least one reference and six permit sites in each
21 watershed and minimum annual monitoring at each location.
22 That's what was agreed to in Ventura. It seems to make
23 sense to do the same thing in L.A. County.

24 Next. Toxicity: Again, why reinvent what
25 you -- what's already been negotiated and approved by

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1 this Regional Board in a commonsense approach to toxicity
2 monitoring?

3 Next. On beach monitoring, one of the important
4 things on beach monitoring was that we had seen a number
5 of beach monitoring programs get gutted because of lack
6 of funding. County Health Departments were doing the
7 beach monitoring and by putting it into the permit, which
8 you have done historically for the L.A. County permit,
9 that'll just make sure that beaches are being monitored
10 on an annual basis. And obviously here in L.A. County,
11 people are in the water each and every day, so it's very
12 important that we're actually measuring beach water
13 quality and protecting public health.

14 Next. And then another item on TMDLs is that
15 all monitoring requirements in the adopted TMDLs of
16 course should be incorporated into the permit. So I
17 think that's very, very important as well.

18 I brought this up earlier, but I think it's
19 important to bring it up again that the time frame, the
20 way this is put in that you're basically getting a draft
21 in March and then approval in May already is a problem
22 from the standpoint that a day before 11 is October and
23 frankly under the Beach Bacterial TMDL, it includes dry
24 weather right now in the winter season. It has since
25 2009. So the longer this permit gets delayed, the more

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1 that you're basically putting millions of beachgoers at
2 risk needlessly and that's just not right. So realize
3 the other side of that equation is obviously from the
4 standpoint of protection of public health.

5 In conclusion, I think you've seen from a lot of
6 speakers previously what they're asking for. We're
7 asking for clean water. We're asking for water that
8 protects beneficial uses like recreation and aquatic
9 life. 21 years has been too long to wait to actually
10 achieve that, so there's a big opportunity here to come
11 up with a permit that's finally going to move us forward
12 to protect those beneficial uses and attain those
13 beneficial uses to protect public health and aquatic
14 life. Thank you.

15 MS. DIAMOND: Thank you. And we have our last card
16 today. Our last speaker is John Kemmerer from the U.S.
17 EPA Region 9.

18 MR. KEMMERER: Good afternoon, Chair Diamond and
19 Board members. My name is John Kemmerer. I'm an
20 Associate Director in EPA Region 9, Water Division, and I
21 appreciate the opportunity to speak to you today about
22 the direction your staff are taking in drafting your
23 renewal of the L.A. County MS4 permit. I'd like to touch
24 on a couple of issues.

25 First of all, we support the direction your

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1 staff is taking on permit structure. We agree that it

2 makes sense to reissue a single permit, MS4 permit, for
3 Los Angeles County and it's our view that splitting the
4 permit up into multiple permits would increase the
5 administrative burden on many parties, especially your
6 staff.

7 Splitting up the permit into multiple permits
8 would be contrary to the MS4 permit consolidation efforts
9 that a lot of Regional Boards around the state are
10 pursuing.

11 In 2009, we were very supportive of what the
12 San Francisco Bay Region did when they took what was six
13 separate Phase I MS4 permits and consolidated into a
14 single regional permit and the San Diego Regional Board
15 has announced their intention to consolidate the three
16 counties into Regional Board 9, into one single regional
17 permit, and we believe these approaches make sense. They
18 enable the Regional Boards to spend more time on critical
19 issues rather than constantly needing to come back and
20 renew the permits. That's of course where the work gets
21 done with implementation. And given the workload
22 challenges your staff face, we really have concerns about
23 breaking this permit into multiple permits.

24 Secondly, I'd like to emphasize that we see the
25 approach that your staff are taking here as consistent
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1 with Federal stormwater requirements. There's a lot of
2 citations brought up on the screen today about different
3 provisions in the Clean Water Act and the regulatory
4 requirements. I thought Renee did an excellent job in
5 her overview of laying out what's in the 402(p) and 40
6 CFR 122.

7 Basically, in short, the Clean Water Act
8 prohibits discharges from MS4s without authorization
9 through an NPDES permit and the Clean Water Act and its
10 implementing regulations has requirements and controls
11 that must be incorporated into these permits and EPA's
12 issued guidance on how the statutory and regulatory
13 guidelines are to be implemented.

14 We allow for flexibility in how there are
15 optimized reductions in stormwater pollutants. The
16 flexibility is necessary, given the different nature of
17 discharges across the country, different parts of the
18 country, and our expectation is that permitting
19 authorities are going to determine appropriate approaches
20 to reduce the discharges for their circumstances.

21 Of course here in L.A. County, we see that
22 stormwater discharges are primary cause of impairments
23 and so it's important to take that into account in coming
24 up with standards that are tailored to address the
25 problems we have here.

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1 So we're working very closely with your staff on
2 the direction of this permit and are seeing that the
3 approaches they're taking that are under consideration

4 right now are consistent with what's laid out in the
5 Clean Water Act and its implementing regulations at EPA's
6 guidance and are concluding that this approach does not
7 go beyond Federal requirements.

8 Lastly, I want to talk a little bit about
9 timing. There's been obviously a lot of folks that would
10 like to see the schedule extended. We're supportive of
11 what the staff have laid out. We think that it's a
12 reasonable and deliberate process to have these two
13 issues-specific workshops in the next couple months, have
14 a draft permit in March, and a Board hearing to consider
15 adoption in May. We'll see how that goes. I think it's
16 worth sticking to that schedule.

17 We heard some discussion today about different
18 reasons why there needs to be schedule extensions. You
19 know, one thing that comes to mind for me is just
20 low-impact development and the post-construction
21 requirements that was mentioned, that maybe the
22 permittees need more time to work with the State on.

23 I guess the way I look at it here, I work in
24 Region 9 as our regional representative and LID workers
25 and I work across the country. Really, we have a lot of
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1 the nation's leaders, in my opinion, in LID
2 implementation here in L.A. County. Projects that have
3 been implemented by L.A. County, the City of L.A., the
4 ordinances in L.A., the County, Santa Monica, the
5 projects in Hermosa Beach, the projects in Downey. We've
6 got a lot of leadership here and some great work that's
7 been done to implement low-impact development. I think
8 it would be a real shine to, in Mark's terms, reinvent
9 the wheel of what needs to be done with LID.

10 We have a great framework of how it's been
11 adopted over the past two years across California and in
12 nine different MS4 permits. So we really need to take
13 advantage of the investments that you all have made to
14 date and, again, try to take advantage of those and not
15 in my opinion really delay this, and try to get it
16 implemented as quickly as possible.

17 So that's all I have today. So thanks for your
18 time.

19 MS. DIAMOND: Thank you.

20 Now it's time for the Board members to ask
21 questions and so I'm going to start with my usual right
22 side.

23 Mr. Blois.

24 MS. GLICKFELD: A point of information, Madam Chair.
25 Would you like us to ask questions and then make comments
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1 afterwards or would you like us to do both?

2 MS. DIAMOND: Well, I guess I really don't care. We
3 can just each take our -- use your time and I don't care
4 if you want to come back. You know, we've listened for a
5 long time. We all have questions, I'm sure, and you can

6 feel free to use the time and if you forget something, we
7 can come back to you. Okay.

8 Mr. Blois.

9 MR. BLOIS: Well, I'm sure to forget a lot of things
10 so I'm going to try and make it as quick and brief as I
11 can.

12 It seems to me that the main issues are time and
13 the complexity of the permit and I think that that comes
14 down to cost and how the reporting is implemented and how
15 the implementation is implemented, and I'm not -- you
16 know, I can spend an hour trying to delve into that, so
17 I'm not going to. I'm going to let the workshops -- all
18 I would do at this point is add my two cents' worth to
19 staff that we consider the costs that we're implementing
20 upon the various permittees. I've heard no testimony or
21 no mention of cost studies. Obviously there's a cost
22 associated with the current permit.

23 What I would like to see and urge our staff to
24 do and also the stakeholders, the permittees, to help
25 educate our staff and the Board, for that matter, as to
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1 how much the cost is of the things that we're asking you
2 or going to ask you to do. I think it's essential that
3 we hear -- I don't want to hear like CalTrans did on the
4 CalTrans general permit a couple of weeks ago where they
5 estimated a cost between 50 and 500 million. You know,
6 that's too much of a swing.

7 I'd like for staff and permittees to try and
8 figure out, Is this going to cost \$100,000 or is it going
9 to cost a million dollars? You know, just to try and get
10 a handle on where we're at so we have a better idea or at
11 least I have a better idea of costs and benefits, and I
12 included in "benefits" the environmental benefits. I
13 recognize that that's important and oftentimes difficult
14 to put a cost on.

15 Most of the testimony from the permittees has
16 revolved around time and I think that everybody's saying
17 that this permit was going to be issued in March. It's
18 not going to be issued in March. The draft is going to
19 be issued in March and then we'll spend some period of
20 time taking a look at it.

21 I would encourage us not to be absolutely rigid
22 in allowing only two months, but to absolutely issue the
23 draft permit in March and then let's see how much
24 consensus we reach; and if it takes -- if it's obvious to
25 staff and to the stakeholders that we can't reach
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1 consensus in two months, then maybe extend it. But let's
2 stick to some sort of a goal and then be flexible in
3 extending it if it looks like it needs to be extended.

4 That's my two cents on that.

5 And then what was the other point I was going to
6 make? Time -- God, I'm acting like Rick Perry now.

7 MS. DIAMOND: No, you're not.

8 MR. STRINGER: As long as you don't start acting like
9 Herman Cain, you're fine.

10 MS. DIAMOND: Yeah. Don't eliminate Regional Board.

11 MS. MEHRANIAN: Don't eliminate everything.

12 MR. BLOIS: The LID stuff, I've heard testimony from
13 all sides on that. I don't think that's as big of an
14 issue as the environmental folks think it is. I think my
15 colleagues on the Board support all that stuff for all
16 the reasons we've heard today. I really don't see that
17 as a huge issue.

18 Oh, the other issue was one permit versus a
19 bunch of permits and, you know, I think that it makes
20 sense to have a single permit from our point, which is
21 why we have it now; but be -- you know, if we've got a
22 permittee out there that absolutely insists for whatever
23 reason that he needs a separate permit, then I would say
24 that we should not close our minds to that possibility,
25 but we should listen to their reasons and consider them.

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1 But I will say this: It's going to obviously cost us
2 more to administer several permits, as opposed to one,
3 and we need to make sure that if we do that that we
4 incorporate those additional costs to us into that
5 additional permit. You know, it's got to come at a cost.
6 And obviously there are other good reasons why the
7 permittees or the stakeholders are asking for separate
8 permits. I think that that, again, needs to be looked at
9 from a cost-benefit standpoint.

10 And when it comes to the cost -- oh, the last
11 issue, that's the one I was thinking of. I just
12 remembered it. It's the issue of joint and several
13 liability. I think that that's an underlying element
14 here that is driving most of our stakeholders, quite
15 frankly, into separate permits and I would encourage us
16 to -- and this probably is, you know, going to take our
17 legal beagles. We need to figure out a way or at least
18 investigate really seriously if there is some other
19 alternative other than the traditional joint and several
20 liability because that's, quite frankly -- at least my
21 sense is that that's what's driving the underlying issue
22 of multiple permits.

23 So with that, I'll shut up.

24 MS. MEHRANIAN: Okay. I have a number of questions
25 and a few comments on the issues that I've been

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1 struggling with and I'm hoping that we don't have to
2 resolve them now, but at least we'll make a list of these
3 things that we can discuss.

4 Going back again to the single permit versus
5 multiple permits, I understand the single-permit issue in
6 light of the watershed, the watershed-based approach in
7 ensuring that the flexibility is there, the provision of
8 that, but I'm trying to understand what that really is
9 because in my mind, yes, we're here to clean the water;

10 but in my mind is the distance, how much of what kind of
11 pollutant, where the city's located, they all have to
12 come into some kind of an equation and the reality is
13 that the purpose here is not to come up with the best and
14 stellar plan but a plan that doesn't get hung up in some
15 court because that's not going to clean the water.

16 So what I'm trying to understand is when we say
17 there is provision that gives flexibility to the city,
18 each city, what are those provisions and how does it work
19 in reality? I would like to know about this in the next
20 workshop.

21 My second question was -- again, you know, in
22 your recommendation, you talk about sections that -- you
23 say something like "All permittees and others devoted to
24 requirements specific to each major watershed management
25 area." I'm trying to understand what are those

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1 requirements, those specific requirements for each one?

2 My second -- my second issue was again going
3 back to the monitoring. Somehow I'm seeing there's -- we
4 kept hearing about two-track monitorings, one monitoring
5 going on the track of TMDL and numeric values and the
6 other one was going on the basis of BMPs. I'm trying to
7 see -- again, we understand the talk of this, but in
8 reality, when we come to monitor something, how would
9 this work? Which one takes priority over the other? I'd
10 like to know that.

11 And the reality that -- again, this question
12 came up, the joint liability also comes up here like when
13 we monitor, how do we address the joint liability issue?

14 There was this issue of receiving water. I'd
15 like to discuss that. Again, when we measure and
16 monitor, is it the end of the pipe? Is it the receiving
17 water? Why and how? I mean, I think this is another
18 subject again for the next meeting that goes back again
19 to somehow the real steps of the monitoring system.

20 And then I have a question of the potential
21 challenges that might be posed to us in adopting this in
22 light of the NRDC versus L.A., City of L.A., and timing
23 of it. If that goes through, what happens to our adopted
24 measures? I tried to understand it. I don't know. It's
25 something that I would like to hear from you.

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1 And when -- somewhere in your discussions, I
2 think the staff said that there is not one principal
3 permittee. I would want to understand what that is. Now
4 that we're saying there is two and then in this system
5 it's only one and then we still say there's not one
6 principal permittee, does that mean there's not one
7 principal permittee that is not -- that is liable? Is it
8 going back to the joint liability issue? I want to
9 understand that.

10 So I think that's all I have. Thank you.

11 MS. DIAMOND: And these are questions that you would

12 like addressed at the next workshop or by staff?

13 MS. MEHRANIAN: Yes, at some point in one of the
14 workshops.

15 MS. DIAMOND: Right. Okay.
16 Madelyn?

17 MS. GLICKFELD: Thank you, Madam Chair.

18 I have several points. I really listened
19 carefully today and I want to talk to all of the groups
20 that have spoken to us today. I wish this was more of a
21 dialogue. It's really not possible to make this a
22 dialogue.

23 I would recommend to the Board and the staff and
24 my feeling on the permit issue is that I'm really, really
25 sorry that the County's decided not to be the principal
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1 co-permittee in this.

2 I think that the County is the entity that has
3 the major system. They're the entity that has the
4 capability of doing the kind of monitoring that's needed,
5 and I think that they've provided an enormous amount of
6 coordination for a lot of tiny cities that do not have
7 this capability. So I would say Not only do I not want
8 to give them an individual permit, I wish they were back
9 taking the role of the primary permittee.

10 So that's one comment.

11 Secondly, I don't think we can all -- I really
12 can't really grasp, we have environmental organizations
13 that want us to do X, County that wants us to do Y, and a
14 variety of different cities asking for delay, and they're
15 asking for a whole bunch of different changes or
16 approaches to the permit. So they want certain ways of
17 handling development issues in the permit. They want --
18 I think the presentations that we saw earlier by that
19 group of cities depicts what they want in terms of the
20 iterative approach.

21 I'm not clear what the real differences are
22 between those statements and I'm not clear that they're
23 really -- that the differences that they think are there
24 between the staff and them are actually there.

25 So I'd like to ask that the staff sometime
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1 between now and our next meeting put together some kind
2 of a summary of what you think the major issues are and
3 where the different parties stand on those issues, sort
4 of as a road map for the Board to see where we are today.

5 On the timing issue, I'm very torn on this issue
6 because, again, I am sympathetic to small cities. The
7 turnaround in 60 days from the date of an announcement
8 to -- it's not even 60 days. If we put a draft permit
9 out in March, in order to hear it in May, people have to
10 return comments in much less than 60 days to be able to
11 get that done. I think that lots of cities don't have
12 the capacity to do that and I'm worried about that, and
13 so I want you to think about how we can address that.

14 On the other hand, I was the person who was most
15 anxious to get the Santa Monica Bay TMDL and Marina
16 Bacterial TMDL back into the permit and we agreed not to
17 push this last year because we wanted to deal with the
18 whole permit in an appropriate way.

19 So I'm not -- I'm very torn by the idea that we
20 should take as much time as -- theoretically, we should
21 take as much time as it takes to get consensus and at the
22 same time I do want to make sure that we still have the
23 capacity to enforce the bacterial limits that we were not
24 able to put back into the -- in the permit this last
25 year. So I'm not sure which way to go on this. I'm very

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1 torn about it and very sympathetic to the cities about
2 their needs.

3 So let's see what the staff can do in thinking
4 about both of those issues. Are there ways that we can
5 continue to enforce the Santa Monica Bay and the
6 Marina Del Rey TMDLs and give the cities the extra time
7 they need? At least give them more than 45 days in
8 between the date that the draft permit is issued.

9 The second thing is -- the next thing is I would
10 like to see there be a workshop after the draft is
11 issued. It doesn't need to be a Board workshop. It
12 should be a workshop that Board members can come to --
13 I'd be happy to come to it -- where we'd get to hear what
14 people's reactions are to it and you get to hear what
15 people's reactions are to the draft permit and I think
16 that would be a way to shake out some of these issues.

17 And I think -- finally, I think it's really
18 important -- I know that the staff has been meeting one
19 on one with cities and that's been very helpful and one
20 on one with the County. That's been really helpful.
21 There have been these workshops, but ultimately what we
22 found in Ventura County is that somehow we had to get
23 into the same room, the environmental groups, the
24 development industry who's interested in the LID issue,
25 and the cities and the County. They have to get into the

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1 same room at the same point. Otherwise, nobody's going
2 to make any compromises. Everybody's going to come here
3 and tell us what to do, and I think that these groups are
4 better able to make the compromises than we are able to
5 make it for them.

6 So that's my last comment except for the
7 following to the County and to the cities and to the
8 environment groups: We decide -- I urge you to decide
9 today whether or not we're heading towards another
10 plethora of lawsuits or we're heading toward a permit
11 that the cities can live with that they don't have to
12 live in fear if they do their job, that they're going to
13 be sued anyway. I want you all to think about that. I
14 want especially the County to think about it.

15 And the one thing that I would tell you very

16 strongly is I feel right now is that there is no way in
17 the world that I will agree to vote ever for a permit
18 that says that the County is just the transporter of
19 pollutants, that the Flood Control District has no
20 responsibility. I think the Flood Control District has
21 tremendous responsibility and they aren't separate from
22 the Department of Public Works, which is the County of
23 Los Angeles, which also has tremendous responsibility.

24 Many of the areas of Los Angeles County were
25 developed when they were unincorporated areas. Most of
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1 the city of Santa Clarita, most of many other cities --
2 there was no city of La Canada Flintridge. There were no
3 cities when this Flood Control District decided to -- was
4 formed. There were almost no cities other than the City
5 of L.A. and the City of Long Beach and the City of
6 Pasadena.

7 So almost all of the development that occurred
8 occurred under the auspices of the County. The whole
9 flood control design system, which is really an amazing
10 system for getting water from one place to another in an
11 incredibly fast way, was also a perfect design for
12 pollution carrying, for carrying pollutants.

13 When we had a field trip last year, the County
14 Flood Control District took us on a field trip up to the
15 top of the watershed in La Canada Flintridge and showed
16 us one of the catch basins. The Flood Control District
17 decided that they were going to buy the minimum area
18 possible to build a catch basin and then allow private
19 development to continue to occur right on top of the
20 catch basin. So there is no way now when you stop at
21 the -- start at the top of the District and put all of
22 the water, you collect all of the water that was going
23 into a watershed and being absorbed in the watershed and
24 you take all these streams that were discharging and you
25 concentrate at one place right at the top of the

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1 watershed and then you design your systems so it's only
2 designed to take clear cold water with no sediments in
3 it, you're creating the system that requires all the
4 pollution that we have today.

5 So the County, I believe, and the counties --
6 the County has a responsibility historically for the
7 land-use patterns and the Flood Control District made
8 some decisions about how they wanted to approach flood
9 control in this County that is really an inheritance for
10 us all and I think there's a responsibility there.

11 I would hope, and I'm asking you with your
12 attorneys here, to abandon the idea that you should
13 somehow be considered just a neutral transporter of
14 pollutants. That's a nonstarter. If we can talk -- if
15 we can get past that point, there are lots of other
16 things that we can talk about. We can't start with that,
17 though.

18 That would be my last comment.

19 MS. DIAMOND: Mr. Stringer.

20 MR. STRINGER: Yeah. Thank you. I'll be very brief.

21 On the issue of timing, I am sympathetic to the
22 enormous complexity of this process and the permit that
23 you all are trying to pull together.

24 At the same time, I do think it's very important
25 to stick to deadlines and I am very concerned about the
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1 Beach Bacteria TMDL that was referenced earlier and I do
2 recall our admonitions that we'd be done by next summer.
3 So I don't know if we can have it both ways and I
4 certainly hope that when the draft permit comes out that
5 there are no surprises. I don't know that having a
6 workshop after that is necessary if you all are working
7 together. It seems to me that the draft permit should
8 contain things that everyone is already fully aware of.

9 So there are a lot of details in today's
10 discussions and presentations and they're incredibly
11 informative. I don't know that it's our place at this
12 point in time anyway to comment too deeply on those.

13 I have great trust in staff and all the
14 stakeholders to work together. I'm not incredibly
15 optimistic that everyone's going to be happy. I think,
16 frankly, that whether we issue the permit in the spring
17 or next winter or whenever we issue it, there will
18 probably be people that will be unhappy and my guess is
19 that some of those issues will have to be resolved by
20 third parties and I just wouldn't want -- I wouldn't want
21 us to delay issuing the permit just because we're trying
22 to get everybody, you know, together and happy.

23 I know that everyone is trying their best to do
24 that, but I'm also very realistic about the challenges
25 that that presents.

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1 You asked for feedback, staff, on the issue of
2 the structure. I don't see any way to go other than an
3 individual permit. I just think that any other way -- is
4 there -- pardon me?

5 MS. GLICKFELD: Did you mean single permit or
6 individual?

7 MR. STRINGER: Single, one, one overall permit.

8 I just don't see any other way to parse out
9 particular parties. Everyone's going to feel unique and
10 have their unique issues.

11 At the same time, I do look forward to learning
12 more about issues of joint and several liability, issues
13 of how the various permit requirements are going to be
14 managed so that folks aren't held responsible for things
15 that are not under their control and I know you guys are
16 all thinking hard about that and I look forward to
17 hearing more about it.

18 That's all I have. Thank you.

19 MS. DIAMOND: I'll just make a couple of comments and

20 say what I'm most interested in.

21 I agree with Board Member Stringer and others
22 who have spoken today about the timing being very
23 important, that we have had a permit that is long
24 overdue, a ten-year permit. It's really unbelievable
25 that it's gone so long and I don't believe that

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1 protecting water quality and public health would allow us
2 to have another summer without a new stormwater permit in
3 place. So I'm very supportive of the deadline that is
4 contained in this recommendation from staff.

5 I believe if we have our draft in March that it
6 is not really -- there is -- they need to respond to it
7 and comment to it and have it back to -- have it back to
8 us for the May meeting in order for us to issue a permit
9 that would be ready for this summer.

10 I don't really believe that it's too much to
11 ask. It's 45 days in some ways, but this has been long
12 coming and the fact that we have much of it based on the
13 Ventura permit is not -- so it's not really a surprise to
14 the permittees.

15 I do think that as much as it can be based on
16 the Ventura permit, that is a really good thing. The
17 Ventura permit was a very good permit. The LID aspect to
18 it is incredibly important for us to be able to
19 accommodate that; and to the extent that we can push
20 retrofit, which was mentioned by the representative from
21 NRDC, to encourage as much as we can retrofit in L.A., in
22 the L.A. permit, I think that would be really important.

23 And I think that when you do have workshops,
24 which I know you intend to have for the permittees, you
25 should let the Board know in advance when those will be

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1 so if members of the Board would like to attend, we can.

2 And I'm very happy to know that the EPA is very
3 supportive of this permit. That gives me a lot of
4 comfort, and I think that basically the questions that
5 have been posed that we'd like to have answers to, those
6 are the questions that I have, too.

7 There was one thing about the issue of the
8 County Flood Control not being the principal permittee.
9 The responsibilities that they have had as principal
10 permittee, whether they've been met or not, who will be
11 responsible for those? I'd like to know who will be -- I
12 mean, how will that be coordinated? It's too bad, I
13 agree, that they're not going to be the principal permittee,
14 but I do think that we have to make sure that the
15 responsibilities are nonetheless accounted for in the
16 next permit.

17 So I want to thank the staff for issuing -- and
18 the presentation of Renee and Ivar today was very
19 helpful. I think if we -- I think the concept of having
20 the single permit for the permittees and then the
21 flexibility within it for the -- with the watershed

22 approach is really a very improved permit and I look
23 forward to seeing how that will play out when you present
24 to us what that will look like, but it makes sense and --
25 and I do -- I think we need to do it by this summer.

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1 I personally think that as a Water Board, our
2 primary -- our only mission is to improve and restore
3 water quality; and as was noted before and many times
4 before, stormwater pollution is the biggest problem we
5 face in our region. So this region really has to make
6 sure that our permit's in place, a new, improved permit
7 by this summer. I don't want to see any more kids
8 surfing in the water without an enforceable permit this
9 summer.

10 That's my comment.

11 MS. MEHRANIAN: Madam Chair, in light of everything
12 that was said, I just have -- I'm trying to understand
13 how this will work because it seems we all agree that the
14 timing of this should not be postponed and then there
15 were all these questions that were listed by all of us.
16 So I'm just wanting to hear how we would -- because I
17 believe that answering these questions is also a process
18 of building consensus to meet the deadlines. So I'm
19 trying to see what the timing of it would be, if you can
20 give us an idea.

21 MR. UNGER: I'm going to try to talk -- to answer
22 that generally and I'll let Renee and Deb, as needed,
23 fill in some of the details.

24 But first of all, thank you very much for all
25 your comments and for listening to the permittees and
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1 other stakeholders and the Board staff as to the
2 direction that we are planning to recommend to you for
3 the permit.

4 I think with the plans that we have in place, we
5 can -- back up just a second.

6 I think basically on most of these issues, we
7 may be a lot closer than we think we are. Whether we're
8 going to get the consensus or not, I agree it may not be
9 possible like we were able to do in Ventura. But given
10 that being said, I don't think the directions are too far
11 apart. The permittees who -- the smaller cities,
12 certainly they can look at other permits -- MS4 permits
13 have been adopted in recent history in Region 9, as
14 Mr. Kemmerer suggested, so they're not going to be going
15 into this blind. They have plenty of time to get up to
16 speed on what the issues are and how these issues have
17 been identified and resolved in other regions. I'm not
18 saying they're going to be resolved the same way here,
19 but at least they can go into this with the familiarity
20 of what the issues are.

21 I think our path forward, to answer your
22 question, Ms. Mehranian, is to get a memo to the Board
23 certainly by the end of the year with all the comments

24 that were said, hopefully sooner than that, hopefully by
25 next month. But with the holidays and such and with the
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1 other workload that the TMDL Development Team has on
2 their plate right now, I think something by the end of
3 the year that you could look at and we would capture all
4 your comments, we would respond to all the comments. All
5 the comments are very valid, very good.

6 I think that Mr. Blois's comments about cost, we
7 have a basis to start looking at costs in the TMDLs that
8 have been adopted and we need to parse that out and give
9 it to you in a succinct format so you can see that.

10 We'll address all your comments. We've all been
11 taking notes, we have the transcript, and we will get you
12 a memo at the same time that we are looking forward to
13 develop a draft. I think the schedule that we have
14 planned out, certainly we're planning some Board staff
15 workshops on specific issues that permittees will be well
16 advised of and they can attend and provide comments there
17 and we stick with the plan that we have in place right
18 now to get it to the schedule and if there's something
19 that would change something in your minds, at least to
20 want to delay it or something like that, that would be
21 your choice; but you wouldn't be held up because we would
22 stick to the schedule.

23 MS. MEHRANIAN: Thank you.

24 MR. UNGER: That's what I propose, to get you a memo.

25 Deb, Renee, do you want to add anything?
0282

1 MS. PURDY: The only thing I was going to add, just
2 echoing Sam, is that I agree. I agree in many ways that
3 we perhaps aren't as far apart as with a lot of
4 permittees and other stakeholders as perhaps some think
5 we are. I think that will become more clear as we have
6 these staff-level workshops that we've been talking about
7 and specifically, as we mentioned, we're thinking of
8 two -- one will probably be in the mid-December time
9 frame and then another probably in the mid-January time
10 frame -- and we'll be hitting on a lot of the key issues
11 that were raised today such as the LID provisions for the
12 new and redevelopment; additionally, how TMDLs are going
13 into the permit, receiving water limitation language and
14 water quality-based effluent limits and monitoring.

15 So I think, you know, the distance between us
16 will become more clear as we start to have those
17 staff-level workshops, and that will help also -- at
18 least the December workshop can help form the memo Sam's
19 hoping to get to you regarding some of the questions.

20 MS. MEHRANIAN: Thank you.

21 MS. GLICKFELD: Madam Chair, I just want to make sure
22 that we get the dates, times, and places of these
23 workshops.

24 MS. PURDY: Certainly.

25 MS. DIAMOND: Well, if there are no other -- anybody

0283

1 have anything else to say?

2 Well, I want to thank everybody who
3 participated. Thank you for being here, for giving us
4 your comments, your letters, and I know you'll be working
5 very hard with staff, as will we. And thank you all for
6 being here. Thank you to staff.

7 We're adjourned.

8 (Proceedings concluded at 5:40 p.m.)

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Matthew Rodriguez
Secretary for
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RB-AR915



Edmund G. Brown Jr.
Governor

TO: Board Members
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

FROM: Samuel Unger, P.E.
Executive Officer
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

DATE: January 20, 2012

SUBJECT: Key Issues Raised by Stakeholders Regarding the Reissuance of the Los Angeles County MS4 Permit

In 2012, the Los Angeles Regional Water Quality Control Board (Regional Board or Board) will consider reissuing the Los Angeles County Municipal Separate Storm Sewer System permit (hereinafter, the LA County MS4 permit). The LA County MS4 permit is a federal National Pollutant Discharge Elimination System (NPDES) permit that regulates municipal separate storm sewer system (MS4)¹ discharges of stormwater and urban runoff. As with all NPDES permits, the LA County MS4 permit must comply with all applicable provisions of the federal Clean Water Act and implementing regulations. Discharges from the MS4 reach receiving waters in Los Angeles County including, but not limited to, Santa Monica Bay, Los Angeles and Long Beach Harbors, and the Los Angeles and San Gabriel Rivers and their tributaries.

The LA County MS4 permit was last reissued by the Regional Board in 2001, and has been amended three times in the past five years to incorporate provisions to implement total maximum daily loads (TMDLs) for bacteria and trash. However, since 2001, thirty-four TMDLs have been developed by either the Regional Board or US EPA that need to be implemented through an updated MS4 permit. It is also widely recognized that the LA County MS4 permit needs to be updated to reflect the best science and lessons learned in stormwater and urban

¹ According to 40 CFR section 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.”

runoff management over the past eleven years. An updated LA County MS4 permit will provide improvements and efficiencies in regulating discharges from the MS4 to improve water quality. Enhancements to water quality may also have a positive effect on local water supply for the Los Angeles Region.

This memorandum stems from the Regional Board's workshop on November 10, 2011 whereby Regional Board staff provided an update on the status and development of the LA County MS4 permit and permittees and stakeholders then presented comments and concerns regarding an updated permit. At the end of the workshop, several Regional Board members posed comments and/or questions to staff. At the close of the workshop, I offered to prepare a memorandum for the Regional Board summarizing the key issues brought forth by staff, permittees, stakeholders, and the Regional Board members prior to the Board's consideration of the updated MS4 permit. This memorandum does not provide responses to all of the issues raised. Since the permit is still being developed by staff, it is premature to provide responses to comments at this time. The Regional Board will be provided with an agenda binder, including responses to all comments raised, prior to the Board's consideration of the permit.

This memorandum is structured in five sections. For the benefit of the newer board members, the first three sections provide general background. Section I provides background on the regulatory framework for stormwater and urban runoff management. Section II provides a description of the Los Angeles County MS4. Section III provides an overview of the current LA County MS4 permit. Section IV provides a status of permit development. Lastly, Section V provides a description of key issues raised by stakeholders regarding the reissuance of the LA County MS4 Permit.

I. REGULATORY FRAMEWORK FOR STORMWATER AND URBAN RUNOFF MANAGEMENT

The regulatory framework for NPDES permits is provided by the federal Clean Water Act and its implementing regulations contained in Title 40 of the Code of Federal Regulations (40 CFR).

Under the NPDES program, all facilities that discharge pollutants from any point source² into waters of the United States are required to obtain an NPDES permit. The stated goals of the Clean Water Act are to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Another notable goal is that the discharge of pollutants into the nation's navigable waters be eliminated by 1985. While that goal was not realized, it remains a principle for establishing NPDES permit requirements.

In 1987, Congress amended the Clean Water Act to bring discharges from MS4s under the NPDES program. USEPA has identified stormwater and urban runoff as one of the most significant sources of water pollution in the country and a serious threat to aquatic life and habitat as well as to human health. Stormwater is precipitation that flows over streets, parking lots, and other developed parcels, and through commercial, industrial and residential sites, and is then collected in MS4s and conveyed to surface waters, which are waters of the United States and State of California. When stormwater flows over urban environs, it collects

² "The term 'point source' means 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, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharged and return from irrigated agriculture." (33 U.S.C. § 1362(14).)

suspended metals, sediments, nutrients (nitrogen and phosphorus), trash and debris, petroleum products, untreated sewage, pesticides, and other toxic pollutants, which are then discharged to creeks, rivers, estuaries and the Pacific Ocean. In addition to stormwater, the MS4 collects non-stormwater runoff from urban activities such as street washing, potable water system testing, and discharges from groundwater treatment programs. These non-stormwater discharges can also contain pollutants that impair the beneficial uses (e.g. recreation, habitat protection, etc.) of the region's water, including the recreational uses of the Pacific Ocean. While non-stormwater discharges are most obvious during dry periods and are seen as the water flowing in the gutters, they can and do occur year round.

Section 402(p) of the Clean Water Act states that permits for discharges from MS4s: (1) may be issued on a system-wide or jurisdiction-wide basis; (2) shall include a requirement to effectively prohibit non-stormwater discharges into the MS4; and (3) shall require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques and system, design, and engineering methods, and such other provisions as the Regional Board determines appropriate for the control of such pollutants. Congress established this flexible MEP standard, and gave permitting authorities discretion to include other provisions as necessary, so that administrative bodies would have the tools to meet the fundamental goals of the Clean Water Act in the context of stormwater pollution, especially as the field of stormwater management is constantly changing as new information and technologies become available.

MS4s are required to develop and implement a stormwater management program (SWMP). The required elements of a SWMP are described in 40 CFR section 122.26(d)(2)(iv). Historically, the SWMP has been the "bread and butter" of stormwater management programs. Permit provisions to implement a SWMP have been historically grouped into six categories of so-called "minimum control measures":

- (1) programs to monitor and control pollutants in stormwater discharges from commercial areas and industrial facilities;
- (2) a program to maintain structural and non-structural best management practices (BMPs) to reduce pollutants in stormwater runoff from construction sites;
- (3) programs to detect and remove illicit discharges and improper disposal into the MS4;
- (4) public agency activities to reduce the impact of MS4 discharges to receiving waters, including impacts from residential areas and flood management projects;
- (5) planning procedures to reduce pollutants from areas of new development and significant redevelopment; and
- (6) a public information and participation program (PIPP) related to the above five areas.

Implementing these minimum control measures typically requires the application of one or more structural or non-structural best management practices (BMPs). Pursuant to California Water Code section 13360, the Regional Board cannot specify the design, location, type of construction, or particular manner in which a permittee complies with its permit. As long as a permittee complies with the standard set (prohibition for non-stormwater discharges and MEP and other provisions as necessary for stormwater), then a permittee may comply in any lawful manner. It is important to recognize that there is site-specific, regional, and national variability associated with the selection of appropriate BMPs, as well as in the design constraints and pollution control effectiveness of practices. Thus, BMPs that work in one part of the state may not necessarily work in the Los Angeles region, and vice-versa.

Once pollutants are present in a waterbody, or after a receiving waterbody's physical structure and habitat have been altered, it is much more difficult and expensive to restore it to an unimpaired condition. Therefore, the use of BMPs that rely first on preventing degradation of receiving waters is recommended. BMPs under each of the minimum control measures generally focus on preventing pollutants from being discharged to the MS4 or the receiving water. For example, for non-stormwater discharges, many permittees have installed "low flow diversions" (LFDs), which are structural devices that re-route urban runoff discharged to the MS4 during dry weather conditions into the sanitary sewer system, where the polluted runoff then receives treatment before being discharged to a receiving water.

Over the last decade, the Regional Board and US EPA have developed approximately 50 total maximum daily loads (TMDLs) to remedy water quality impairments in various waterbodies within Los Angeles County. In most cases, these TMDLs identify MS4 discharges as a source of pollutants to these waterbodies and, as required, set wasteload allocations (WLAs) for MS4 discharges to reduce the amount of pollutants discharged to receiving waters. Federal regulations require that NPDES permits contain effluent limitations consistent with the assumptions and requirements of all available WLAs (40 CFR §122.44(d)(1)(vii)(B)). Therefore, as part of the update of the LA County MS4 Permit, staff will be developing numeric limitations and other provisions to implement the TMDL WLAs assigned to permittees regulated by the LA County MS4 Permit. The Regional Board has some flexibility when establishing permit provisions that are designed to determine compliance with the numeric limitations derived from the TMDL WLAs. Broadly, this means that the Regional Board may either require a demonstration that permittees comply with the numeric limitations through monitoring (such as outfall and/or receiving water monitoring) or, alternatively, allow permittees to develop and implement control measures to achieve the numeric limitations (referred to as an "action-based" compliance demonstration) where there is an adequate demonstration in the record that the selected control measures and schedule will achieve the numeric limitations. As described below, the manner in which the TMDLs will be incorporated in the forthcoming MS4 permit is one of the key comments that underlie much of the controversy in the development of the reissued MS4 permit.

Lastly, when an NPDES permit is renewed, reissued or modified, it generally must be at least as stringent as the prior permit. This is consistent with Congress' intent that state management programs evolve based on changing conditions from program development and implementation and corresponding improvements in water quality.

II. THE LOS ANGELES COUNTY MS4

The Los Angeles County MS4, like many MS4s in the nation, is based on regional floodwater management systems that use both natural and altered waterbodies to achieve flood management goals. The LA County MS4 is a large interconnected system, controlled in large part by the Los Angeles County Flood Control District (County FCD), among others, and used by multiple cities along with Los Angeles County. These systems convey stormwater and non-stormwater urban runoff across municipal boundaries where it is commingled within the MS4 and then discharged to a receiving waterbody.

The Los Angeles County Flood Control Act was passed in 1915. The original storm drain system was developed in the 1930s by the U.S. Army Corps of Engineers (ACOE). As Los

Angeles began to grow rapidly in the 1920s and 1930s, stormwater that was once absorbed by acres of undeveloped land began to run off the newly paved and developed areas, leading to an increased amount of water flowing into the region's rivers and local creeks. These waterways could not contain the increased amount of water and the region experienced extensive flooding. In response, the ACOE lined the Los Angeles River and Ballona Creek with concrete and initiated the development of an underground urban drainage system. As Los Angeles continued to grow, the complex drainage system we now know as the Los Angeles County MS4 developed.

Today, a total of approximately 120,000 catch basins, over 2,800 miles of underground pipes, and 500 miles of open channels comprise the Los Angeles County MS4. In total, runoff from approximately 1,060 square miles of developed land reach Santa Monica and San Pedro Bays through approximately 60 storm drain outfalls. Approximately 100 million gallons of urban runoff flow through Los Angeles County's MS4 on an average dry day. When it rains, the amount of water flowing through the channels can increase to 10 billion gallons, reaching speeds of 35 mph and depths of 25 feet. The chemical and hydrological variability of stormwater and urban runoff within the MS4 creates both technical and regulatory complexity. The treatment technologies for these discharges are not as well developed as those for sewage and industrial waste discharges and cannot be easily centralized. Issues of shared responsibility for compliance with TMDL wasteload allocations and receiving water limitations, and equity and fairness between multiple permittees are far more complex in an MS4 permit that regulates commingled discharges compared to an individual NPDES permit.

III. CURRENT LOS ANGELES COUNTY MS4 PERMIT

The LA County MS4 Permit is one of the most important permits issued and administered by the Regional Board. The permit regulates commingled discharges of stormwater and urban runoff from one of the nation's largest MS4s, covering the jurisdictional areas of 86 permittees. Permittees regulated by the LA County MS4 Permit include the County FCD as owner and operator of the MS4 infrastructure, Los Angeles County, and 84 incorporated cities³ within Los Angeles County.

The current LA County MS4 Permit was last reissued by the Regional Board in 2001. The permit expired in 2006, but has been administratively extended pursuant to federal regulations. Since 2006, the current permit has been reopened and amended three times to incorporate provisions to implement three TMDLs. It was further amended in 2010 and 2011 pursuant to a peremptory writ of mandate.

The current LA County MS4 Permit is organized under the following seven parts and includes several attachments. The description below summarizes key permit parts and attachments:

Part 1 – Discharge Prohibitions

As required by section 402(p) 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 MS4 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, firefighting flows, and flows incidental to urban activities (i.e. landscape irrigation, sidewalk rinsing). These non-stormwater flows may be

³ With the exception of the City of Long Beach, who has had a separate MS4 permit since 1991.

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 Executive Officer to impose conditions on these types of discharges and to add or remove categories of conditionally exempted non-stormwater discharges based on their potential to contribute pollutants to receiving waters.

Part 2 – Receiving Water Limitations

As required by 40 CFR section 122.44(d)(1), Part 2 prohibits discharges from the MS4 that cause or contribute to the violation of Water Quality Standards or water quality objectives. In addition, discharges from the MS4 of stormwater or non-stormwater, 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 SWMP and its components to include modified BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised SWMP.

Part 2 also includes provisions relating to 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 objectives.

Part 2 had 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 County FCD, the Regional Board was required to void and set aside those provisions, which the Regional 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 LA County MS4 Permit. The SQMP, at a minimum, shall also comply with the applicable stormwater program requirements of 40 CFR 122.26(d)(2), which includes the minimum control measures outlined above. The SQMP and its components shall be implemented so as to reduce the discharges of pollutants in stormwater to the MEP and effectively prohibit non-stormwater discharges to the MS4. Each permittee shall also implement additional controls, where necessary, to reduce the discharge of pollutants from the MS4. Permittees shall revise the SQMP at the direction of the Regional Board Executive Officer to comply with regional, watershed specific requirements, and/or TMDL wasteload allocations.

Part 3 also sets forth specific responsibilities of the Principal Permittee, which under the 2001 permit is the County FCD, 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-stormwater discharges to the MS4, as well as possess adequate legal authority to develop and

enforce stormwater and non-stormwater 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 stormwater program.

Part 5 – Definitions

Part 5 includes definitions for terms used within the LA County MS4 Permit.

Part 6 – Standard Provisions

Part 6 includes standard provisions relating to implementation of the programs required by the permit. Such provisions include the duty to comply, the duty to mitigate, inspection and entry requirements, proper operation and maintenance requirements, and the duty to provide information. Most of these provisions are required by 40 CFR section 122.41 and apply to all NPDES permits.

Part 7 – TMDL Provisions

In 2009, the permit was amended to include provisions that are consistent with the assumptions and requirements of wasteload 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

The LA County MS4 Permit 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 or objectives by comparing results to the applicable standards and objectives in the Basin Plan. The permit establishes that the Principal Permittee shall monitor the mass emissions stations. The permit requires that mass emission sampling is conducted five times per year for the Watershed Rivers.

IV. STATUS OF PERMIT DEVELOPMENT

Regional Board staff plans to bring an updated permit for the Board's consideration in late spring 2012. Updating the LA County MS4 Permit is one of the highest priorities of the Board. Board staff in the Stormwater Permitting Unit is being assisted by staff from other programs, as well as by contractor support provided by the U.S. Environmental Protection Agency (US EPA).

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.

Since the kick-off meeting, staff has held numerous meetings upon request to discuss specifics with permittees, consultants representing permittees, and environmental organizations. In addition, staff has also been conducting inspections of several program areas, including municipal oversight of construction and post-construction stormwater controls and control measures to detect and eliminate illicit discharges and illicit connections to the MS4. The results of these inspections will help inform permit development and determine areas of possible customization on a watershed or individual Permittee basis.

On November 10, 2011, the Board held a public workshop on the issuance of the new LA County MS4 Permit. Staff made a presentation on the status of permit development and key elements of the permit. Permittees and other stakeholders also had an opportunity to address the Board to make comments and raise concerns.

Since the November 10, 2011 Board workshop, staff has continued working on a draft permit with the assistance of US EPA, as well as hold meetings with stakeholders to discuss various aspects of permit development.

A staff-level workshop with a focused discussion on incorporation of TMDLs and monitoring requirements is scheduled for January 23, 2012.

V. KEY ISSUES RAISED BY STAKEHOLDERS

The remainder of this memorandum summarizes the key issues that stakeholders have raised during the current effort to develop a draft LA County MS4 Permit for the Regional Board's consideration in late Spring 2012. The issues identified below have been raised during staff-level meetings and workshops, as well as the Regional Board workshop held on November 10, 2011. For many of these issues, staff has formulated conceptual approaches. However, in other areas, staff continues to formulate approaches that will be presented to stakeholders and the Regional Board at future meetings. As stated above, the purpose of this memorandum is to summarize the key issues raised to date, and not to provide responses to all concerns raised. Doing so at this time would be premature. Staff will provide responses to all comments received after a draft permit is released for public review and comment.

The Ventura County MS4 Permit issued by this Board is one of many recent MS4 permits that have been issued nationwide and within southern California. While the Ventura County MS4 permit provides guidance for developing an MS4 permit in southern California, there are a number of technical and policy aspects that are unique in Los Angeles County that staff is considering when drafting the LA County MS4 Permit for Board consideration. The following key issues are addressed in this memorandum:

Permit Structure

The current 2001 Permit is a single permit whereby all 86 permittees are assigned uniform requirements with additional requirements for the Principal Permittee.

One of the fundamental issues for the forthcoming permit was a reconsideration of the basic permit structure. The structure of an updated MS4 permit and the relationship among the permittees has been an issue raised by multiple permittees for several years. In 2006, the Cities of Downey and Signal Hill each submitted an individual Report of Waste Discharge (ROWD), which serves as an application for an individual MS4 permit. Also in 2006, five cities in the upper San Gabriel River watershed submitted a ROWD for a small group MS4 permit. In 2010, the County FCD submitted a ROWD also requesting an individual MS4 permit. The County FCD's ROWD asserted that there is a fundamental difference in their activities relative to the other municipalities and the unincorporated areas of the County of Los Angeles, in that the County FCD does not own or control land areas where pollutants originate. The County FCD also requested that if an individual MS4 permit was not issued to them, that it no longer be designated as the Principal Permittee and that it is relieved of Principal Permittee responsibilities. Regional Board staff evaluated these ROWDs and found them to be inadequate.

The federal Clean Water Act (CWA) section 402(p) and implementing regulations at 40 CFR section 122.26(a)(1)(v) allows 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 system that are similar in nature, or for individual discharges from MS4s.

At the May 25, 2011 kick-off meeting, Board staff requested input from the attendees on various permit structures. The permittees in attendance brought forth several key considerations, such as:

- The passage of Assembly Bill 2554 in 2010, which amended the Los Angeles County Flood Control Act. This statute allows the County FCD to assess a parcel tax for stormwater 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; and

- The Regional Board and US EPA have developed 34 TMDLs that need to be incorporated into the LA County MS4 permit, and permittees have set up jurisdictional groups on a watershed or subwatershed basis for TMDL implementation.

In addition, a shared comment from many stakeholders is that they would like the LA County MS4 permit to provide flexibility to allow them to pool resources to implement stormwater BMPs and address TMDL requirements on a watershed scale in the reissued MS4 permit. Board staff was motivated to set up a MS4 permit structure that would allow governance and compliance either through a watershed based group, or individually.

In response to a suggestion from permittees at the kick-off meeting, staff developed and distributed an online survey to permittees in order to solicit input regarding alternative permit structures, 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. Fifty-two permittees responded to the survey. The results of the survey showed that a majority of the permittees preferred a single MS4 permit for all municipalities and the County entities. A significant minority supported multiple watershed-based permits. Overall, 85 percent of the permittees that responded to the survey supported either a single MS4 permit or several individual watershed-based permits. A small number of permittees supported alternative groupings of adjacent municipalities instead of watershed-based groupings. Only four permittees expressed a preference for individual MS4 permits.

The issue of permit structure was a key subject for the Regional Board workshop on November 10, 2011. At that workshop, Board staff recommended a single permit with some sections devoted to universal requirements for all permittees and others devoted to requirements specific to each major Watershed Management Area (WMA), which would include TMDL implementation provisions. This structure is supported by section 402(p) of the Clean Water Act and 40 CFR section 122.26, subdivisions (a)(1)(v) and (a)(3)(ii). Staff explained that a single permit will ensure consistency and equitability in regulatory requirements within the county, while watershed-based sections within the single permit will provide flexibility to tailor permit provisions to address distinct watershed characteristics and water quality issues. Additionally, an internal watershed-based structure comports with the Regional Board's watershed-based TMDL requirements and the County FCD'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 stormwater and urban runoff pollution. Further, watershed-based sections may encourage collaboration among permittees to implement regional integrated water resources approaches such as stormwater capture and re-use to achieve multiple benefits.

Staff also explained that it did not plan to recommend multiple permits or individual permits for Signal Hill, Downey, the five upper San Gabriel River cities, or the County FCD. The information presented in the ROWDs does not reflect evolved program elements that have emerged over the past decade. Further, individually tailored permittee requirements can be provided in a single permit, where appropriate. In response to the request from the County FCD to be relieved of its responsibilities as Principal Permittee, staff agreed with this request. Staff explained that it did not intend to recommend any permittee as Principal Permittee in the updated permit and staff would continue to evaluate appropriate requirements for the County FCD in the permit.

While the Board did not take any formal action at the November 10, 2011 workshop, the Board supported staff's recommendation of structuring a single permit with a combination of universal requirements for all permittees and specific watershed-based requirements.

Incorporation of TMDLs

As part of the updated LA County MS4 Permit, the Regional Board must include provisions implementing 34 TMDLs into the permit. As explained above, NPDES permits are required by federal regulations to include numeric limitations consistent with the assumptions and requirements of all available TMDL wasteload allocations. These WLAs regulate the mass or concentration of constituents discharged into receiving waters. How the Regional Board translates WLAs into numeric limitations has garnered significant debate among the stakeholder community.

Recent US EPA guidance on this subject indicates that WLAs can be included in the permit either as numeric water quality based effluent limits (WQBELs) or as BMPs that have reasonable assurance to meet WLAs. Staff believes that since the WLAs are expressed numerically, numeric limitations in MS4 permits are appropriate. Many Permittees, on the other hand, have asserted that TMDL WLAs do not need to be interpreted as numeric limits, but can be implemented as BMPs that can achieve water quality objectives. On this subject, US EPA recommends that, "NPDES permitting authorities use numeric effluent limitations where feasible as these types of effluent limitations create objective and accountable means for controlling stormwater discharges."

To date, the Regional Board has only established numeric WQBELs 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 WQBELs. 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. Staff is considering similar approaches for the other TMDLs that have to be put into the permit, where appropriate. In addition, many of the permittees have asked that such an option is included in the reissued LA County MS4 Permit.

Another key issue raised by stakeholders is how the numeric limitations and associated implementation schedules derived from TMDLs will interact with other permit provisions. Many of the TMDLs that need to be incorporated have implementation periods that exceed the 5-year NPDES permit term and include performance based interim WLAs. Options under consideration by staff include acknowledgement in the permit provisions that if a permittee is in full compliance with the interim numeric limitations derived from the TMDL per an approved implementation plan/program, then although there may be exceedances of water quality standards in the receiving water, this would not represent a violation of the permit's Receiving Water Limitations.

Non-Stormwater Discharge Prohibition

As noted above, Part 1 of the 2001 Permit contains a requirement for permittees to effectively prohibit discharges of non-stormwater into the MS4 and to watercourses, except where such discharges are covered by a separate MS4 permit or fall within one of thirteen categories of flows that are conditionally exempted from the discharge prohibition.

Some permittees assert that the language in Part 1 of the current permit is inconsistent with federal requirements. These permittees assert that under the Clean Water Act, the MS4 permit is only required to prohibit non-stormwater discharges into, and not out of, the MS4. Staff and legal counsel do not agree with these permittees' interpretation of the Clean Water Act as the federal requirement to prohibit non-stormwater discharges into the MS4 is necessary to prevent non-stormwater discharges from the MS4 to the receiving water. This is consistent with Congress' intent to ultimately to control MS4 discharges to receiving waters.

Further, some permittees comment that some of the flows that are exempted from the non-storm water prohibition may contain pollutants that can cause violations of other provisions of the permit such as receiving water limitations. As noted above, the 2001 Permit conditionally exempts certain non-stormwater flows so long as they are not a source of pollutants. However, the effect of individual and collective exempted discharges into the MS4 on the quality of non-stormwater discharged from the MS4 has not been well characterized. Historically, the control measures required to achieve this effective prohibition have been those included in the illicit discharges/illicit connections elimination (IC/IDE) program of the SWMP. However, recent inspections of Permittees' IC/IDE program have indicated that while Permittees have conducted screening of their MS4 as required by the permit, non-stormwater discharges to the MS4 and watercourses continue, often resulting in exceedances of water quality standards. Staff is considering bringing some of the currently conditionally exempted flows, such as municipal water system line flushing, under individual NPDES permits, if appropriate.

Staff continues to evaluate options to improve the effectiveness of this section of the Permit through the use of dry weather outfall screening along with non-stormwater action levels.

Receiving Water Limitations

As noted above, Part 2 of the 2001 Permit contains a requirement that prohibits discharges from the MS4 that cause or contribute to violations of Water Quality Objectives or Standards. This section of the 2001 Permit also contains provisions that establish an "iterative process" whereby certain actions are required when exceedances of Water Quality Objectives or Standards occur. This iterative process includes submitting a Receiving Water Limitations Compliance Report; revising the SWMP and its components to include modified BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised SWMP.

Many permittees have expressed concern regarding compliance with receiving water limitations, because they claim a lack of clarity as to whether compliance with the iterative process in Part 2.3 deems them in compliance with the discharge prohibitions in Parts 2.1 and 2.2. Many Permittees believe that if they fully comply with the iterative process in response to exceedances of Water Quality Objectives or Standards, then those Permittees should not be in violation, and thus not be subject to enforcement, of the discharge prohibitions in the Receiving Water Limitations section of the permit.

Permittees have commented that improvement to water quality will be realized through implementation of additional BMPs or source control, that such BMPs will take time to implement, and that if permittees are found to be in non-compliance, it will deter them from investing in additional BMPs.

The Regional Board has held that compliance with the iterative process as outlined in the 2001 Permit is not a “safe harbor” for compliance with Water Quality Standards or Objectives, and that the discharge prohibitions are independently and separately enforceable provisions of the 2001 Permit. The Regional Board’s interpretation was recently upheld in July 2011 by the United States Court of Appeal for the Ninth Circuit in the *Natural Resources Defense Council (NRDC) v. County of Los Angeles* case. The Court ruled that the discharge prohibitions are independently enforceable requirements, separate and distinct from the iterative process requirements.

In evaluating the iterative process for the updated permit, staff has looked to see how other regional boards are dealing with this issue. Some regional boards have issued permits that contain not just receiving water monitoring, but also outfall monitoring paired with “action levels” that, if exceeded, trigger requirements to submit and implement a plan to enhance or implement additional BMPs to eliminate the exceedances of Water Quality Objectives or Standards. In the Regional Board’s deliberations on the Ventura County MS4 Permit, the Regional Board supported outfall monitoring, but rejected the use of action levels as proposed. Staff continues to evaluate options and tools that will acknowledge the iterative process of SWMP and BMP implementation, while ensuring accountability for taking appropriate, timely, and effective actions toward achieving Receiving Water Limitations.

Low Impact Development

Research over the past decade has shown the effectiveness of low impact development⁴ (LID) in reducing storm water discharges and improving receiving water quality. Effective BMP requirements on new development and redevelopment also offer a cost effective strategy to reduce pollutant loads to surface waters. These controls not only provide pollutant reduction/elimination but also treat water as a resource by augmenting groundwater supplies and reusing captured rainfall.

Recent MS4 permits issued across the nation and within California have included requirements for low impact development. In the 2010 Ventura County MS4 permit issued by this Board, LID requirements were required for certain developments throughout Ventura County. In Los Angeles County, several municipalities, including the Cities of Los Angeles and Santa Monica, have adopted LID ordinances and implemented LID programs.

Key issues with LID involve prioritization of BMPs, such as retention, over other treatment technologies, and provisions for offsite mitigation when onsite retention is not feasible. In addition, the American Society of Civil Engineers (ASCE) and the Water Environment Federation (WEF) have recommended a numerical BMP design standard for stormwater that is derived from a mathematical equation to maximize treatment of runoff volume for water quality

⁴ Low Impact Development (LID) is a stormwater management approach. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, store, evaporate, filter, and detain runoff close to its source. Techniques are based on the premise that stormwater management should not be seen as stormwater disposal. Instead of conveying and managing / treating stormwater in large, end-of-pipe facilities located at the bottom of drainage areas, LID addresses stormwater through small, cost-effective landscape features located at the lot level.

based on rainfall/runoff statistics and which is economically sound. The maximized treatment volume is cut-off at the point of diminishing returns for rainfall/runoff frequency. The ASCE and WEF's recommendation was incorporated in the water quality storm sizing for the Standard Urban Stormwater Mitigation Plan (SUSMP) in the 2001 LA County MS4 Permit. The Board also approved a numeric criterion for LID in the 2010 Ventura County MS4 Permit.

Many areas within the Los Angeles County are densely developed and there may be less opportunity for infiltration than areas covered by other MS4 permits. Because the growth rate in Los Angeles County has slowed and is projected to stay low, the effectiveness and controversy surrounding LID requirements is not as intense as during the Ventura County MS4 permit adoption. However, Staff is considering proposing language to require permittees to ensure that new and re-development projects implement LID similar to the Ventura County MS4 Permit requirements, including an emphasis on onsite retention, with offsite mitigation as an alternative where onsite retention is infeasible. Staff is also considering provisions to encourage adoption of local LID ordinances, and where LID ordinances are in place an option to demonstrate compliance with the new and redevelopment provisions of the permit through implementation of a local LID ordinance if reasonable assurance is provided that the LID ordinance will provide equivalent water quality benefit as that anticipated from the permit provisions.

Water Conservation

Some stakeholders have commented that the LA County MS4 permit should incentivize water conservation by requiring or incentivizing infiltration⁵ over other BMPs. There has been significant work accomplished by Los Angeles County Department of Public Works, City of Los Angeles and numerous water purveyors that have studied and mapped areas where stormwater can be effectively infiltrated. Further, Board staff is working with many stakeholders to develop salt and nutrient management plans to preserve our groundwater basins as viable resources for future water resources in Los Angeles County. However, there is no direct authority in the Clean Water Act or the California Water Code for the Regional Board to require that a given amount or percentage of stormwater be infiltrated. Nonetheless, staff understands the importance of increased water conservation as an important priority for our region.

Monitoring

The monitoring and reporting program in the current LA County MS4 Permit focuses on mass emission station and receiving water monitoring. This monitoring evaluates water quality in the receiving water rather than directly evaluating the nature of the stormwater and urban runoff that is discharged from the LA County MS4. There is a growing consensus regarding the need for outfall, or end-of-pipe, monitoring, which may provide more insightful information on the effectiveness of BMPs in reducing pollutant loads than mass emission monitoring. Outfall monitoring is necessary to determine compliance with numeric effluent limitations and may also provide information on which permittees are implementing more effective BMPs and which are not.

One of the key difficulties in implementing outfall monitoring is that there are thousands of MS4 outfalls that drain to receiving waters in Los Angeles County. Clearly, monitoring each outfall is neither cost effective nor practical. In the Ventura County MS4 Permit, each permittee is responsible for monitoring one "representative" outfall pipe in addition to the mass emission

⁵ Practices that capture and temporarily store stormwater before allowing it to infiltrate into the soil over a period of time.

monitoring. During the Ventura County MS4 permit development, these representative drains were proposed by the City of Ventura and reviewed by Regional Board staff. Specific drains were approved with requirements to monitor during both wet and dry seasons. Other methods were also considered such as rotating monitoring stations, watershed based monitoring, and monitoring on a less frequent than annual basis.

Staff has concluded that outfall monitoring is necessary and will provide key information for the LA County MS4 Permit, but has not yet determined a plan for the monitoring.

Compliance Determination

Permittees are understandably concerned about how compliance with the various provisions of the updated LA County MS4 Permit will be determined. This concern is due not only to potential enforcement actions that may be taken by the Regional Board, but also by citizen suits that may be initiated by third parties. For permittees, this concern was realized when the environmental groups Natural Resources Defense Council and Santa Monica Baykeeper brought citizen suits against the County of Los Angeles, the County FCD, and the City of Malibu for violations of the current permit. As discussed in more detail above, staff is considering development of a multifaceted approach to clarify compliance requirements in the updated permit. Elements that staff is considering include the use of action levels for non-stormwater discharges and WQBELs and/or implementation of BMPs that have a reasonable assurance of achieving WQBELs derived from TMDL WLAs.

Another issue raised by stakeholders is whether the updated permit will address whether permittees are jointly responsible for complying with permit provisions. In the 2006 amendment to the current LA County MS4 Permit to incorporate the Santa Monica Bay dry weather bacteria TMDL, the Board included a footnote stating that permittees were jointly responsible for complying with the TMDL provisions. This language was taken directly from the TMDL itself. Several permittees believe that assigning joint responsibility is unlawful, and request that such language not be reinstated in the updated MS4 permit. Staff believes that since MS4 discharges from multiple Permittees commingle prior to discharge to a receiving water, compliance with certain permit provisions, such as receiving water limitations, is the joint responsibility of all those Permittees who discharge to that receiving water.

While staff continues to evaluate options concerning compliance determination, it is clear that the updated permit needs to include language clearly describing how the Board intends to determine compliance with the various permit provisions.

VI. CONCLUSION

Staff has made substantial progress on some key issues concerning the reissuance of the Los Angeles County MS4 permit. However, there are a number of areas in which staff has not fully identified and evaluated options. Staff intends to continue the dialogue among the permittees and other stakeholders in order to meet a tentative schedule for Board consideration of the permit by late Spring 2012. Overall, staff feels there is an opportunity for the Board to issue an updated LA County MS4 Permit that can greatly improve water quality and potentially increase water resources in Los Angeles County.



California Regional Water Quality Control Board Los Angeles Region

RB-AR930



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Edmund G. Brown Jr.
Governor

TO: MS4 Permittees and Interested Persons

FROM: Renee A. Purdy, Section Chief *Renee A. Purdy*
Regional Programs

DATE: December 1, 2011

SUBJECT: NOTICE OF PUBLIC WORKSHOP ON THE DEVELOPMENT OF AN
UPDATED GREATER LOS ANGELES COUNTY MUNICIPAL SEPARATE
STORM SEWER SYSTEM (MS4) PERMIT

The Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) will hold a public workshop to discuss tentative requirements to be incorporated in the updated Greater Los Angeles County MS4 Permit. Los Angeles Water Board staff invites Co-permittees and interested persons to a public workshop on:

**Thursday, December 15, 2011
1:00 - 4:00 PM
California Regional Water Quality Control Board
First Floor Carmel Room
320 W. 4th Street
Los Angeles, CA 90013**

At the workshop, Los Angeles Water Board staff will discuss with Co-permittees and interested persons:

- Tentative permit requirements for the following minimum control measures comprising Co-permittees' core stormwater management program;
 - Development Construction Program
 - Planning and Land Development Program
 - Public Agency Activities Program
 - Industrial/Commercial Facilities Control Program
 - Public Information and Participation Program
 - Illicit Connections and Illicit Discharges Detection and Elimination Program
- Options for flexibility in the above core stormwater management program areas to address watershed priorities; and
- Tentative approaches to addressing non-stormwater MS4 discharges.

Another public workshop will be held on January 23, 2012 from 1:00 - 4:00 PM at the same location to discuss TMDL-related permit requirements and the Monitoring and Reporting Program.

Permittees and interested persons will have an opportunity to ask questions of Los Angeles Water Board staff and provide initial feedback. Please contact me at (213) 576-6622 or rpurdy@waterboards.ca.gov or, alternatively, Mr. Ivar Ridgeway at (213) 620-2150 or iridgeway@waterboards.ca.gov with questions.

California Environmental Protection Agency

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RB-AR931

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6/17/2011 20:16 uyeda@pbworld.com	Pamela Uyeda
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**Los Angeles MS4 Permit:
Minimum Control Measure
Workshop**

Los Angeles Regional Board
December 15, 2011

**Minimum Control Measure –
Industrial/Commercial Sources**

- Significant Difference(s)
 - Prescriptive BMP implementation (e.g. CASQA manual)

**Storm Water Management
Program: Minimum Control
Measures**

40 CFR 122.26(d)(2)(iv)

- Industrial / Commercial Program
- Development Construction Program
- Illicit Connections/Illicit Discharges Elimination Program
- Public Agency Activities Program
- New Development/Redevelopment Program
- Public Information and Participation Program

**Minimum Control Measure –
Development Construction Program**

- Key Objective: Ensure the implementation of BMPs at construction sites to reduce the contribution of pollutants to the MS4 from construction activities.
- Key Requirements
 - Inventory of grading permits, encroachment permits, demolition permits, building permits, or construction permits
 - Development, review and written approval of a Erosion and Sediment Control Plan (ESCP)
 - BMP implementation (per CASQA or Caltrans manual)

**Minimum Control Measure –
Industrial/Commercial Sources**

- Key Objective: Ensure the implementation of BMPs at industrial/commercial facilities to reduce the contribution of pollutants to the MS4 from industrial/commercial activities.
- Key Requirements
 - Watershed-based database of all industrial and commercial facilities
 - 2 Inspections of all designated industrial/commercial facilities within 5 years
 - Ensure BMP implementation (e.g. CASQA manual)
 - Verification of Permit Coverage and No Exposure Condition (if Necessary)
 - Investigation of Regional Board Submitted Complaints

**Minimum Control Measure –
Development Construction Program**

- Significant Difference(s)
 - Electronic Inventory
 - Elimination of Local SWPPP Requirement
 - Prescriptive BMP implementation (e.g. CASQA manual and Caltrans Manual)
 - Tiered BMP Approach
 - e.g. Non-storm water management listed for larger sites
 - Risk Level BMP Implementation
 - E.g Sites discharging to sediment/siltation require enhanced BMPs

Minimum Control Measure – Illicit Connections and Illicit Discharges Elimination (Non-stormwater Discharges Oversight)

- Key Objective: Effectively prohibit non-storm water discharges to the MS4.
- Key Requirements
 - Development and implementation a Dry Weather Outfall Screening Program to identify priority areas.
 - Monitoring/Field Screening of selected outfalls within priority areas.
 - Development procedures for conducting source investigations for IC/IDs
 - Development of procedures for eliminating for IC/IDs

Minimum Control Measure – Public Agency Activities Program

- Significant Difference(s)
 - Implementation of prescriptive BMPs (e.g Caltrans Manual)
 - Implementation of an Integrated Pesticide Management Program.

Minimum Control Measure – Illicit Connections and Illicit Discharges Elimination (Non-stormwater Discharges Oversight)

- Significant Difference(s)
 - Elimination of illicit connection screening for all storm water pipes of a given size.
 - Use of field sampling/monitoring to identify potential ICs/IDs
 - Identification of Priority Areas and stations within the priority areas
 - Development of a protocol to eliminate ICs/IDs

Minimum Control Measure- New Development and Redevelopment

- Key Objective: Minimize the impacts of development and significant re-development projects on water quality and hydrology.
- Key Requirements
 - On-site retention of the storm water runoff volume resulting from the 85th percentile, 24-hour storm or the 0.75 inch 24-hour storm, whichever is greater.
 - Off-site mitigation required where on-site retention is technically infeasible.
 - Development of a prioritized list of off-site mitigation projects

Minimum Control Measure – Public Agency Activities Program

- Key Objective: Minimize storm water pollution impacts from permittee owned or operated facilities and activities.
- Key Requirements
 - Maintain an inventory and map of all Permittee-owned or operated facilities.
 - Implement activity specific BMPs (such as catch basin cleaning, open channel maintenance, street sweeping, and appropriate pesticide application)
 - Training of employees and contractors.

Minimum Control Measure- New Development and Redevelopment

- Significant Difference(s)
 - On-site retention of the storm water runoff volume resulting from the 85th percentile, 24-hour storm or the 0.75 inch 24-hour storm, whichever is greater.
 - Treatment BMPs would only be allowed in the form of biofiltration (only when infiltration is technically infeasible).
 - The allowance of subwatershed/regional BMPs in lieu of on-site BMPs

Minimum Control Measure- New Development and Redevelopment

Interim Hydromodification.
(Sites < 50 acres)

- Applies to "Natural Drainage Areas"
- Requirements
 - On-site retention of the volume of runoff from the 95th percentile, 24-hour storm, or
 - BMP implementation to ensure 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.
 - The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study

Minimum Control Measure - Public Information and Participation Program

- Key Objective: To measurably increase the knowledge of the target audience about the adverse impacts of storm water pollution and change the waste disposal and storm water pollution generation behavior of target audiences.
- Key Requirements
 - Watershed-wide reporting hotline
 - Storm water pollution prevention advertising campaign
 - Distribution of outreach materials
 - Conduct storm water pollution prevention public service announcements
 - Provide schools within each school district in the watershed storm water pollution prevention materials

Minimum Control Measure- New Development and Redevelopment

Interim Hydromodification
(Sites > 50 acres)

- Applies to "Natural Drainage Areas"
- Requirements
 - On-site project infiltration of at least the runoff from a 2-year, 24-hour storm event, or
 - BMP implementation to ensure 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. These conditions must be substantiated by hydrologic modeling acceptable to the Permittee, or
 - The Erosion Potential (Ep) in the receiving water channel <1.

Storm Water Management Program: Minimum Control Measures (Flexibility)

- Substitution Process
 - Specific Permit Requirements
 - Individual Plan review
- Equivalency Demonstration

Minimum Control Measure- New Development and Redevelopment

Interim Hydromodification

- Significant Difference(s)
 - The inclusion of very specific and detailed hydromodification requirements



LA County MS4 Permit Reissuance December 15, 2011 Workshop

Part II: Regulation of
Non-Stormwater Discharges

Background

- Permittees must effectively prohibit non-stormwater discharges into separate storm sewers
- Some exemptions allowed
 - Discharges covered under an NPDES permit
 - Categorical exemptions (conditionally allowed)
- Illicit Discharge Detection and Elimination (IDDE) Program required

Background (cont.)

- Order No. 01-182
 - Includes non-stormwater discharge prohibition
 - Includes list of exempted non-stormwater discharges
 - Discharges covered under an NPDES permit
 - Discharges resulting from natural flows (Category A)
 - Discharges from emergency fire fighting (Category B)
 - Discharges incidental to urban activities (Category C)
 - Includes IDDE program requirements
 - Requires dry-weather monitoring at mass emission stations

Evaluation of Current Approaches

- IDDE program effectiveness
 - Review of annual reports
 - Inspections
- Results of dry-weather monitoring data from mass emission stations (MES)
 - Based on annual reports from 2005 to 2011
 - Provides 15 dry-weather data sets for each MES

Results of Recent IDDE Program Inspections

- Widespread presence of persistent dry weather flows
- Little done to identify the source(s) and characteristics
- No program in place to address these persistent flows

Evaluation of Dry-Weather Monitoring Data

- Used to evaluate effectiveness of programs to prohibit non-stormwater discharges
- Used to make preliminary determination regarding whether reasonable potential exists for non-stormwater discharges from the MS4 to contribute to WQS exceedances during dry weather

MES Dry-Weather Data (2005-2011): Exceedances of WQS

Parameter	Santa Clara River	Los Angeles River	Dominguez Channel	Ballona Creek	Malibu Creek	San Gabriel River	
						Upper Portion	Lower Portion
Total Coliform	√	√	√	√	√	√	√
Fecal Coliform	√	√	√	√	√	√	√
Enterococcus	√	√	√	√	√	√	√
Chloride	√	√	√	√	√	√	√
Nitrate				√			
Sulfate					√	√	√
Total Dissolved Solids	√	√	√	√	√	√	√
Methylene Blue Active Substances	√						
Cyanide		√	√	√		√	√
Total Aluminum	√		√	√		√	
Dissolved Copper			√	√		√	
Total Copper	√	√	√	√		√	
Dissolved Lead				√		√	
Total Lead			√	√		√	
Total Mercury		√				√	
Total Nickel						√	
Dissolved Selenium	√	√		√	√		√
Total Selenium	√	√	√	√	√	√	√
Dissolved Zinc						√	
Total Zinc				√		√	

Summary of Evaluation

- Non-stormwater discharges from the MS4 are routinely observed
- Water quality at MES indicates frequent and widespread exceedances of WQS during dry-weather
- Some exempted categories of non-stormwater discharges and some permitted non-stormwater discharges cause concerns

Proposed Enhancements - 1

- Refine list of conditionally exempted non-stormwater discharges
 - Include more specific discharge conditions
 - Potentially remove several currently exempted discharges (e.g., landscape irrigation)
 - Evaluate general permits for some exempted discharges

Proposed Enhancements - 2

- Incorporate non-stormwater action levels as interim approach
- Uses:
 - To evaluate effectiveness of programs to prohibit non-stormwater discharges
 - To trigger actions to identify and address non-stormwater discharges
 - To determine reasonable potential for non-stormwater discharges from the MS4 to contribute to WQS exceedances during dry weather

Non-stormwater Action Levels (cont.)

- Based on water quality objectives
- Included for inland and shoreline discharges
- Established for pollutants showing reasonable potential based on MES data; additional pollutants of concern
- Applied to major outfalls within each watershed management area
- Outfall based monitoring required to assess attainment/exceedance of action levels

Non-stormwater Action Levels (cont.)

- Exceedance indicates potential lack of compliance with requirement to effectively prohibit non-stormwater discharges
- Exceedance triggers requirement to investigate source(s)
- Required response by Permittee(s) depends on source
 - Illicit discharge = Eliminate
 - Exempted category = Re-evaluate
 - Discharges violating NPDES permit = Report to Regional Water Board
 - Unknown or natural source = Additional monitoring and evaluations, and program changes as necessary

Proposed Enhancements - 3

- Refine IDDE Program
 - Develop and implement dry-weather outfall screening program
 - Identify priority areas based on non-stormwater action levels
 - Conduct source investigations
 - Implement targeted procedures to address illicit connections/illicit discharges

Conclusion

- Three areas of enhancement to improve regulation of non-stormwater discharges
 - Refine list of conditionally exempted non-stormwater discharges
 - Incorporate non-stormwater action levels
 - Refine IDDE Program

DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues

Minimum Control Measure – Industrial/Commercial Storm Water Sources

<p>Primary Objectives:</p>	<ul style="list-style-type: none"> Identify and track industrial/commercial facilities which may be critical sources of storm water pollution to the MS4. Educate and raise storm water awareness of industrial/commercial facility employees to ultimately change behaviors that will reduce pollutant discharges to the MS4. Ensure the implementation of BMPs at industrial/commercial facilities to reduce the contribution of pollutants to storm water from industrial/commercial activities and materials storage. Increase the detection of illicit discharges and connections to the MS4 from industrial/commercial facilities. Minimize the occurrence of illicit discharges and connections to the MS4 from industrial/commercial facilities.
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<p>Legal Authorities:</p>	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)(A) and (C)) Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B))
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Category	Description of Requirement	Origin of Requirement	Notes
General	Ensure implementation of pollutant reduction and control measures at industrial and commercial facilities, with the objective of reducing pollutants in storm water.	Draft April 2011 LA County and Ventura County MS4 Permits	
Track	Maintain an updated watershed-based inventory or database of all industrial and commercial facilities within the jurisdiction that are critical sources of storm water pollution. Incorporate this information into GIS.	Draft April 2011 LA County and Ventura County MS4 Permits	
Track	This permit requirement lists the specific information which must be included in the inventory or database of critical sources.	Draft April 2011 LA County and Ventura County MS4 Permits	
Track	Update the inventory or database of critical sources at least annually.	Draft April 2011 LA County and Ventura County MS4 Permits	
Inspect	Inspect all commercial facilities identified by the Permit twice during the 5-year term of the Order, with the first mandatory compliance inspection within 2 years after Order adoption date. This permit requirement includes subsections that detail inspection and BMP requirements for different types of facilities, such as, (1)	Ventura County MS4 Permit	

	restaurants, (2) automotive service facilities, (3) retail gasoline outlets and automobile dealerships, and (4) commercial nurseries and nursery centers.		
Inspect	Conduct compliance inspections at industrial facilities identified by the Permit. Initial inspection must be within 2 years after Order adoption date. Conduct follow-up inspections at 20 percent of non-exposure facilities each year after the initial inspections are complete.	Ventura County MS4 Permit	
Inspect	During each inspection, confirm that each operator has a current WQID number, has a No Exposure Certification, if applicable, and is effectively implementing BMPs for the reduction of pollutants in storm water discharges from the facility or maintaining a condition of no exposure of industrial activities to storm water, if applicable.	Ventura County MS4 Permit	
Ensure Compliance	Ensure BMP implementation of the source control BMPs identified in the <i>CASQA Industrial and Commercial BMP Handbook</i> .	Ventura County MS4 Permit	
Ensure Compliance	Ensure implementation of additional pollutant-specific controls for critical sources that discharge to MS4s that directly discharge to ESAs or to CWA § 303(d) listed impaired waterbodies.	Ventura County MS4 Permit	
Ensure Compliance	Implement a progressive enforcement policy to ensure that facilities are brought into compliance with all storm water requirements within a reasonable time period, as specified in the Permit.	Draft April 2011 LA County and Ventura County MS4 Permits	
Interagency Coordination	A Permittee may refer a violation(s) of its municipal storm water ordinances and California Water Code § 13260 by Industrial and Commercial facilities to the Regional Water Board provided that the Permittee has conducted and documented at least two follow-up inspections and two warning letters or notices of violation.	Draft April 2011 LA County and Ventura County MS4 Permits	
Interagency Coordination	For facilities in violation of municipal storm water ordinances and subject to the Industrial Activities Storm Water General Permit (IASGP), 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.	Draft April 2011 LA County and Ventura County MS4 Permits	
Interagency Coordination	Initiate, within one business day of complaint transmittal by the Regional Water Board, investigation of complaints (other than non-storm water discharges to the MS4) from facilities.	Draft April 2011 LA County and Ventura County MS4 Permits	
Interagency Coordination	Provide assistance to the Regional Water Board for enforcement actions, as directed by the Regional Water Board Executive Officer.	Draft April 2011 LA County and Ventura County and Ventura	

Last Updated: October 27, 2011

Los Angeles County MS4 Permit Development

Interagency Coordination	Participate in an enforcement task force with the Regional Water Board and other public agencies.	County MS4 Permits Draft April 2011 LA County and Ventura County MS4 Permits
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DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues
Minimum Control Measure – Development Construction Program

<p>Primary Objectives:</p>	<ul style="list-style-type: none"> Prevent illicit construction-related discharges of pollutants into the MS4. Ensure that structural and non-structural BMPs are implemented and maintained. Reduce discharge of pollutants from construction sites to the MEP. Minimize the potential for sediment discharges from construction activities to impact sensitive receiving waterbodies. Minimize soil compaction during construction activities to preserve the highest potential for infiltration of post-construction storm water.
<p>Legal Authority:</p>	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)(D)) Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B))
<p>Category Purpose</p>	<p>Description of Requirement</p> <p>Each Permittee shall implement a construction program that prevents illicit construction-related discharges of pollutants into the MS4, implements and maintains structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites, reduces construction site discharges of pollutants from the MS4 to the MEP, and prevents construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.</p>
<p>Applicability</p>	<p>Origin of Requirement</p> <p>Ventura County MS4 Permit</p> <p>Contractor, with language from the State Water Board Construction General Permit (CGP)</p>
<p>Inventory/Electronic Tracking System</p>	<p>Notes</p> <p>Ventura County MS4 Permit</p> <p>SWRCB's Draft Small MS4s General Permit</p>

Category	Description of Requirement	Origin of Requirement	Notes
	<p>requirement, the use of a database or GIS system is encouraged, but not required.</p> <p>The tracking system shall contain the following information:</p> <ul style="list-style-type: none"> (a) Relevant contact information for each project (e.g., name, address, phone, email, etc. for the owner and contractor), (b) The basic site information including location, status, size of the project and area of disturbance, (c) 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, (d) Significant threat to water quality status, based on consideration of factors listed in Appendix 1 to the State Water Board's Constructin General Permit (CGP), (e) Current construction phase. (f) The required inspection frequency, (g) The project start and anticipated completion dates, (h) Whether the project has coverage under the State Water Board's CGP, (i) The date the Permittee approved the erosion and sediment control plan (j) Post-Construction Structural BMPs subject to Operation and Maintenance Requirements. 	<p>Contractor recommends the addition of Post-Construction BMPs to the tracking system for continuity between Construction and Post-Construction Phases.</p>	
<p>Plan Review and Approval Procedures</p>	<p>Prior to issuance of a grading or building permit, the operator shall submit the Erosion and Sediment Control Plan (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.</p>	<p>SWRCB's Draft Small MS4s General Permit</p>	
<p>Criteria for Review</p>	<p>The ESCP must include the elements of a Storm Water Pollution Prevention Plan (SWPPP). Controls must be consistent with the applicable California Stormwater Quality Association (CASQA) Best Management Practices Handbooks (or Caltrans Handbooks for public transportation related construction projects) and tailored to the risks posed by the project. Projects are ranked from Low Risk</p>	<p>Ventura County MS4 Permit SWRCB's Draft Small MS4s General Permit and the CGP</p>	

Category	Description of Requirement	Origin of Requirement	Notes
<p>Required Elements of the ESCP/SWPPP</p>	<p>(Risk 1) to High Risk (Risk 3). Project risks are calculated based on the potential for erosion from the site and the sensitivity of the receiving waterbody. Receiving waterbodies that are listed on the Clean Water Act (CWA) Section 303(d) list for sediment or siltation are considered high risk. Likewise, waterbodies with designated beneficial uses of SPWN, COLD, and MIGRATORY are also considered to be high risk. The combined (sediment/receiving water) site risk may be calculated using the methods provided in Attachment 1 of the State Water Board's CGP.</p> <p>Applicable BMP controls for projects of different sizes are referenced in Tables VI.C.10-A, B, and C of this order.</p> <p>Applicable BMPs for enhanced requirements for high-risk sites are referenced in Table VI.C.10-D. of this order.</p> <p>Applicable BMPs for paving projects are described in Table VI.C.10-E. of this order.</p>	<p>Ventura County MS4 Permit</p> <p>SWRCB's Draft Small MS4s General Permit and CGP</p> <p>Contractor recommends limitations on soil disturbance during wet weather, minimizing footprint of the disturbed area and protection of native vegetation and trees.</p>	

Category	Description of Requirement	Origin of Requirement	Notes
	<p>management; sanitary waste management),</p> <ul style="list-style-type: none"> Rain Event Action Plan (REAP) when soil disturbance activities will be conducted during the wet-weather season. 		
Rationale for Selection and Design of BMPs	The ESCP/SWPPP must include the rationale for the selection and design of the proposed BMPs including quantifying the expected soil loss from different BMPs.	Ventura County MS4 Permit and the SWRCB's Draft Small MS4s General Permit	
Certification	<p>(A) Each Permittee shall require that for projects disturbing 1 acre or more, the ESCP/SWPPP is developed and certified by a Qualified SWPPP Developer (QSD).</p> <p>(B) Each Permittee shall require that all structural BMPs be designed by a California licensed engineer.</p> <p>(C) Each Permittee shall require that for all projects, the landowner or the landowner's agent sign a statement on the Local ESCP/SWPPP to the effect:</p> <p><i>"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 Local SWPPP to reflect current conditions, or failing to properly and/or adequately implement the ESCP/SWPPP may result in revocation of grading and/or other permits or other sanctions provided by law."</i></p>	<p>State Water Board CGP</p> <p>Ventura County MS4 Permit</p>	
Confirming Coverage under Other Permits	Prior to issuing a grading or building permit, the Permittee shall verify that the construction site operators have existing coverage under applicable permits, including, but not limited to the State Water Board's CGP, State Water Board 401 Water Quality Certification, U.S. Army Corp 404 permit, and California Department	SWRCB's Draft Small MS4s General Permit	

Category	Description of Requirement	Origin of Requirement	Notes
ESCP/SWPPP Plan Review Checklist	<p>of Fish and Game 1600 Agreement.</p> <p>The Permittee shall develop a checklist to be used to conduct and document review of each ESCP/SWPPP.</p>	SWRCB's Draft Small MS4s General Permit	
Inspection Authority	<p>the Permittee shall use legal authority to implement procedures for inspecting public and private projects and conducting enforcement if necessary.</p>	SWRCB's Draft Small MS4s General Permit	
Inspection Frequency	<p>The Permittee shall inspect all phases of construction as follows:</p> <p>(1) Prior to Land Disturbance: Prior to allowing an operator to commence land disturbance, the 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.</p> <p>(2) Grading and Land Development: During grading and land development activities, conduct inspections in accordance with the frequencies specified in Section VI.C.10-F of this Order.</p> <p>(3) Streets and Utilities: During street and utilities activities, conduct inspections in accordance with the frequencies specified in Table VI.C.10-F of this Order.</p> <p>(4) Vertical Construction: During vertical construction activities, conduct inspections in accordance with the frequencies specified in Table VI.C.10-F of this Order.</p> <p>(5) Final Landscaping and Site Stabilization: At the conclusion of the project, the Permittee shall inspect 10% of all projects 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.</p>	SWRCB's Draft Small MS4s General Permit	
Inspection Procedures	<p>The Permittee shall develop, implement, and revise as necessary, standard operating procedures that identify the inspection and enforcement procedures the Permittee will follow.</p> <p>Inspections of construction sites, and the standard operating procedures, shall include, but are not limited to:</p> <p>(1) Verification of active coverage under the State Water Board's CGP for projects disturbing 1 acre or more, or are part of a</p>	<p>SWRCB's Draft Small MS4s General Permit</p> <p>Contractor recommends sampling and analysis of storm</p>	

Category	Description of Requirement	Origin of Requirement	Notes
Enforcement Procedures	<p>planned development that will disturb 1 acre or more.</p> <p>(2) Review of the applicable ESCP/SWPPP and inspection of the construction site to determine whether all BMPs have been selected, installed, implemented, and maintained according to the approved plan.</p> <p>(3) Assessment of the appropriateness of the planned BMPs and their effectiveness.</p> <p>(4) Visual observation and record keeping of non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff.</p> <p>(6) Sampling and analysis of storm water runoff discharges from the property when visual observation indicates turbidity in the storm water discharge.</p> <p>(7) Development of a written or electronic inspection report generated from an inspection checklist used in the field</p> <p>(8) 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 VI.C.10-F of this Order.</p> <p>(1) Take all necessary follow-up actions (e.g., re-inspection, enforcement) to ensure compliance in accordance with the Permittee's Legal Authority and Enforcement Response Plan. At a minimum, follow-up inspections shall be conducted within 2 weeks after for inspected sites that have not adequately implemented their ESCP/SWPPP.</p> <p>(2) The Permittee shall track and report these follow-up inspections and enforcement actions.</p> <p>(3) Each Permittee shall take additional enforcement actions to achieve compliance as specified in municipal codes, if compliance with municipal codes, ordinances, or permits has not been attained.</p> <p>(4) Each Permittee can refer sites to the Regional Water Board for joint enforcement actions for violation of municipal storm water ordinances and the CGP, after conducting a minimum of 2 site inspections and issuing a minimum of two written notices to the operator regarding the violation (copied to the</p>	<p>water discharge from the property when visual observation indicates turbidity.</p> <p>Ventura County MS4 Permit</p>	

Category	Description of Requirement	Origin of Requirement	Notes
Certificate of Occupancy	Regional Water Board. 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.	Ventura County MS4 Permit	
Training of Permittee Staff	<p>Task Description – The Permittee shall ensure that all staff whose primary job duties are related to implementing the construction storm water program are adequately trained.</p> <p>Implementation Level – The Permittee may conduct in-house training or contract with consultants. Training shall be provided to the following staff positions of the MS4:</p> <p>(a) 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 plans and the key objectives of the State Water Board Qualified SWPPP Developer (QSD) program. Permittees may provide internal training to staff or require staff to obtain QSD certification.</p> <p>(b) Erosion Sediment Control/Storm Water Inspectors - The 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 ensure that a designated person on staff who has been trained in the key objectives of the QSD/QSP programs supervise inspection operations. Permittees may provide internal training to staff or require staff to obtain QSD/QSP certification.</p> <p>(c) Third-Party Plan Reviewers, Permitting Staff, and Inspectors - If the Permittee utilizes outside parties to conduct inspections and/or review plans, the Permittee shall ensure these staff are trained per the requirements listed above.</p>	SWRCB's Draft Small MS4s General Permit and collaboration between the Regional Water Board staff and the contractor.	
Education Outreach to Development Community	The Permittee shall develop and distribute educational materials to construction site operators. The Permittee shall do the following: (a) Each year, provide information on training opportunities for	SWRCB's Draft Small MS4s General Permit	

Los Angeles County MS4 Permit Development

Category	Description of Requirement	Origin of Requirement	Notes
	<p>construction operators on BMP selection, installation, implementation, and maintenance as well as overall program compliance</p> <p>(b) Develop or utilize existing outreach tools (i.e. brochures, posters, etc.) aimed at educating construction operators on appropriate selection, installation, implementation, and maintenance of storm water BMPs, as well as overall program compliance.</p> <p>(c) Distribute appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. The Permittee's contact information and website shall be included in these materials.</p> <p>(d) Update the existing website to include information on appropriate selection, installation, implementation, and maintenance of BMPs, as well as overall program compliance.</p>		

Table VI.C.10-A. Minimum Set of BMPs for All Construction Sites

Minimum Set of BMPs for All Construction Sites	CASQA Handbook	Caltrans Handbook ¹
Erosion Controls		
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
Sediment Controls		
Silt Fence	SE-1	SC-1
Sand Bag Barrier	SE-8	SC-8
Stabilized Construction Site Entrance/Exit	TC-1	TC-1
Non-Storm Water Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations	NS-2	NS-2
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-2
Spill Prevention and Control	WM-4	WM-4
Solid Waste Management	WM-5	WM-5
Concrete Waste Management	WM-8	WM-8
Sanitary/Septic Waste Management	WM-9	WM-9

¹ Applies to public roadway projects.

Table VI.C.10-B. Additional BMPs Applicable to Construction Sites Disturbing 1 Acre or More but Less Than 5 Acres

BMPs	CASQA Handbook	Caltrans Handbook ¹
Erosion Controls		
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
Sediment Controls		
Fiber Rolls	SE-5	SC-5
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/ or Vacuum	SE-7	SC-7
Storm Drain Inlet Protection	SE-10	SC-10
Additional Controls		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Entrance/ Exit	TC-1	TC-1
Stabilized Construction Roadway	TC-2	TC-2
Entrance/ Exit Tire Wash	TC-3	TC-3
Non-Storm Water Management		
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9

¹ Applies to public roadway projects.

Table VI.C.10-C. Additional BMPs Applicable to Construction Sites Disturbing 5 Acres or More

BMPs	CASQA Handbook	Caltrans Handbook ¹
Sediment Controls		
Scheduling	EC-1	SS-1
Check Dam	SE-4	SC-4
Tracking Control BMPs		
Stabilized Construction Entrance/ Exit	TR-1	TC-1
Non-Storm Water Management		
Vehicle and Equipment Maintenance	NS-10	NS-10
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Spill Prevention and Control	WM-4	WM-4

¹ Applies to public roadway projects.

Table VI.C.10-D. Additional Enhanced BMPs for High Risk Projects

BMPs	CASQA Handbook	Caltrans Handbook ¹
Erosion Controls		
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
Slope Drains	EC-11	SS-11
Sediment Controls		
Silt Fence	SE-1	SC-1
Fiber Rolls	SE-5	SC-5
Sediment Basin	SE-2	SC-2
Check Dam	SE-4	SC-4
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/or Vacuum	SE-7	SC-7
Sand Bag Barrier	SE-8	SC-8
Storm Drain Inlet Protection	SE-10	SC-10
Additional Controls		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Entrance/Exit	TC-1	TC-1
Stabilized Construction Roadway	TC-2	TC-2
Entrance/Exit Tire Wash	TC-3	TC-3
Advanced Treatment Systems ¹		
Non-Storm Water Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering only under NPDES Permit No. CAG994004)	NS-2	NS-2
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9
Vehicle and Equipment Maintenance	NS-10	NS-10
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-2
Spill Prevention and Control	WM-4	WM-4
Solid Waste Management	WM-5	WM-5

¹ Applies to public roadway projects.

Table VI.C.10-E-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.

Table IV.C.10-F. Inspection Frequencies

Site Risks	Inspection Frequency
a. All sites one (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 ¹ and 2) within 48 hours of a 1/2-inch rain event and at least once every two weeks
b. Other sites one (1) acre or more determined to be a significant threat to water quality.	
c. All other construction sites with one (1) acre or more of soil disturbance not meeting the criteria above	At least monthly
d. Construction sites less than one (1) acre in size	As needed based on the evaluation of the factors that are a threat to water quality
A follow-up inspection shall take place within two weeks for inspected sites that have not adequately implemented the ESCP/SWPPP.	
*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.	

¹ www.srh.noaa.gov/forecast

DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues
Minimum Control Measure – Illicit Connections and Illicit Discharges Detection and Elimination Program (IC/ID)

<p>Primary Objectives:</p> <ul style="list-style-type: none"> • Gain an understanding of the MS4 and possible sources of pollution to the MS4 through mapping activities and to provide a tool to track or trace illicit discharges. • Minimize the occurrence of illicit discharges and connections to the MS4. • Increase the detection of illicit discharges and connections to the MS4 which do occur and eliminate them as needed. • Document sufficient information to demonstrate the effectiveness of the IC/ID program. 	
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<p>Regulatory Authority:</p> <ul style="list-style-type: none"> • Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B)) 	
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Category	Description of Requirement	Origin of Requirement	Notes
General	Continue to implement an IC/ID Program to detect, investigate, and eliminate IC/IDs to the storm drain system.	Draft April 2011 LA County and Ventura County MS4 Permits	
General	Ensure that the Permittee has adequate legal authority to prohibit IC/IDs to the storm drain system and enable enforcement capabilities to eliminate the source of IC/IDs:	Draft April 2011 LA County and Ventura County MS4 Permits	
General	<p>The IC/ID Program must consist of at least the following major components:</p> <ol style="list-style-type: none"> (1) An up-to-date storm sewer system map (see Part X) (2) Procedures for identifying priority areas within the MS4 likely to have IC/IDs, and a list of all such areas identified in the system (see Part X) (3) Procedures for field screening to detect IC/IDs (see part X) (4) Procedures for conducting source investigations for IC/IDs (see Part X) (5) Procedures for eliminating the source of IC/IDs (see Part X) (6) Spill response plan (see Part X) (7) IC/ID education and training for Permittee staff (see Part X) 	Draft April 2011 LA County and Ventura County MS4 Permits and SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide.	

Category	Description of Requirement	Origin of Requirement	Notes
Mapping	<p>Develop and maintain an up-to-date, accurate map of the MS4. If possible, the map should be maintained in GIS. The map must include at least, the following:</p> <ul style="list-style-type: none"> (1) MS4 outfalls (2) Drainage areas contributing to those outfalls (3) The location and length of underground storm drain pipes 18 inches and greater in diameter (4) The location and length of open stormwater channels (5) Priority areas (6) Receiving waters (7) Field screening stations (8) Dry weather diversions 	<p>Draft April 2011 LA County and Ventura County MS4 Permits and SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide</p>	
Priority Areas	<p>Identify priority areas in the MS4 and include them on the MS4 map. The Permit defines specific types of areas which must be identified as priority areas and requires that at least 20 percent of the system be identified as a priority area. The list of priority areas must be evaluated yearly to determine whether areas should be added or removed from the list.</p>	<p>Draft April 2011 LA County and Ventura County MS4 Permits and SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide</p>	
Field Screening	<p>Develop and implement a Dry Weather Field Screening and Analytical Monitoring Program to detect and eliminate IC/IDs.</p>	<p>SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide</p>	
Field Screening	<p>Document how the Dry Weather Field Screening and Analytical Monitoring Program will be implemented with written procedures. Procedures must be updated to reflect current program.</p>	<p>SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide</p>	
Field Screening	<p>Identify a minimum of [specify number] stations within the priority areas it identified in Part X at which field observations, field screening monitoring and analytical monitoring will take place. This list should be updated annually in concert with the evaluation of priority areas.</p>	<p>SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide</p>	
Field Screening	<p>Conduct dry weather field observations and field screening</p>	<p>SWRCB's Draft Small</p>	

Category	Description of Requirement	Origin of Requirement	Notes
	monitoring at each station identified above at least once per year.	MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Field Observations - Visually observe each identified station and document the observations in either hardcopy and/or electronic format.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Field Screening Monitoring Requirements - Conduct a field screening analysis for the following constituents: XX, XX, XX, XX, and XX. Samples must be collected and analyzed consistent with the procedures required by 40 CFR Part 136	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Conduct sampling of flow or ponded runoff if observed at a field screening station and there has been at least seventy-two (72) hours of dry weather prior to the observation.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Field Screening	Conduct an annual evaluation of the Dry Weather Field Screening and Analytical Monitoring Program to determine whether changes or updates are needed. Make changes as necessary.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Illicit Discharge Investigation & Elimination	Develop written procedures for conducting investigations to identify the source of all illicit discharges, including procedures to eliminate the discharge once the source is located.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Illicit Discharge Investigation & Elimination	Conduct an investigation(s) to identify and locate the source of any continuous or intermittent non-stormwater discharge within 48 hours of becoming aware of the illicit discharge. Part VI.C.12.e.iii specifies conditions which must be met for conducting the investigations.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Illicit Discharge Investigation & Elimination	Corrective Action to Eliminate Illicit Discharges – Once the source of the illicit discharge has been determined, the Permittee must immediately notify the responsible party of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 48 hours of notification. The Permittee must formally verify and document.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	

Category	Description of Requirement	Origin of Requirement	Notes
Illicit Connection Investigation & Elimination	that the illicit discharge has been eliminated. Conduct screening for illicit connections to the MS4. The Permit outlines an implementation schedule for this activity.	Ventura County MS4 Permit	
Illicit Connection Investigation & Elimination	Maintain a list containing all connections under investigation for possible illicit connection and their current status.	Ventura County MS4 Permit	
Illicit Connection Investigation & Elimination	Upon discovery or upon receiving a report of a suspected illicit connection, complete an investigation within 21 days.	Ventura County MS4 Permit	
Illicit Connection Investigation & Elimination	Upon confirmation of an illicit storm drain connection, ensure that the connection is eliminated within 180 days of completion of the investigation, using its formal enforcement authority, if necessary, to eliminate the illicit connection.	Ventura County MS4 Permit	
Illicit Connection Investigation & Elimination	Formal records must be maintained for all illicit connection investigations and the formal enforcement taken to eliminate illicit connections.	Ventura County MS4 Permit	
Public Reporting	Promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into	Ventura County MS4 Permit and	

Category	Description of Requirement	Origin of Requirement	Notes
Public Reporting	Develop and maintain written procedures that document how complaint calls are received, documented, and tracked to ensure that all complaints are adequately addressed. Evaluate procedures annually and make changes as necessary.	EPA Permit Improvement Guide	
Public Reporting	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.	Draft April 2011 LA County and Ventura County MS4 Permits and EPA Permit Improvement Guide	
Spill Response	Develop a written spill/dumping response procedure, and a flow chart or phone tree, or similar list for internal use; that shows the procedures for responding to public notices of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response, even if it is a different entity other than the Permittee.	EPA Permit Improvement Guide	
Education & Training	Continue to implement a training program regarding the identification of IC/IDs for all municipal field staff and contractors, 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 storm sewer system. Training program documents must be available for review by the permitting authority.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Education & Training	Training program should address, at a minimum, the following: (1) IC/ID identification, (2) investigation, (3) elimination, (4) cleanup, (5) reporting, and (6) documentation.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	
Education & Training	Create a list of applicable staff which require IC/ID training and ensure that training is provided at least annually. Maintain documentation of the training activities.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	

Category	Description of Requirement	Origin of Requirement	Notes
Education & Training	New Permittee staff members must be provided with IC/ID training within six months of starting employment.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	

DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues

Minimum Control Measure – Public Agency Activities Program

<p>Primary Objectives:</p>	<ul style="list-style-type: none"> Minimize storm water pollution impacts from permittee owned or operated facilities and activities. Develop, deploy, and ensure ongoing operation and maintenance of BMPs for facilities, activities, and staff. Train public employees on the need for, use, and maintenance of BMPs.
<p>Legal Authority:</p>	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)) Regulations addressing structural and source control measures to reduce pollutants from runoff (40 CFR §122.26(d)(2)(i)(A)(1),(3),(5),and(6)) Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B))

Category	Description of Requirement	Origin of Requirement	Notes
General	Implement a Public Agency Activities Program to minimize storm water pollution impacts from Permittee-owned or operated facilities and activities.	Ventura County MS4 Permit	
Public Construction Activities Management	Implement and comply with the Planning and Land Development Program requirements in Part X of this Order.	Ventura County MS4 Permit	
Public Construction Activities Management	Implement and comply with the appropriate Development Construction Program requirements in Part X of this Order.	Ventura County MS4 Permit	
Public Construction Activities Management	Projects that disturb less than one acre of soil shall require the development and implementation of a Storm Water Pollution Control Plan (SWPCP).	Ventura County MS4 Permit	
Public Construction Activities Management	Obtain separate coverage under the CASGP or Small LUP General Permit for all Permittee-owned or operated construction sites that require coverage.	Ventura County MS4 Permit	
Public Facility Inventory	Maintain an updated watershed-based inventory and map of all Permittee-owned or operated facilities within its jurisdiction that are potential sources of storm water pollution. The incorporation of facility information into a Geographical Information System (GIS) is required.	SWRCB's Draft Small MS4s General Permit and EPA Permit Improvement Guide	

Category	Description of Requirement	Origin of Requirement	Notes
Public Facility Inventory	Include the following minimum fields of information for each Permittee-owned or operated facility in its watershed-based inventory and map.	Ventura County MS4 Permit	
Public Facility Inventory	Update its inventory and map at least annually.	Ventura County MS4 Permit	
Public Agency Facility and Activity Management	Obtain separate coverage under the IASGP for all Permittee-owned or operated facilities where industrial activities are conducted that require coverage under the IASGP.	Ventura County MS4 Permit	
Public Agency Facility and Activity Management	Implement and maintain the general and activity specific BMPs listed in Table X (BMPs for Public Agency Facilities and Activities) when such activities occur at Permittee-owned or operated facilities and field activities or that have the potential to discharge pollutants in storm water.	Ventura County MS4 Permit	
Public Agency Facility and Activity Management	Any contractors hired by the Permittee to conduct Public Agency Activities (e.g., municipal maintenance) shall be contractually required to implement and maintain the general and activity specific BMPs listed in Table X (BMPs for Public Agency Facilities and Activities). Conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.	Ventura County MS4 Permit and EPA Permit Improvement Guide (for inclusion of contractors)	
Vehicle and Equipment Washing	Implement and maintain the activity specific BMPs listed in Table X (BMPs for Public Agency Facilities and Activities) for all vehicle and equipment washing.	Ventura County MS4 Permit	
Vehicle and Equipment Washing	Eliminate all existing discharges of wash waters from vehicle and equipment washing.	Ventura County MS4 Permit	
Vehicle and Equipment Washing	Ensure that any municipal facilities constructed, redeveloped, or replaced shall prohibit discharges to the MS4 for all vehicle and equipment wash areas.	Ventura County MS4 Permit	
Landscape, Park, and Recreational Facilities Management	Implement and maintain the activity specific BMPs listed in Table x (BMPs for Public Agency Facilities and Activities) for all landscape, park, and recreational facilities and activities.	Ventura County MS4 Permit	
Landscape, Park, and Recreational Facilities Management	Implement Integrated Pest Management (IPM) Program.	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
Landscape, Park, and Recreational Facilities Management	<p>Implement additional the following requirements:</p> <ol style="list-style-type: none"> 1. Comply with the provisions and the monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2004-0008-DWQ) (Vector Control) and Order No. 2004-0009-DWQ (Weed Control). 2. Consistency with the State Board's guidelines and monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2001-12 DWQ). 3. Use a standardized protocol for the routine and non-routine application of pesticides and fertilizers. 4. Ensure there is no application of pesticides or fertilizers immediately prior to, during, or immediately after a rain event, or when water is flowing off the area where the application is to occur. 5. Ensure that no banned or unregistered pesticides are stored or applied. 6. 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. 7. Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs 8. Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment. 	Ventura County MS4 Permit and Inclusion of Aquatic Pesticide Orders and Guidance	
Storm Drain Operation and Maintenance (General)	<ol style="list-style-type: none"> 1. Implement and maintain the activity specific BMPs listed in Table X (BMPs for Public Agency Facilities and Activities) for storm drain operation and maintenance. 2. Ensure that all material removed from the storm drain system does not reenter the system. Solid material shall be dewatered in a contained area and liquid material shall be disposed in accordance with approved measures. 	Ventura County MS4 Permit and EPA Permit Improvement Guide for Item 2	

Category	Description of Requirement	Origin of Requirement	Notes
<p>Storm Drain Operation and Maintenance (Catch Basin Prioritization)</p>	<p>Designate catch basin inlets within its jurisdiction as one of the following: <u>Priority A:</u> Catch basins that are designated as consistently generating the highest volumes of trash and/or debris. <u>Priority B:</u> Catch basins that are designated as consistently generating moderate volumes of trash and/or debris. <u>Priority C:</u> Catch basins that are designated as generating low volumes of trash and/or debris.</p> <p>Submit a map or list of Catch Basins with their GPS coordinates and their priority designations. The map or list shall contain the rationale or data to support designations.</p>	<p>Ventura County MS4 Permit</p>	
<p>Storm Drain Operation and Maintenance (Catch Basin Inspection and Cleaning)</p>	<p>In areas that are not subject to a trash TMDL, inspect catch basins according to the following schedule: <u>Priority A:</u> A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year. <u>Priority B:</u> A minimum of once during the wet season and once during the dry season every year. <u>Priority C:</u> A minimum of once per year.</p> <p>Catch basins shall be cleaned as necessary on the basis of inspections. At a minimum, ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out. Maintain inspection and cleaning records for Regional Water Board review.</p>	<p>Ventura County MS4 Permit</p>	
<p>Storm Drain Operation and Maintenance (Catch Basin Inspection and Cleaning)</p>	<p>In areas that are subject to a trash TMDL, continue to implement the requirements listed below until trash TMDL implementation measures are adopted. Thereafter, implement programs in conformance with the TMDL implementation schedule, which shall include an effective combination of measures such as street sweeping, catch basin cleaning, installation of treatment devices and trash receptacles, or other BMPs. Default requirements include:</p>	<p>Ventura County MS4 Permit</p>	

Category	Description of Requirement	Origin of Requirement	Notes
	<ol style="list-style-type: none"> 1. Inspection and cleaning of all catch basins a minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year; 2. For any catch basin that is found to be \geq 40% full of trash and/or debris during an inspection; the inspection and cleaning frequency shall be increased to 4 times during the wet season and once during the dry season every year; 3. Record keeping of catch basins cleaned, demonstrating that all required catch basin cleaning has been conducted; and 4. Recording of the overall quantity of catch basin waste collected. 		
Storm Drain Operation and Maintenance (Trash Management at Public Events)	<p>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:</p> <ol style="list-style-type: none"> 1. Proper management of trash and litter generated; and 2. Arrangement for temporary screens to be placed on catch basins; or 3. Provide clean out of catch basins, trash receptacles, and grounds in the event area within 24 hours subsequent to the event. 	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Trash Receptacles)	<ol style="list-style-type: none"> 1. Install trash receptacles, or equivalent trash capturing devices in areas that are subject to a trash TMDL, and all other areas subject to high trash generation within its jurisdiction; 2. Ensure that all trash receptacles are cleaned out and maintained as necessary to prevent trash overflow. 	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Catch Basin Labels)	<ol style="list-style-type: none"> 1. Inspect the legibility of the stencil or label nearest each inlet prior to the wet season every year. 2. Record all catch basins with illegible stencils and re-stencil or re-label within 15 days of inspection. 	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Additional Trash)	Install trash excluders, or equivalent devices on or in catch basins or outfalls to prevent the discharge of trash to the storm drain system or receiving water in areas defined as Priority A or B. Criteria and	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
Storm Drain Operation and Maintenance (Storm Drain Maintenance)	<p>corresponding exceptions for flooding and alternatives BMPs are included.</p> <p>Implement a program for Storm Drain Maintenance includes the following:</p> <ol style="list-style-type: none"> 1. Visual monitoring of Permittee-owned open channels and other drainage structures for debris at least annually. 2. Remove trash and debris from open channel storm drains a minimum of once per year before the wet season. 3. Eliminate the discharge of contaminants during MS4 maintenance and clean outs. 4. Quantify the amount of materials removed using techniques appropriate for quantifying solid waste and ensure the materials are properly disposed of. 	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Spill Response)	Each Permittee which owns and /or operates a sanitary sewer system that requires coverage under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWC), shall comply with the provisions and the monitoring requirements associated with this Order.	Ventura County MS4 Permit	
Storm Drain Operation and Maintenance (Permittee Owned Treatment Control BMPs)	<ol style="list-style-type: none"> 1. Implement an inspection and maintenance program for all Permittee owned treatment control BMPs, including post-construction treatment control BMPs. 2. Ensure proper operation of all treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs. 3. Implement BMPs for all residual water produced by a treatment control BMP and not being internal to the BMP performance. 	Ventura County MS4 Permit	
Streets, Roads, and Parking Facilities Maintenance (Prioritization)	<p>Designate streets and/or street segments within its jurisdiction as one of the following:</p> <p><u>Priority A:</u> Streets and/or street segments that are designated as consistently generating the highest volumes of trash and/or debris.</p> <p><u>Priority B:</u> Streets and/or street segments that are designated as consistently generating moderate volumes of trash and/or debris.</p> <p><u>Priority C:</u> Streets and/or street segments that are designated as</p>	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
Streets, Roads, and Parking Facilities Maintenance (Street Sweeping)	<p>generating low volumes of trash and/or debris.</p> <p>Perform street sweeping of curbed streets according to the following schedule:</p> <p><u>Priority A:</u> Streets and/or street segments that are designated as Priority A shall be swept at least two times per month.</p> <p><u>Priority B:</u> Streets and/or street segments that are designated as Priority B shall be swept at least once per month.</p> <p><u>Priority C:</u> 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.</p>	Ventura County MS4 Permit	
Streets, Roads, and Parking Facilities Maintenance (Road Reconstruction)	<p>Require that for any project that includes roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces, that the BMPs in X (BMPs for Public Agency Facilities and Activities) and as specified in Part X (Development Construction Program) be implemented for each project.</p>	Ventura County MS4 Permit	
Streets, Roads, and Parking Facilities Maintenance (Parking Facilities Maintenance)	<p>Permittee-owned parking lots exposed to storm water shall be kept clear of debris and excessive oil buildup and cleaned using street sweeping equipment no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a Permittee-owned parking lot be cleaned less than once a month.</p>	Ventura County MS4 Permit	
Emergency Procedures	<p>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:</p> <ol style="list-style-type: none"> 1. Providing 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. 2. Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than one day) are not subject to the notification provisions. 	Ventura County MS4 Permit	
Municipal Employee and Contractor Training	<p>Train all of their employees and contractors in targeted positions on the requirements of the overall storm water management program</p>	Ventura County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
Municipal Employee and Contractor Training	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. Annually train all of their employees and contractors who use or have the potential to use pesticides or fertilizers to 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.	Ventura County MS4 Permit	

DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues
Minimum Control Measure – Planning and Land Development Program

<p>Primary Objectives:</p>	<ul style="list-style-type: none"> Lessen the impacts of development and significant re-development projects on water quality and hydrology by designing projects to minimize the impervious area footprint and employing Low Impact Development (LID) design principles to mimic pre-development water balance through infiltration, evapotranspiration and re-use Minimize pollutant loadings through the use of properly designed, technically appropriate BMPs (including source control BMPs), LID strategies, and treatment control BMPs. Minimize the adverse impacts from storm water runoff on the biological integrity of natural drainage systems and the beneficial uses of waterbodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21100). 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, safeguarding of environmentally sensitive areas, mixing of land uses (e.g., homes, offices, and shops), transit accessibility, and better pedestrian and bicycle amenities.
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<p>Legal Authority:</p>	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)) Regulations addressing post-construction controls for new development and significant re-development (40 CFR §122.26(d)(2)(iv)(A)(2)) Regulations addressing illicit discharges and improper disposal (40 CFR §122.26(d)(2)(iv)(B)) Regulations addressing discharges by implementing and maintaining structural and non-structural best management practices to reduce pollutants in storm water runoff (40 CFR §122.26(d)(2)(iv)(D))
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Category	Description of Requirement	Origin of Requirement	Notes
<p>Purpose</p> <ul style="list-style-type: none"> Lessen the impact of new development and significant re-development on pollutant loading to receiving waterbodies. Minimize the hydromodification impacts on natural drainage systems. Provide criteria to ensure the effective design, operation and maintenance of LID and hydromodification control BMPs. 		<p>Ventura County MS4 Permit with modifications based on collaboration between the contractor, Regional Board staff and EPA.</p>	
<p>Applicability</p>	<p>Define new development and re-development projects that are subject to the requirements of Part X.</p>	<p>Ventura County MS4 Permit</p>	
<p>Performance Criteria</p>	<p>Except as provided for under Part X or X, new development and re-development projects must retain on-site the storm water runoff</p>	<p>Collaboration between the contractor,</p>	

<p>Performance Criteria for Infiltration</p>	<p>volume resulting from the 85th percentile, 24-hour storm or the 0.75 inch 24-hour storm, whichever is greater.</p> <p>If it is not technically feasible to retain on-site the entire storm water runoff volume, the project must be designed and operated to biofiltrate 1.5 times the storm water runoff volume that cannot be retained on-site.</p> <p><u>Note:</u> The draft permit language does not restrict the percent effective impervious area (EIA). The draft permit encourages designs that minimize impervious surfaces because the storm water runoff volume is related to the amount of impervious surface.</p>	<p>Regional Board staff and EPA. The 85th percentile, 24-hour storm is the design storm used in recently-issued California MS4 permits. * A minimum requirement based on the 0.75 inch 24-hour storm is required in this permit to prevent backsliding from the previous permit.</p> <p>*The following permits include requirements to retain on-site the runoff volume from the 85th percentile design storm:</p> <ul style="list-style-type: none"> San Bernardino County MS4 Permit (Order No. R8-2010-0036) Riverside County in San Diego Region (Order No. R9-2010-0016). 	
	<p>The infiltration rate of soils decrease as the moisture content increases-- to the point of saturation. When calculating the infiltration rates of underlying soils, the Permittees will account for the infiltration loss considering the impact of increasing soil moisture using Horton's Equation or other means approved by the Executive Officer of the Los Angeles Regional Water Quality Control Board. Alternatively, the Permittee may assume that the soil is</p>	<p>Horton's Equation is referenced in the Energy Independence and Security Act (EISA) Technical Guidance Manual.</p> <p>The State Water</p>	

	<p>saturated and the minimum infiltration rate applies.</p>	<p>Resources Control Board developed a Post-Construction Water Balance Calculator spreadsheet for estimating the performance of LID elements. The calculator input assumes wet soil conditions and the minimum infiltration rate for the specified soil classification.</p>
<p>Design Criteria for Biofiltration</p>	<p>Bio-filtration BMPs shall be designed to accommodate the design flow at a surface loading rate no greater than 5 inches per hour and shall have a total volume, including pore spaces and pre-filter, detention volume, no less than the runoff volume generated by the design storm depth times 0.75. [Note: These design criteria are under review based on more recent information.]</p>	<p>Collaboration with the contractor, Regional Board staff and EPA. Similar to provisions in the San Diego Regional Board MS4 Permit for South Orange County (Order No. R9-2009-002).</p>
<p>Performance Criteria for Harvest and Re-use</p>	<p>If rainwater harvested for use in irrigation is to be credited toward the total volume of storm water runoff retained on-site, the Permittees must require that the project applicant to conduct a conservative (assuming reasonable worst-case scenarios) assessment of water demand during the wet 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 re-use in irrigation may not exceed the reliable estimated irrigation demand during the wet season.</p>	<p>Collaboration with the contractor, Regional Board staff and EPA.</p>
<p>Alternative Compliance for Technical Infeasibility</p>	<p>Technical site constraints may preclude the use of infiltration LID measures and limit the ability to meet the Integrated Water Quality/Flow Reduction/Resources Management Criteria in Part X. The Permittees may allow projects that are unable to meet the</p>	<p>Ventura County MS4 Permit</p>

	<p>Integrated Water Quality/Flow Reduction/Resources Management Criteria in Part X to comply with this Order through the alternative compliance measures described in this section to encourage smart growth and infill development of existing urban centers where on-site compliance with post-construction requirements may be technically infeasible.</p>		
<p>Technical Infeasibility</p>	<p>Technical infeasibility may result from conditions including the following:</p> <ol style="list-style-type: none"> (1) Locations where seasonal high groundwater is within 5 to 10 feet of the surface (2) Locations within 100 feet of a groundwater well used for drinking water (3) Brownfield development sites or other locations where pollutant mobilization is a documented concern (4) Locations with potential geotechnical hazards (5) 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. 	<p>Ventura County MS4 Permit with modifications to be consistent with municipal LID manuals. References to a Technical Guidance Manual have been deleted. The draft permit does not require the Permittees to develop a Technical Guidance Manual.</p>	
<p>Alternative Compliance Measures</p>	<p>When a Permittee finds that the project applicant has demonstrated technical infeasibility, after confirming that the project design minimizes the impervious area to the extent allowed by local zoning regulations and the project design incorporates all applicable LID BMPs including green roofs and rainfall harvest and re-use, and considering recommended protective buffers for riparian areas and environmentally sensitive areas, the Permittee shall require the applicant to provide off-site mitigation.</p> <p>The required off-site mitigation volume will be equal to 1.5 times the storm water volume runoff that cannot be retained on-site. The project applicant must perform off-site mitigation or provide sufficient funding for public or private off-site mitigation to achieve equivalent mitigation storm water volume reduction through infiltration, reuse, and/or evapotranspiration.</p> <p>The Permittees must develop a prioritized list of off-site mitigation projects, and when feasible, the mitigation must be directed to the highest priority mitigation project within the same drainage area as,</p>	<p>Ventura County MS4 Permit and collaboration between the contractor, the Regional Board staff and EPA.</p>	

Los Angeles County MS4 Permit Development

		<p>or the nearest downstream drainage from the proposed development or re-development.</p> <p>Off-site mitigation 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 off-site mitigation project, unless a longer period is authorized by the Executive Officer of the Los Angeles Regional Water Quality Control Board.</p> <p>Applies when the project applicant has successfully demonstrated technical infeasibility to retain on-site the required storm water runoff volume. In addition to providing off-site mitigation, the project applicant must provide for effective treatment of the runoff from the project site.</p> <p>In addition to the requirements for controlling pollutant discharges as described above, the Permittee will ensure that the new development or re-development project will not cause the Permittee to exceed applicable wasteload allocations (WLAs) or fail to comply with Total Maximum Daily Load (TMDL) implementation plan requirements.</p> <p>Applies to natural drainage systems (to be defined). The goal of the hydromodification provisions is to preserve pre-development hydrology. The draft permit will provide interim hydromodification requirements. Final hydromodification requirements will be developed by the Permittees based on pending studies to be approved by the SWRCB.</p> <ul style="list-style-type: none"> The project is designed to retain on-site, through infiltration, evapotranspiration, and/or harvest and reuse, the stormwater volume from the runoff of the 95th percentile, 24-hour storm, or 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. 	
<p>Water Quality Mitigation Criteria</p>	<p>Ventura County MS4 Permit and collaboration between the contractor, the Regional Board and EPA.</p>		
<p>Hydromodification</p>	<p>Ventura County MS4 Permit and collaboration with the contractor, Regional Board staff and EPA.</p>		
<p>Hydromodification Projects Disturbing Less than 50 Acres</p>	<ul style="list-style-type: none"> Federal Energy Independence and Security Act (EISA), Technical Guidance Document¹ Other recently issued California 		

¹ U.S. Environmental Protection Agency. December 9, 2009. *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* < <http://www.epa.gov/owow/NPS/tid/section438/> Accessed October 20, 2011.

<p>Hydromodification Projects Disturbing 50 Acres or More</p>	<p>This condition may be substantiated by simple screening models or</p> <ul style="list-style-type: none"> The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment X. <p>Note: These requirements are intended to offer less expensive options than the requirements for larger projects.</p>	<p>MS4 permits. These requirements are similar to provisions in the Orange County MS4 permit (Order No. R8-2009-0030) and the Riverside County MS4 Permit (Order No. R9-2010-0016).</p> <ul style="list-style-type: none"> The Erosion Potential method is from the Ventura County MS4 Permit. 	
	<ul style="list-style-type: none"> The project infiltrates on-site at least the runoff from a 2-year, 24-hour storm event, or 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 Permittee, or The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment X. 	<ul style="list-style-type: none"> Other recently issued California MS4 permits. These requirements are similar to provisions in the Orange County MS4 Permit (Order No. R8-2009-0030) and the Riverside County MS4 Permit (Order No. R9-2010-0016). The Erosion Potential method is from the Ventura County MS4 Permit. 	
<p>Implementation</p>	<p>Maintenance Agreement and Transfer of Responsibility to operate and maintain post-development BMPs.</p>	<p>Ventura County MS4 Permit</p>	
<p>Maintenance Agreement</p>	<p>Prior to issuing approval for occupancy, the Permittee will require new development and redevelopment projects to provide a plan and financial assurance for continued operation and maintenance of LID practices, treatment control BMPs, and hydromodification control BMPs.</p>	<p>Ventura County MS4 Permit</p>	

Los Angeles County MS4 Permit Development

<p>Tracking, Inspection and Enforcement of Post-Construction BMPs</p>	<p>Each Permittee will implement a tracking system and an inspection and enforcement program for new development and re-development post-construction storm water BMPs.</p>	<p>Ventura County MS4 Permit</p>	
<p>Alternative Post-Construction Storm Water Mitigation Programs</p>	<p>A Permittee or coalition of Permittees may apply to the Regional Water Board for approval of a Redevelopment Project Area Master Plan (RPAMP) for re-development within Re-development Project Areas, in consideration of exceptional site constraints that inhibit site-by-site or project-by-project implementation of post-construction requirements.</p> <p>Note: The Draft Permit does not require the Permittees to develop a Technical Guidance Document. This section is to be used to provide general technical guidelines relating to site development, recommended riparian buffer widths, etc.</p>	<p>Ventura County MS4 Permit</p>	
<p>Developer Technical Guidelines</p>		<p>Collaboration between the contractor, the Regional Board staff and EPA.</p>	

DRAFT Core Permit Requirements – Table of Objectives, Elements, and Issues
Minimum Control Measure – Public Information and Participation Program (PIPP)

<p>Primary Objectives:</p>	<ul style="list-style-type: none"> 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. To measurably change the waste disposal and storm water pollution generation behavior of target audiences by developing and encouraging the implementation of appropriate solutions. To involve and engage socio-economic groups and ethnic communities in Los Angeles County to participate in mitigating the impacts of storm water pollution.
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<p>Legal Authorities:</p>	<ul style="list-style-type: none"> Requirements regarding proposed management program, covering minimum control measures to be included (40 CFR §122.26(d)(2)(iv)(A)(6)) Regulations addressing public information and participation programs (40 CFR §122.26(d)(2)(iv)(B)(6))
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Category	Description of Requirement	Origin of Requirement	Notes
<p>General</p>	<p>The Permittees shall implement a Public Information and Participation Program (PIPP) that includes, but is not limited to, the requirements listed in this part.</p> <p>The Permittees shall be responsible for developing and implementing the PIPP, and implementing specific PIPP requirements.</p>	<p>Draft April 2011 LA County and Ventura County MS4 Permits</p>	
<p>Advisory Committee</p>	<p>The Permittees shall consider developing an advisory committee to provide input and assistance in meeting the goals and objectives of the public education campaign.</p> <p>The advisory committee shall be consulted during the process of developing the PIPP campaign, and shall provide comments and advice during the process of preparing a Request For Proposal for a storm water public education contractor.</p> <p>The committee may participate as a part of a working group that</p>	<p>Draft April 2011 LA County MS4 Permit</p>	

Category	Description of Requirement	Origin of Requirement	Notes
	<p>evaluates contractor proposals and other tasks as appropriate.</p> <p>The committee shall be comprised of representatives of the environmental community, Permittees, Regional Water Board staff, and experts in the fields of public education and marketing.</p> <p>The committee shall meet at least once a year.</p>		
<p>Residential Program – No Dumping Message</p>	<p>Each Permittee shall label all storm drain inlets that they own with a legible “no dumping” message.</p> <p>Signs with prohibitive language discouraging illegal dumping shall be posted at designated public access points to creeks, other relevant waterbodies, and channels.</p> <p>Signage and storm drain messages shall be legible and maintained as necessary during the term of the permit.</p>	<p>Draft April 2011 LA County MS4 Permit</p>	
<p>Residential Program – Countywide Hotline</p>	<p>Permittees will develop and implement, or continue to implement, a watershed-wide reporting hotline to serve as the general public reporting contact for reporting illicit discharges/dumping, faded or lack of catch basin labels, and general storm water management information. Each Permittee may establish its own hotline if preferred.</p> <p>Permittees shall include this information, updated when necessary, in public information, and the government pages of the telephone book, as they are developed or published.</p> <p>The Permittees shall compile a list of the general public reporting contacts submitted by all Permittees and make this information available on the Permittee’s websites and upon request.</p>	<p>Draft April 2011 LA County MS4 Permit</p>	

Category	Description of Requirement	Origin of Requirement	Notes
Outreach and Education	<p>Each Permittee is responsible for providing current, updated information to the Principal Permittee.</p> <p>The Permittees shall implement the following activities:</p> <ol style="list-style-type: none"> (1) Conduct a storm water pollution prevention advertising campaign. (2) Conduct storm water pollution prevention public service announcements (3) Consider distributing storm water pollution prevention public education materials to potential pollutant contributing entities, such as automotive parts stores, home improvement centers / lumber yards / hardware stores, and pet shops / feed stores (4) Public education materials shall include the topics specified at Permit Part X (5) Consider working with existing local watershed groups or organizing watershed Citizen Advisory Groups/ Committees to develop effective methods to educate the public about storm water pollution (6) Organize events targeted to residents and population subgroups (7) Maintain the countywide storm water website (www.888CleanLA.com), which shall include educational material listed in Part X. 	Draft April 2011 LA County MS4 Permit and Ventura County MS4 Permit	
Outreach and Education	The Permittees shall develop a strategy to educate ethnic communities through culturally effective methods.	Draft: April 2011 LA County MS4 Permit	
Outreach and Education	Requirement regarding quantity of storm water quality "impressions" on the general public - To be developed.	Draft: April 2011 LA County MS4 Permit	
Outreach and Education	The Permittees shall provide schools within each School District in the county with materials, including, but not limited to, videos, live presentations, and other information necessary to educate a minimum of 50 percent of all school children (K-12) every 2 years	Draft: April 2011 LA County MS4 Permit	

Category	Description of Requirement	Origin of Requirement	Notes
Pollutant-specific Outreach	<p>on storm water pollution.</p> <p>The Permittees shall coordinate to develop outreach programs that focus on the watershed-specific pollutants listed in Table 1.</p>	Draft April 2011 LA County MS4 Permit	
Pollutant-specific Outreach	Each Permittee shall make outreach materials available to the general public and target audiences, such as schools, community groups, contractors and developers, and at appropriate public counters and events. Outreach material shall include information on pollutants of concern, sources, and source abatement measures.	Draft April 2011 LA County MS4 Permit	
Corporate Business Outreach	The Permittees shall consider working with other regional or statewide agencies and, associations such as the California Storm Water Quality Association (CASQA), to develop and implement a Corporate Outreach program to educate and inform corporate franchise operators and/or local facility managers about storm water regulations and BMPs.	Ventura County MS4 Permit	
Corporate Business Outreach	Once developed, the program shall consider targeting Retail Gasoline Outlets (RGO) franchisers, retail automotive parts franchisers, home improvement center franchisers and restaurant franchisers.	Ventura County MS4 Permit	
Business Assistance Program	The Permittees shall consider implementing a Business Assistance Program to provide technical information to small businesses to facilitate their efforts to reduce the discharge of pollutants in storm water. The Permit specifies required components of the program.	Draft April 2011 LA County and Ventura County MS4 Permits	



City of Arcadia

Public Works Services Department

Tom Tait
Public Works Services Director

January 19, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Ms. Diamond:

The City of Arcadia operates a Community Water System (CWS), the Arcadia Water Department which are regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). The City also operates a Municipal Separate Storm Sewer System (MS4) through our Department of Public Works which is regulated under the Clean Water Act. Additionally, the City has a Fire Department which is regulated under the Government and Health and Safety Codes. Our goal is to provide our citizens the greatest protection against fire and flooding and a reliable and safe supply of water.

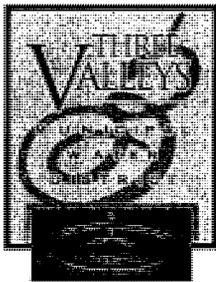
I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) permit. The MS4 permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of the upcoming changes to the Los Angeles County (LAC) MS4 permit. The Board Staff have indicated that there will be final draft of the permit as early as the end of February and that the Board plans on voting on the permit in May. However at the December 15, 2011 workshop held by Board staff, a number of important changes were proposed to how "allowed non-stormwater discharges" which will have a very significant impact on our Water Department, our Public Works Department, and our Fire Department. Given the lateness of announcement of these proposed changes to the MS4 permit and the speed with which the Board is pursuing adoption of the permit, the City is concerned that some very important issues have not had the appropriate amount of discussion.

The City is requesting that there be a formal Board Workshop on the topic of "allowed non-stormwater discharges" and how it will impact CWSs, MS4 operators, and Fire Departments in Los Angeles County. It is understood that the MS4 permit has been in development for a very long time and has been administratively extended several times so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested, a Board Workshop does not appear to be too great an effort to make.

Thank you for your attention. Should you have any questions, please contact Vanessa Hevener, Environmental Services Officer at (626) 305-5327.

Sincerely,

Tom Tait
Public Works Services Director



BOARD OF DIRECTORS

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GENERAL MANAGER/CHIEF ENGINEER
 Richard W. Hansen, P.E.

January 19, 2012

Ms. Francine Diamond, Chair
 Los Angeles Regional Water Quality Control Board
 320 West Fourth Street, Suite 200
 Los Angeles, CA 90013

RE: Proposed Storm Sewer System (MS4) NPDES Permit

Dear Ms. Diamond:

Several of the member agencies of the Three Valleys Municipal Water District (TVMWD) and specifically the cities within our service area are regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Additionally, many have a Fire Department which is regulated under the Government and Health and Safety Codes. Their goal is to provide citizens the greatest protection against fire and flooding and a reliable and safe supply of water.

The purpose of this letter in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) permit. The MS4 permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, on behalf of our impacted member agencies, we are quite concerned about the implications of the upcoming changes to the Los Angeles County (LAC) MS4 permit. The Los Angeles Regional Water Quality Control Board (Board) staff has indicated that there will be final draft of the permit as early as the end of February and that the Board plans to vote on the permit in May. However at the December 15, 2011 workshop held by Board staff, a number of important changes were proposed to "allowed non-stormwater discharges" which will have a very significant impact on the local Water Departments, Public Works Departments and Fire Departments. Given the lateness of announcement of these proposed changes to the MS4 permit and the speed with which the Board is pursuing adoption of the permit, there is wide concern that some very important issues have not had the appropriate amount of discussion.

We are thus requesting that there be a formal Board Workshop on the topic of "allowed non-stormwater discharges" and how it will impact Water Departments, MS4 operators, and Fire Departments in Los Angeles County. It is understood that the MS4 permit has been in development for a very long time and has been administratively extended several times, so we can see why the Board is anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested, a Workshop would be a reasonable effort for the Board to make.

Thank you for your attention to this matter. If you have any questions or comments regarding our concerns, please contact me at 909-621-5568.

Sincerely,

Rick Hansen, P.E.
 General Manager
 Three Valleys Municipal Water District

City of Alhambra

Department of Utilities

January 20, 2012



*Gateway
to the
San Gabriel Valley*

*111
South First Street
Alhambra
California
91801*

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

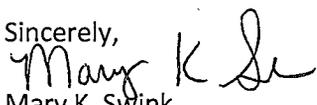
RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Ms. Diamond:

The City of Alhambra operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (CDPH). Alhambra also operates a Municipal Separate Storm Sewer System (MS4) through our Department of Utilities, which is regulated under the Clean Water Act. Additionally, Alhambra has a Fire Department which is regulated under the Government and Health and Safety Codes. Our goal is to provide our citizens with a reliable and safe supply of water, as well as protection against fire and flooding.

We are writing you in regard to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) permit. The MS4 permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of the proposed changes to the Los Angeles County (LAC) MS4 permit. The Regional Board staff has indicated that there will be final draft of the permit as early as the end of February and that the Board plans on voting on the permit in May. However, at the December 15, 2011 workshop held by Board staff, a number of important changes were proposed regarding "allowed non-stormwater discharges", which will have a significant impact on our Utilities and Fire Departments. In light of the fact that these proposed changes have just been introduced, the City is concerned that some very important issues have not had the appropriate amount of discussion.

The City is thus requesting that there be a formal Board Workshop on the topic of "allowed non-stormwater discharges" and how it will impact CWSs, MS4 operators, and Fire Departments in Los Angeles County. It is understood that the MS4 permit has been in development for a very long time and has been administratively extended several times, and that the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested, a Board Workshop does not appear to be too great an effort to make.

Sincerely,

 Mary K. Swink
 Deputy City Manager/Director of Utilities





Crescenta Valley Water District

2700 Foothill Boulevard, La Crescenta, California 91214
Phone (818) 248-3925 Fax (818) 248-1659

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Kathleen M. Ross
James D. Bodnar
Kerry D. Erickson
Kenneth R. Putnam

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Dennis A. Erdman, P.E.
General Manager
Ron L. Mitchell
Secretary-Treasurer

January 20, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

The Crescenta Valley Water District, a County water district formed under Division 12 of the Water Code (District), operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection to ensure the safety of our citizens' lives and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on our district. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

The District therefore requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested,

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
January 20, 2012
Page 2

we are respectfully requesting a Board Workshop on this specific issue so that we may present our concerns to the Board.

Thank you for your consideration of this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Dennis A. Erdman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dennis A. Erdman, P.E

General Manager



1999 KINCLAIR DRIVE, PASADENA, CALIFORNIA 91107-1017
MAILING ADDRESS: P.O. BOX 5578, PASADENA, CA 91117-0578
TELEPHONE (626) 797-6295 • FAX (626) 794-5552
WEBSITE: kinneloairrigationdistrict.info

January 20, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

The Kinneloa Irrigation District, formed under Division 11 of the Water Code (District), operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection to ensure the safety of our citizens' lives and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on our district. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

The District therefore requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested, we are respectfully requesting a Board Workshop on this specific issue so that we may present our concerns to the Board.

Thank you for your consideration of this request.

Sincerely,

Melvin L. Matthews

General Manager



301 North Lake Avenue
10th Floor
Pasadena, CA 91101-4108
Phone: 626.793.9400
Fax: 626.793.5900
www.lagerlof.com

Established 1908

January 20, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond:

We are special counsel to the Public Water Agencies Group (the "Group"). The Group is an informal association of 17 public water agencies that provide water service throughout Los Angeles County.¹ Each Group member operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act by the State of California Department of Public Health. As public agency water suppliers, the Group's members strive to provide safe, reliable drinking water to their customers at a reasonable cost, while providing the best possible fire protection to ensure the safety of their citizens' lives and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The Group's members understand the importance of the MS4 Permit with respect to the protection of the Los Angeles Region's water resources and generally support the goals the MS4 Permit achieves. However, the Group's members are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a

¹ The Group consists of Crescenta Valley Water District, Kinneloa Irrigation District, La Habra Heights County Water District, La Puente Valley County Water District, Newhall County Water District, Orchard Dale Water District, Palmdale Water District, Pico Water District, Quartz Hill Water District, Rowland Water District, San Gabriel County Water District, San Gabriel Valley Municipal Water District, Sativa-Los Angeles County Water District, South Montebello Irrigation District, Three Valleys Municipal Water District, Valley County Water District and Walnut Valley Water District. Group members Palmdale Water District and Quartz Hill Water District are not located in the Los Angeles Regional Board's jurisdiction, as they are under the jurisdiction of the Lahontan Regional Board.

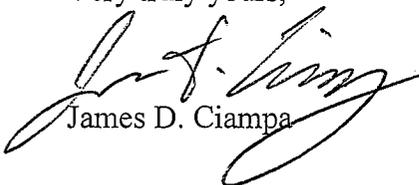
Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
January 20, 2012
Page 2

very significant impact on the Group's members and other CWS operators in the region. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, the Group's members are concerned that some very important issues have not had the appropriate amount of discussion.

On behalf of the Group, we therefore request that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and that the existing permit has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested, we respectfully request that a Board Workshop on this specific issue so that the Group may present its concerns to the Board.

Thank you for your consideration of this request.

Very truly yours,



James D. Ciampa

JDC/cc

cc: PWAG Members [via e-mail]



LA HABRA HEIGHTS COUNTY WATER DISTRICT

(562) 697-6769 • FAX (562) 697-5568

1271 North Hacienda Road
La Habra Heights, California 90631

Post Office Box 628
La Habra, California 90633-0628

January 20, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

The La Habra Heights County Water District, a county water district formed under Division 12 of the Water Code (District), operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection to ensure the safety of our citizens' lives and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-storm water discharges" which will have a very significant impact on our district. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

The District therefore requests that a formal Board Workshop be conducted on the topic of "allowed non-storm water discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and has been administratively extended several times, so the Board is understandably anxious to move forward

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
January 20, 2012
Page 2

with this permit. Nonetheless, given the very significant implications of the changes suggested, we are respectfully requesting a Board Workshop on this specific issue so that we may present our concerns to the Board.

Thank you for your consideration of this request.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Gualtieri', written over a horizontal line.

Michael Gualtieri
General Manager
La Habra Heights County Water District
1271 N. Hacienda Rd.
La Habra Heights, CA 90631
(562) 697-6769

William R. Rojas
President

Henry P. Hernandez
Vice President

Charles Aguirre
Director



John P. Escalera
Director

David Hastings
Director

Gregory B. Galindo
General Manager

La Puente Valley County Water District

112 N. First St. / P.O. Box 3136
La Puente, CA 91744
(626) 330-2126 – Fax (626) 330-2679

January 20, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

The La Puente Valley County Water District, a county water district formed under Division 12 of the Water Code (District), operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection to ensure the safety of our citizens' lives and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on our district. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

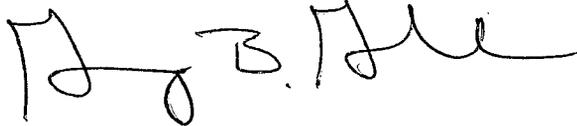
The District therefore requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and has been administratively extended several times, so the Board is understandably anxious to move forward

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
January 20, 2012
Page 2

with this permit. Nonetheless, given the very significant implications of the changes suggested, we are respectfully requesting a Board Workshop on this specific issue so that we may present our concerns to the Board.

Thank you for your consideration of this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg B. Galindo". The signature is fluid and cursive, with the first name "Greg" being the most prominent.

Greg B. Galindo
General Manager
La Puente Valley County Water District

Cc: Board of Directors



NEWHALL COUNTY WATER DISTRICT

23780 North Pine Street • P.O. Box 220970 • Santa Clarita, CA 91322-0970
 (661) 259-3610 Phone • (661) 259-9673 Fax • email: mail@ncwd.org

Directors: DANIEL MORTENSEN, *President* MARIA GUTZEIT, *Vice President* B. J. ATKINS KATHY COLLEY LYNNE A. PLAMBECK

January 20, 2012

Ms. Francine Diamond, Chair
 Los Angeles Regional Water Quality Control Board
 320 West Fourth Street, Suite 200
 Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond:

Newhall County Water District, a special water district formed under Division 12 of the Water Code (NCWD), operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the California Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection ensuring the safety of life and property.

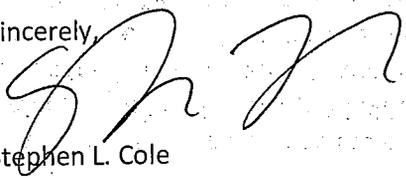
I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on NCWD. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

We are aware that the MS4 Permit has been in development for a long time and has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the suggested changes, NCWD respectfully requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County.

Thank you for your consideration of this request.

Sincerely,


 Stephen L. Cole
 General Manager



Orchard Dale WATER DISTRICT

13819 E. Telegraph Road, Whittier, CA 90604 • Office: (562) 941-0114 • Fax: (562) 944-6384 • Web: www.odwd.org

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Dennis R. Azevedo

General Manager

Thomas L. Coleman

January 20, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

The Orchard Dale Water District, a county water district formed under Division 12 of the Water Code (District), operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection to ensure the safety of our citizens' lives and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on our district. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

The District therefore requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested, we are respectfully requesting a Board Workshop on this specific issue so that we may present our concerns to the Board.

Thank you for your consideration of this request.

Sincerely,

Thomas L. Coleman
Secretary – General Manager

OFFICERS
VICTOR CABALLERO, PRESIDENT
JAMES B. ROYBAL, VICE PRESIDENT
MARK J. GRAJEDA, GEN. MGR. / SECRETARY
CAROL SEPULVEDA, TREASURER

Pico Water District

P.O. BOX 758 4843 CHURCH ST.
PICO RIVERA, CALIFORNIA 90660
TEL: (562) 692-3756 FAX: (562) 695-5627
www.picowaterdistrict.net

DIRECTORS
VICTOR CABALLERO
JAMES B. ROYBAL
ADRIAN L. DIAZ
DAVID R. GONZALES
HENRIETTA C. SALAZAR

January 20, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

The Pico Water District, a county water district formed under Division 12 of the Water Code (District), operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection to ensure the safety of our citizens' lives and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on our district. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

The District therefore requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested,

we are respectfully requesting a Board Workshop on this specific issue so that we may present our concerns to the Board.

Thank you for your consideration of this request.

Sincerely,

A handwritten signature in black ink that reads "Victor Caballero". The signature is written in a cursive style with a large initial 'V'.

Victor Caballero
President

VC/cs

cc: Pico Water District Board members
Mark Grajeda



Valencia Water Company

24631 Avenue Rockefeller • Valencia, CA 91355-3907

(661) 294-0828 • Fax (661) 294-3806

www.valenciawater.com

January 23, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

Valencia Water Company (VWC), a private water company regulated by the California Public Utilities Commission, operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the California Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection ensuring the safety of life and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on VWC. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

We are aware that the MS4 Permit has been in development for a long time and has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the suggested changes, VWC respectfully requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County.

Thank you for your consideration of this request.

Sincerely,

Keith Abercrombie
General Manager

WALNUT VALLEY WATER DISTRICT



BOARD OF DIRECTORS

271 South Brea Canyon Road
Walnut, California 91789-3002 • (909) 595-1268 • (626) 964-6551
Website: www.wvwd.com • Fax: (909) 444-5521

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H. Jess Senecal

January 23, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

The Walnut Valley Water District (District), a California Water District formed under Division 13 of the Water Code, operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection to ensure the safety of our citizens' lives and property. I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May. At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on our district. Given the lateness of the announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion and review.

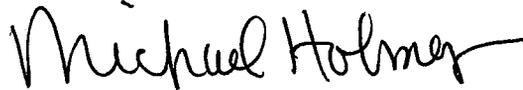
The District therefore requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any proposed changes to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes

suggested, we are respectfully requesting a Board Workshop on this specific issue so that we may present our concerns to the Board.

Thank you for your consideration of this request.

Most Sincerely,

WALNUT VALLEY WATER DISTRICT



Michael Holmes
General Manager

cc: WVWD's Board of Directors
Public Water Agency Group (Messrs. Ciampa & Deck)



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2012 JAN 25 PM 4 20

CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

January 23, 2012

Mr. Samuel Unger, Executive Officer
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Mr. Unger,

The Water Replenishment District of Southern California (WRD) manages the groundwater supply for nearly four million residents in 43 cities of Southern Los Angeles County and serves pumpers who may also fulfill the role as community water systems (CWS). As you are aware, CWS are regulated under the Safe Drinking Water Act (SDWA) by the California Department of Public Health (DPH), and at the same time, their discharges to the MS4 are regulated under an MS4 permit.

I am writing in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) permit currently being drafted by the Los Angeles Regional Water Quality Control Board (LARWQCB) staff. We understand that the LARWQCB plans to issue a tentative MS4 permit in March 2012 and to adopt a final MS4 permit by May 2012. The MS4 permit is important for the protection of our critical water resources, and as a groundwater management agency, we support the continued advancement of this effort.

At the December 15, 2011 workshop held by Board staff, a number of important changes were proposed as to how "allowed non-stormwater discharges" will be regulated. This was new information, and we would like to request additional time to evaluate these proposed changes to more fully understand how "allowed non-stormwater discharges" will be regulated. We request that the March and May 2012 timelines be extended to allow this thorough review and comment period.

Thank you very much for your attention and cooperation.

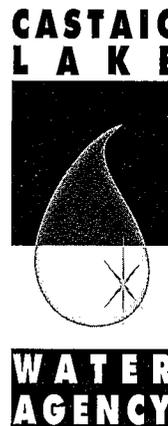
Sincerely,

Robb Whitaker, P.E.
General Manager
Water Replenishment District of Southern California



January 26, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013



Re: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond:

Castaic Lake Water Agency was formed in 1962 to bring supplemental water to the Santa Clarita Valley from the State Water Project. As a water wholesaler, our goal is to provide a safe, reliable supply of drinking water to our retail customers at a reasonable cost, and to provide for the best possible fire protection ensuring the safety of life and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System National Pollution Discharge Elimination System Permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February, and that the Board plans on considering and voting on the proposed permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges", which will have a very significant impact on CLWA. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is taking to adopt the permit, we are concerned that some very important issues have not been fully vetted.

We are aware the MS4 Permit has been in development for a long time and its adoption has been administratively continued several times, and that the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the suggested changes, CLWA respectfully requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators and fire departments in Los Angeles County.

Thank you for your consideration of this request.

Sincerely,

Dan Masnada
General Manager

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SECRETARY

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"A PUBLIC AGENCY PROVIDING RELIABLE, QUALITY WATER AT A REASONABLE COST TO THE SANTA CLARITA VALLEY"

27234 BOUQUET CANYON ROAD • SANTA CLARITA, CALIFORNIA 91350-2173 • 661 297-1600 FAX 661 297-1611

website address: www.clwa.org


CALIFORNIA WATER SERVICE COMPANY

1720 NORTH FIRST STREET • SAN JOSE, CA 95112-4598

(408) 367-8200

January 27, 2012

Ms. Francine Diamond, Chair
 Los Angeles Regional Water Quality Control Board
 320 West Fourth Street, Suite 200
 Los Angeles, CA 90013

RECEIVED
 2012 JAN 30 PM 4 32
 CALIFORNIA REGIONAL WATER
 QUALITY CONTROL BOARD
 LOS ANGELES REGION

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Ms. Diamond:

California Water Service Company (Cal Water) is a private water utility that owns and operates community water systems throughout California, with a significant number located in Los Angeles County. Cal Water is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Cal Water is also regulated by the California Public Utilities Commission. The primary goal of Cal Water is to protect public health while ensuring a reliable water supply for its customers.

The Los Angeles Regional Water Quality Control Board (LA RWQCB) has recently proposed changes to the Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) permit. Cal Water believes that these proposed changes would significantly impact how water utilities operate. These changes could potentially have a detrimental impact on the ability of Cal Water, as well as other water utilities in Los Angeles County, to continue to supply a reliable, high quality, water supply while protecting public health. A reliable water supply is also needed in order to insure adequate fire protection to the cities that we serve.

Cal Water agrees the MS4 permit is important for the protection of critical water resources, and supports the continued advancement of this effort. However, Cal Water is quite concerned about the implications of the proposed changes to the Los Angeles County MS4 permit. While the LA RWQCB has been working on this permit for quite some time, only recently has it indicated that it is proposing significant changes to the sections of the MS4 NPDES Permit that would have the greatest impact on public water systems. Cal Water understands the current schedule for adoption of this permit is aggressive. Therefore, Cal Water is concerned that some important aspects of the proposed changes will not be given the time to be adequately evaluated.

Cal Water is respectfully requesting that the LA RWQCB schedule a workshop to hear and discuss the proposed changes and related concerns of the public water systems, in particular, as they relate to "allowed non-stormwater discharges."

Respectfully,

Dale Gonzales, P.E.
 Environmental Manager
 California Water Service Company

Directors
 Annette Sanchez *President*
 Harris Mataalii *Vice President*
 Robert E Brown *Director*



A PUBLIC CORPORATION

Officers
 Alberto Corrales
General Manager
 Andrea Fernandez
Corporate Secretary

January 27, 2012

Ms. Francine Diamond, Chair
 Los Angeles Regional Water Quality Control Board
 320 West Fourth Street, Suite 200
 Los Angeles, CA 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chair Diamond,

South Montebello Irrigation District, an irrigation water district formed under Division 11 of the Water Code (District), operates a Community Water System (CWS), which is regulated under the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our goal is to provide a safe, reliable supply of drinking water to our customers at a reasonable cost, and to provide for the best possible fire protection to ensure the safety of our citizens' lives and property.

I am writing you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System permit (MS4 Permit). The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of some of the changes being proposed to the MS4 Permit. Regional Board staff has indicated there will be a final draft of the permit prepared as early as the end of February and that the Board plans on considering and voting on the permit in May.

At the December 15, 2011 workshop held to discuss the MS4 Permit, a number of important changes were proposed on "allowed non-stormwater discharges" which will have a very significant impact on our district. Given the lateness of announcement of these proposed changes to the MS4 Permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

The District therefore requests that a formal Board Workshop be conducted on the topic of "allowed non-stormwater discharges" and how any changes proposed to the MS4 Permit on that issue will impact CWSs, MS4 operators, and fire departments in Los Angeles County. We are aware that the MS4 permit has been in development for a very long time and has been administratively extended several times, so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested, we are respectfully requesting a Board Workshop on this specific issue so that we may present our concerns to the Board.

Thank you for your consideration of this request.

Sincerely,

General Manager
 South Montebello Irrigation District

THE CITY OF
POMONA

Water Operations

February 6, 2012

Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

**RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit**

Dear Ms. Diamond,

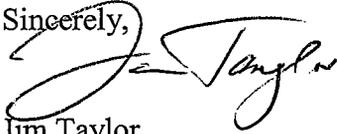
The City of Pomona operates a Community Water System (CWS) which is regulated by EPA and the California Department of Public Health (CDPH). Pomona also operates a Municipal Separate Storm Sewer System (MS4) through our Department of Public Works which is regulated under the Clean Water Act. Our goal is to provide our citizens the best possible protection against fire, flooding, and a reliable and safe supply of water.

I am writing to you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System MS4 National Pollution Discharge Elimination System NPDES Permit. The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are very concerned about the implications of the upcoming changes to the Los Angeles County (LAC) MS4 Permit regarding the impact to the operation of the city's water system. The Board Staff have indicated that there will be a final draft for the Permit as early as the end of February 2012, and the Board plans on voting on the Permit in May 2012. However, at the December 15, 2011 workshop held by Board Staff, a number of important changes were proposed to the "allowed non-stormwater discharges". Given the lateness of the announcement of these proposed changes to the MS4 Permit, and the speed with which the Board is pursuing adoption of the Permit, the City of Pomona is concerned that some very important issues have not had the appropriate amount of discussion.

The City of Pomona is thus requesting that there be a formal Board Workshop on the topic of "allowed non-stormwater discharges" and how it will impact CWS's, MS4 Operators, and the Fire Departments in Los Angeles County. It is understood that the MS4 Permit has been in development for a very long time, and has been administratively extended several times, so therefore, the Board is understandably anxious to move forward with this Permit. Nonetheless, given the very significant implications of the changes suggested, scheduling a Board Workshop in the near future does not appear to be too great an effort to make in order for the affected parties to voice our concerns.

Should you have any questions, please feel free to contact me at (909) 620-2251.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Taylor". The signature is written in a cursive style with a large, looping initial "J".

Jim Taylor

Water/Wastewater Operations Manager

cc: Daryl R. Grigsby, Public Works Director
Raul Garibay, Supervising Water Resources Engineer
Kaying Lee, Acting Supervising Environmental Services Engineer
Julie Carver, Environmental Programs Coordinator



RON CHAPMAN, MD, MPH
Director & State Health Officer

State of California—Health and Human Services Agency
California Department of Public Health



EDMUND G. BROWN JR.
Governor

2012 FEB 23 PM 1 21
CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

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February 14, 2012

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

Dear Mr. Unger:

MS4 PERMITS INVOLVING PUBLIC WATER SYSTEM DISCHARGES

The purpose of this letter is to outline the concerns of the California Department of Public Health (CDPH) regarding the proposed Los Angeles County MS4 permit to be issued by the Regional Water Quality Control Board. Our concern focuses primarily on "non-storm water discharges" that originate from public water systems regulated by the Drinking Water Program for compliance with the State and Federal Safe Drinking Water Acts.

There are a number of regulations enforced by our program that require public water systems to periodically maintain their facilities including flushing portions of their distribution systems and discharging potable water to ensure that the water delivered to customers remains safe for human consumption. In most cases, the water is discharged to storm drains. We understand that your agency's goal is to minimize the impacts of discharges on receiving waters. It is important that water system operations and maintenance activities are not adversely influenced by concerns of fines and penalties that may occur if distribution systems, reservoirs or wells are flushed and cleaned to improve water quality.

The list below summarizes the typical planned operations and maintenance activities that require discharge of water from public water systems to achieve compliance with Title 22, California Code of Regulations, Chapter 15, Article 16 §64449.5 and Title 22 California Code of Regulations, Chapter 16, Article 4 §64575, Article 6, §64585, and Article 8, §64600:

1. Flushing mains, dead ends or other areas to address water quality problems
2. Water main maintenance and repair
3. System wide distribution system flushing

Mr. Samuel Unger

Page 2

February 14, 2012

4. Wells start-up or development
5. Treatment facility start-ups
6. Well rehabilitation
7. Well head pump to waste on start-up
8. Small Scale Pilot or Demonstration systems
9. Sample drain lines (most to sewers)
10. Backwash decanting
11. Reservoir maintenance and/or cleaning
12. Hydrostatic discharges

When planned operations and maintenance activities including flushing are needed, public water systems routinely comply with required Best Management Practices (BMP) including dechlorination to protect plants, fish, and the environment; implement sediment control and prevent discharge scouring; and keep records of the volume of water flushed. The cost of drinking water supplies alone prevents excessive flushing and potable water discharges by public water systems since it increases their operating expenses.

Additionally, unplanned potable water discharges can occur on occasion. Examples include sheared fire hydrants, water main breaks, and treatment equipment malfunction. These discharges can be controlled and impacts minimized by rapid emergency response.

CDPH respectfully requests that your Board consider allowing the MS4 permit holders to work in partnership with the public water systems to develop and implement BMPs to minimize the impacts to the receiving waters to the maximum extent practicable, rather than establishing numerical effluent limits for potable discharges. CDPH feels that this approach would meet the objectives of both the State and Federal Safe Drinking Water Acts and the Clean Water Act.

We would be happy to meet with your staff to further discuss this issue upon your request. Thank you in advance for your attention to these matters.

Sincerely,

A handwritten signature in black ink, appearing to read "Leah Godsey Walker for". The signature is written in a cursive, flowing style.

Leah Godsey Walker, P.E., Chief
Division of Drinking Water
and Environmental Management



Timothy J. Scranton, Fire Chief
Beverly Hills Fire Department

February 24, 2012

California Regional Water Quality Control Board
Chairperson Maria Mehranian
320 West Fourth Street, Ste. 200
Los Angeles, Ca 90013

RE: Proposed Municipal Separate Storm Sewer System (MS4) NPDES Permit

Dear Chairperson Mehranian:

Thank you for the opportunity to voice several concerns.

As President of the Los Angeles Area Fire Chiefs Association, I am writing on behalf of fire departments of the Los Angeles region regarding the proposed *Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) permit*.

Our cities provide fire suppression, fire prevention and emergency medical services to our communities. We also have mutual aid programs in place to assist our neighboring cities when necessary. Community Water Systems (CWS) are implemented and regulated by the Safe Drinking Water Act (SDWA) by the Department of Public Health (DPH). Our communities need such systems in place; it provides a sense of security knowing their fire department can effectively do their job, because it does. As part of our efforts, we need reliable and sustainable CWS.

On a daily basis, our regional offices must conduct various fire inspections like rough and final fire sprinkler systems, fire alarms, fire department connections, underground main fire supplies, and hydrant testing. Moreover, it is vital to continue providing training to our firefighters. Inspections and training requires water usage via fire hydrants, engines, and hose lines. It necessitates the discharge of water. Fire crews must routinely perform live exercises with significant water flow at high velocity and pressure. Performing these "Wet Drills" will prepare us for actual firefighting conditions. We cannot jeopardize the safety of our personnel either. Fire sprinkler/fire protection systems require periodic maintenance and testing, required by State regulation and to ensure operational efficiency.

These necessarily result in the significant discharge of water provided by CWS. Many of our cities suffered on budget reductions alone. Can you imagine the fallouts of compromising our water usage? Our goal is to provide safe and reliable fire protection.

The MS4 permit is important for the protection of our water resources and we support the continued advancement of this effort. However, we are greatly concerned about the implications of the upcoming potential changes to the Los Angeles County MS4 permit. CWS are required, under the threat of adverse legal action by DPH, to periodically discharge water from our distribution systems. The vast majority of this discharge ends up in the gutter and then into the storm drains. Fire departments must periodically exercise the valves on fire hydrants to ensure that they will work properly in an emergency. It is our duty to provide fire protection, upholding the quality of life of our citizens. Your proposal will hinder such rights.

Chairperson Mehranian and the Board, under the existing LAC MS4 permit, there is already considerable pressure upon the MS4 permit-holders to minimize the amount of non-stormwater discharge, even those non-stormwater discharges considered allowable under the "flow incidental to urban activities".

As more Total Maximum Daily Loads (TMDL) are adopted and incorporated into the MS4 permit, this pressure will increase. In other parts of the State, MS4 operators are issuing citations and fines to CWS, fire departments, and C-16 Contractors (those who install water based fire suppression equipment, like fire sprinklers) for discharging otherwise potable water into storm drains. This is true even if the CWS has a NPDES permit giving them authority to discharge "low threat" or "de minimis risk" waters by the local RWQCB. This trend is already being observed here in Los Angeles County even under the comparatively lenient existing permit. It would only get worse as more TMDLS are adopted and incorporated into the MS4 permit.

The MS4 operators do not care whether water from a CWS or fire department meets any TMDL based or any other effluent limit. Their best defense against a notice of violation (NOV) is zero discharge, the less non-stormwater they discharge, the better their odds of not receiving an NOV. Beyond that, even if a CWS or fire department were to discharge bottled water, it could still mobilize metals, salts, and bacteria in the street, gutter, or storm drains. The rule is "Less is More" from their perspective, quality does not matter. It has to be remembered that the MS4 operators have legal authority of their own beyond that of the RWQCB.

It is evident that CWS and fire departments are caught between the proverbial rock and a hard place. DPH demands that CWS discharge but MS4 operators are increasingly demanding that we do not discharge so that they can comply with their MS4 permits. Fire departments need to exercise hydrants, conduct Wet Drills and performing fire sprinkler/fire protection system testing and maintenance; not doing so is not a practical or legally possible option. We need some sort of regulatory relief which can only come from the RWQCB. We would thus like to request that the Los

Angeles Regional Water Quality Control Board hold a special Board Workshop on the issue on the regulation of non-stormwater discharges in the Los Angeles County MS4 permit.

Fire departments throughout California are dealing with the same economic conditions that the State and Federal Governments are addressing with legislation. Funds are not available for many of the training activities that the Fire Service once had. Now the Water Board is proposing to impose restrictive new conditions on the Fire Service as they go about their assignment of protecting the Life, Safety and Welfare of the residents of their communities.

Part 1.A.1.(c).(2) lists "Category B - Flows from emergency fire fighting activities." As an exempt discharge when they are not the source of pollutants that exceed water quality standards. Table 1 contains a condition under which the discharge is allowed. The condition is "Pooled water after fire must be controlled." This limit will put fire departments state-wide in a difficult position, given the need for additional staff to respond to incidents and the potential for a reduction in public safety if Incident Commanders must concern themselves with water runoff.

Everyone understands that putting water on a fire is in direct response to the fire emergency. In addition during the period when the debris is still smoldering and the firefighters are making sure that the fire is extinguished (the overhaul of the site), that activity is also considered part of the emergency.

The difficulty comes when the fire is out and the fire department begins the final phase of their responsibility. Currently, firefighter's transitions from the emergency response to the event clean up. The water that the fire department has applied during the emergency must be dealt with because it will continue to damage an already weakened structure. If they must stop to set up "BMP's" or worse turn the site over to Hazmat personnel for the removal of the remaining water, assuming that it is contaminated with chemicals, there will undoubtedly be an increased cost, becoming a burden on the property owner and the taxpaying public. Since every site is unique it is impossible for the fire department to respond with the necessary material and equipment to implement effective "BMP's" for every situation. So the fire department is required to either tell the property owner that the cleanup is their responsibility or they must try to implement a "universal" BMP that may or may not be effective to deal with the pooled water at the site. I would ask that the Board expand the definition of the emergency to include the "Pooled Water after fire".

Another indirect impact of the provisions of Part 1.A.1.(c).(3) is an unintended consequence on fire service training. While the hydrostatic testing of fire hydrants is typically not the responsibility of the fire department, it serves two purposes in assuring that the fire department is ready and able to respond to an emergency.

During the regular training that fire personnel undergo, they will drive to a predetermined area and practice the deployment of equipment that will include the flowing of a fire hydrant. This assures the fire department that water is available in sufficient quantity and pressure for their use at the location,

for effectiveness during an emergency. The condition contained in Table 1 will limit the fire departments ability to use this element in training. The condition itself is complex and states "discharges from water lines and potable water sources shall be dechlorinated, pH adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediment." How would the fire crew know the answer to these questions? With the Boards consideration of the Potable Water System Discharge permit, is this provision needed in the MS4 permit?

We believe that the draft permit will have negative effects on the emergency response the public expects from fire departments. This unintended affect should be sufficient for the Board to return the permit to its previous wording to (1) remove the specific Condition for the treatment of Pooled water from a fire emergency and (2) to allow the occasional discharge of potable water by fire departments when training for emergency response.

The fire service state-wide is charged with protecting the Health, Safety and Welfare of the Community and its Citizens. The fire service does not knowingly or willfully pollute the waters of the State or the Nation, but when an emergency confronts fire departments of this State they must be able to attack the emergency with a focus that protects the public and themselves.

Thank you for your time and attention to this serious matter. I am confident the Board will do its due-diligence and give great consideration during deliberation on the impacts to Fire Service Preparedness if the language contained within the MS4 permit proposal is adopted in its current form.

Sincerely,



Timothy Scranton
Fire Chief



Ms. Francine Diamond, Chair
Los Angeles Regional Water Quality Control Board
320 West Fourth Street
Suite 200
Los Angeles, CA 90013

RE: Proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit

Dear Ms. Diamond:

Golden State Water Company (GSWC) operates thirteen Community Water Systems (CWSs) in Los Angeles County which are regulated under the Safe Drinking Water Act (SDWA) by the California Department of Public Health (CDPH) and the California Public Utilities Commission (CPUC). As a regulated investor owned utility, GSWC is required to perform certain system maintenance operations that require us to discharge varying quantities of potable water to storm water conveyances in LA County. Therefore, it is necessary that GSWC be allowed to continue these discharges of "non-stormwater" to the County's storm sewers without GSWC being penalized for these discharges.

We are writing to you in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System (MS4) permit issued as part of the National Pollutant Discharge Elimination System (NPDES) program. We realize that the MS4 permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, we are quite concerned about the implications of the proposed changes to the Los Angeles County MS4 permit. The Los Angeles Regional Water Quality Control Board (LARWQCB) staff has indicated that there will be a final draft of the permit as early as the end of February and that the Board plans on voting on the permit in May. However at the December 15, 2011 workshop held by Board staff, a number of important changes were proposed to "allowed non-stormwater discharges," which will have a very significant adverse impact on GSWC. Given the lateness of the announcement of these proposed changes to the MS4 permit and the speed with which the Board is pursuing adoption of the permit, we are concerned that some very important issues have not had the appropriate amount of discussion.

Golden State Water Company is thus requesting that there be a formal Board Workshop on the topic of "allowed non-stormwater discharges" and how it will impact CWSs and MS4 operators in Los Angeles County. It is understood that the MS4 permit has been in development for a very long time and has been administratively extended several times so the Board is understandably anxious to move forward with this permit. Nonetheless, given the very significant implications of the changes suggested, a Board Workshop does not appear to be an onerous request.

Thank you for your consideration of this request. We look forward to hearing from you and having the opportunity to discuss our concerns at a formal Board Workshop. Please contact Ms. Brandy Hancocks at (916) 853-3639 or at brandy.hancocks@gswater.com if you have any questions.

Sincerely,



David Chang, PhD, P.E.
Vice President Operations
Golden State Water Company

REH

CC: Brandy Hancocks
David Kimbrough, Ph.D., Water Quality Manager, Pasadena Water & Power

MS4 PERMIT WORKSHOP

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD JANUARY 23, 2014 @ 1:00 PM

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MS4 PERMIT WORKSHOP

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RB-AR1040
city
only

MS4 PERMIT WORKSHOP

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
 JANUARY 23, 2012 @ 1:00 PM

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MS4 PERMIT WORKSHOP

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 JANUARY 23, 2011 @ 1:00 PM

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MS4 PERMIT WORKSHOP

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MS4 PERMIT WORKSHOP

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MS4 PERMIT WORKSHOP

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LA County MS4 Permit Workshop

- I. Incorporation of TMDLs
- II. Monitoring Requirements

January 23, 2012

TMDL Provisions

- 32 TMDLs with WLA for LA County MS4 Permittees
 - LA River Trash – in permit
 - MDR Bacteria (summer dry weather) – in permit
- Watershed-based implementation
 - Allocations
 - Implementation
 - Compliance monitoring

Basic Elements of TMDL Provisions in MS4 Permit

- Provisions consistent with assumptions and requirements of WLAs
 - Numeric interim & final effluent limitations and/or receiving water limitations
 - Alternative means to demonstrate compliance with numeric limitations
 - Deadlines according to TMDL implementation schedule
 - Compliance monitoring requirements consistent with TMDL monitoring requirements and approved monitoring plans
 - Reporting requirements

Organization of TMDL Provisions

- Part 7
 - General provisions, including language regarding compliance demonstration
 - Trash TMDLs
 - Others
 - Matrix of Permittees and TMDLs to identify those subject to TMDL-specific requirements
 - TMDLs grouped by watershed management area (WMA)
 - TMDL specific numeric effluent limitations and/or receiving water limitations + deadlines consistent with TMDL
- Monitoring Program
- Reporting Program

Methods for Demonstrating Compliance

- Meet numeric effluent limitations at MS4 "outfall"
- Meet water quality standards or interim receiving water limitations in receiving water
- No discharge from MS4 (dry weather only)
- Implement BMPs and other actions in accordance with an approved reasonable assurance plan (*action based compliance pathway*)

Action-based Compliance Requirements

- Submittal of *Reasonable Assurance Plans* (RAPs)
 - Watershed based plans encouraged
 - Timing
 - Approval process
- Elements of RAPs
- Annual monitoring and evaluation of RAP implementation
- Process to revise RAPs

**Elements of
Reasonable Assurance Plan**

- Address all effluent and/or receiving water limitations assigned to the Permittee(s) pursuant to established TMDLs
- Identify BMPs and other actions or programs to achieve limitations
- Include a schedule and milestones for implementing each BMP/action
- Identify responsibilities of each Permittee
- Demonstrate through quantitative analysis/modeling that plan has reasonable assurance of achieving limitations
- Monitoring and annual evaluation of effectiveness of RAP
- Triggers to revise RAP and implement additional BMPs/actions

**Monitoring and Evaluation
Requirements**

- Comprehensive reporting on BMPs/actions implemented, including their performance
- Ongoing model validation based on monitoring data
- Determination regarding whether suite of BMPs/actions continues to provide reasonable assurance that limitations will be met
- Timely modifications to RAP

**Compliance Determination:
Action-based Compliance**

- RAP is approved by EO
- Permittee is implementing all elements of RAP in accordance with approved schedule
- BMPs properly sized and operated/maintained
- Revisions to plan are submitted upon determination that interim milestones may not be/have not been met
- Approved revisions to plan are implemented per schedule
- If criteria are not met, Permittee is subject to compliance determination based on numeric effluent limitations and/or receiving water limitations

**Considerations Regarding
Past TMDL Deadlines**

- If anticipated immediate non-compliance
 - Permittees may request Time Schedule Order (TSO)
 - Justification including actions taken to date, status of attainment, planned actions and schedule to achieve TMDL deadlines as soon as possible
 - Board consideration of TSO or other appropriate orders

**Relationship of TMDLs to
Receiving Water Limitations (RWL)**

- MS4 discharges may not cause or contribute to violations of water quality standards (WQS) (Part 2.1).
 - Receiving Water Limitations = WQS
- State-adopted TMDLs provide implementation schedules to attain water quality standards
- During TMDL implementation, water quality standards may not be met in the receiving water
- For waterbodies subject to a TMDL, if a Permittee is in compliance with applicable provisions of Part 7 (TMDL Provisions), staff is considering proposing language that an exceedance of a RWL for a pollutant covered by a TMDL would not represent a violation of Part 2.1

Draft Los Angeles County MS4 Monitoring Program

January 23, 2012 Workshop

PG Environmental, LLC

Los Angeles Regional Water Quality
Control Board

Objectives

- Assess the chemical, physical and biological impacts of the MS4 discharges on receiving waters.
- Identify pollutant discharges to the MS4 that cause or contribute to an exceedance of water quality standards in the receiving water.
- Assess the effectiveness of the Permittee's BMPs and management practices in reducing pollutant discharges to the MS4.

Elements of the Monitoring Program

- Regional Monitoring Programs.
- TMDL Compliance Monitoring Programs.
- Storm drain outfall monitoring of stormwater (wet-weather discharges).
- Storm drain outfall monitoring of non-stormwater (dry-weather) discharges.

Monitoring Plans

- **Regional Monitoring Programs** are designed to assess whether receiving waters are fully supporting beneficial uses, and to identify pollutants and hydromodification that are causing or contributing to an exceedance of water quality standards. LID and BMP effectiveness studies may also be performed at a regional scale.
- **TMDL Monitoring Plans** are designed to assess whether the applicable interim and final waste load allocations (WLAs) are being achieved.
- **Stormwater Outfall-Based Monitoring Program** to characterize the effects of urban stormwater discharges on receiving waters and to measure the effectiveness of the Permittee's Best Management Practices and Control Measures.
- **Non-Stormwater Outfall-Based Monitoring Program** using screening methods to identify high-priority outfalls, and to determine whether non-stormwater flows are caused by other permitted NPDES discharges, authorized non-stormwater discharges, or illicit connections/illicit discharges (IC/IDs).

Regional Monitoring Programs

On-Going Regional Monitoring Programs include:

- Mass Emission
- Bioassessment
- Southern California Bight Project
- Beach Monitoring.

New Regional Monitoring Programs

- Hydromodification
- Pyrethroid Toxicity
- LID Effectiveness

New Regional Monitoring Programs

Hydromodification Study

The following assessment tools shall be developed:

- A system for mapping and classifying streams based on their susceptibility to the effects of hydromodification.
- Protocols for ongoing monitoring to assess the effects of hydromodification.
- Dynamic models to assess the effects of hydromodification on stream condition.
- Tools that managers can easily apply to make recommendations or set requirements relative to hydromodification for new development and redevelopment.

New Regional Monitoring Programs

Hydromodification Study

- Within 2 month after the Order adoption date, each Permittee with jurisdiction over drainages to a “natural waterbody” shall submit a letter to the Regional Water Board Executive Officer stating how it will satisfy the requirements to conduct a hydromodification study.
- This requirement can be satisfied by participating in the ‘Development of Tools for Hydromodification Assessment and Management’ Project undertaken by the SMC and coordinated by the SCCWRP and the State Water Resources Control Board.

New Regional Monitoring Programs

Pyrethroid Insecticide Study

- Each Permittee shall participate in the Regional Pyrethroid Insecticide Study for each watershed within the Permittee's jurisdiction.
- The study shall include:
 - Sediment Monitoring for the following Pyrethroids: bifenthrin, cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin (if laboratory is capable of analyzing for it).
 - Each sediment sample to be analyzed for total organic carbon.
 - Testing of all sediment samples for toxicity to 7 to 10-day *Hyalella azteca*.
 - At least two monitoring stations along the main stem.

New Regional Monitoring Programs

Pyrethroid Study Actions

- Minimum monitoring frequency: once every three years , beginning no later than the second year after the Order Adoption date.
- If toxicity is attributed to Pyrethroids, consult with U.S. EPA, California Department of Pesticide Regulation, and CASQA to develop recommendations to mitigate toxicity.
- Submit a final report to the Executive Officer of the Regional Water Board within 8 months after the final monitoring event, but not later than 5 years after the effective Order date.

New Regional Monitoring

LID Development

Where new developments incorporating LID design have been constructed, the Permittee shall participate in regional studies to monitor and compare stormwater runoff from LID developments and traditional (non-LID) developments with comparable land use. This monitoring is intended to assess the effectiveness of the LID design and implementation.

TMDL Compliance Monitoring

The TMDLs effective or scheduled to be effective before the adoption of the Order include:

- Ballona Creek: Trash, Metals, Toxics, and Bacteria
- Ballona Creek Wetlands: Habitat Alteration, Exotic Vegetation, Hydromodification, and Reduced Tidal Flushing (EPA to establish)
- Calleguas Creek: Creek: Metals, Nutrients, Salts, Toxics, and Trash
- Colorado Lagoon: Pesticides, PAHs, PCBs, and Metals
- Dominguez Channel Watershed, Machado Lake: Trash, Nutrients, and Pesticides and PCBs (also see Los Angeles and Long Beach Harbors)
- Los Cerritos Channel: Metals (EPA established)
- Los Angeles Area Lakes Trash (L.A. River Trash TMDL) and Toxics (EPA to establish)
- Los Angeles Harbor: Bacteria
- Los Angeles and Long Beach Harbors, Dominguez Channel: Toxics
- Los Angeles River: Trash, Nutrients, Metals, and Bacteria
- Malibu Creek: Nutrients (EPA established), Bacteria and Trash
- Marina del Rey: Bacteria and Toxics
- San Gabriel River: Trash and Metals and Selenium (EPA established)
- Santa Clara River: Chloride, Nutrients, Trash, and Salts
- Lake Elizabeth, Munz Lake, and Lake Hughes Trash TML
- Santa Monica Bay: Bacteria, Debris, and DDT and PCBs (EPA to establish).
- Santa Clara River Estuary and Reaches 3,5,6, and 7 Indicator Bacteria

Outfall-Based Monitoring

- The outfall-based monitoring program includes monitoring of water conveyed by the storm drain system within a Permittee's jurisdictional boundary, regardless of whether there is an actual "outfall" at this location.
- Outfall-based monitoring may include monitoring at an outfall, manhole or from an open storm drain at the Permittee's jurisdictional boundary.

Outfall-Based Monitoring

- Within 6 months after the Order adoption date, each Permittee shall submit:
 - The latitude/longitude coordinates for each outfall within its jurisdictional boundary and the proposed stormwater monitoring locations, and
 - A description of each outfall and stormwater monitoring location including the outfall / storm drain size, shape and construction type (e.g., pipe, open channel, trapezoid shaped channel, etc.)

Stormwater Outfall-Based Monitoring Program

The number of outfall-based monitoring stations will depend on:

- The number of subwatersheds (HUC-12) located within the Permittee's jurisdictional boundary.
- At a minimum, each Permittee shall monitor at least one outfall within each subwatershed.

Stormwater Outfall-Based Monitoring Program

Outfall Selection Criteria:

- **To the extent possible, the drainage to the outfall shall be located entirely within the Permittee's jurisdictional boundary.** Otherwise, the Permittee must include monitoring upstream (where the storm drain flows into the Permittee's jurisdictional boundary). The upstream and downstream outfalls shall be monitored simultaneously. This "bracketing" will allow the Permittee to discount the upstream pollutant loadings. Alternatively, the Permittee may coordinate with the upstream, neighboring Co-Permittee to ensure that the Co-Permittee monitors the upstream outfall (i.e., the Co-Permittee's downstream) simultaneously.
- **The land uses within the outfall drainage shall be representative of the full range of land uses within the Permittee's jurisdictional boundary.** Otherwise, the Permittee may be required to monitor multiple outfalls to provide the estimated EMC and pollutant loading from each individual land use within its jurisdiction.

Stormwater Outfall-Based Monitoring Program

Outfall Selection Criteria:

- **To the extent possible, the selected outfall(s) shall not receive drainage from other permitted non-stormwater discharges, which may alter the estimated stormwater pollutant EMC and loading estimates.**
- **Where feasible, Permittees are encouraged to select outfalls that are also monitored under a TMDL Compliance Monitoring Plan, when it will result in overall cost savings.**

Stormwater Outfall-Based Monitoring Program

Parameters to include:

- Flow
- All 303(d) listed pollutants
- Totals Suspended Solids
 - If the 303(d) list includes sedimentation, siltation or turbidity include Suspended Sediment Concentration (SSC)
- Hardness, pH, temperature, specific conductivity
- Aquatic Toxicity.

Stormwater Outfall-Based Monitoring Program

- Monitoring Frequency
 - Three storms per year including the first storm of the season, with the exception of Aquatic Toxicity.
 - Aquatic toxicity: two storms during the first year including the first storm of the year. In subsequent years, aquatic toxicity is required for the first storm of the year.

Stormwater Outfall-Based Monitoring Program

- Monitoring Methods
 - Gauge, flow data logger, modeled: flow
 - Field Measurement: DO, Hardness, pH, temperature, specific conductivity
 - Grab: Indicator bacteria, oil & grease, cyanide and volatile organics
 - Flow-weighted 24-hour composite, volume-paced microsampling, targeted volume-paced sampling, pollutograph: other pollutants.

Non-Storm Water Outfall-Based Monitoring Program

- Identify outfalls with significant non-storm water flows. A significant flow is one that: (1) causes an overflow of a dry-weather diversion or (2) causes an increase of 10 percent or more above the lowest, rolling one-hour flow measured during a consecutive seven-day monitoring period.
- Determine whether the significant non-stormwater flows are caused by other NPDES permitted discharges, authorized non-stormwater discharges or illicit connections/illicit discharges (IC/IDs).
- Characterize the pollutant loading in authorized non-stormwater discharges.
- Identify and take corrective actions to control IC/IDs.

Non-Storm Water Outfall-Based Monitoring Program

- Screen outfalls to identify those with significant flow. Screening shall consist of :
 - Using remote sensing devices (e.g., flow data loggers) to monitor continuous flow for at least seven consecutive days.
 - Taking daily grab samples (5 samples per week) concurrently with flow monitoring and analyzing for applicable indicator bacteria within 6 hours.
- Screening data may be used to partially fulfill the Los Angeles River Bacteria TMDL Load Reduction Strategy monitoring requirements, and possibly other bacteria TMDL monitoring requirements.

Non-Storm Water Outfall-Based Monitoring Program

- Within 1 month after the Order adoption date, begin screening outfalls for dry-weather flow and indicator bacteria. At least one outfall per month shall be screened.
- Outfalls that are suspected of having significant dry-weather flows should be screened within 6 months after the Order adoption date.
- All outfalls shall be screened within 9 months after the Order adoption date.

Non-Storm Water Outfall-Based Monitoring Program

- Within 9 months after the Order adoption date, each Permittee shall determine the relative flow contribution from other permitted discharges and report this information to the Regional Water Board Executive Officer.
- Within 12 months after the Order adoption date, each Permittee shall identify non-stormwater outfalls that have significant dry-weather flow that is not attributed to other permitted NPDES discharges. These outfalls shall be designated as **high-priority** non-stormwater outfalls.
- Within 18 months after the Order adoption date, each Permittee shall implement a plan for monitoring **the high-priority** non-stormwater outfalls.

Non-Storm Water

Outfall-Based Monitoring Program

- The monitoring shall include:
 - 24-hour flow data (e.g., flow data loggers).
 - 24-hour flow weighted composite samples (or other methods approved by the Regional Water Board Executive Officer). Samples to be analyzed for:
 - Pollutants identified in a Reasonable Potential Analysis.
 - Pollutants assigned a dry-weather WLA in a currently effective TMDL.
 - CWA Section 303(d) listed pollutants.
 - TSS to be analyzed when metals are analyzed.
 - TSS and SSC to be analyzed when the receiving water is listed for sedimentation, siltation or turbidity.
 - Grab samples: indicator bacteria, oil & grease, cyanide and volatile organics (when parameters are identified in the RPA, listed on the Section 303(d) list or have a dry-weather WLA).
 - Field measurements: DO, hardness, pH, temperature, and specific conductivity.
 - Aquatic Toxicity.

Non-Storm Water Outfall-Based Monitoring Program

- Monitoring Frequency: each high-priority non-stormwater outfall shall be monitored at least quarterly during the first year of monitoring.
- Aquatic Toxicity Analysis shall be performed twice per year at each high-priority non-stormwater outfall.
- The monitoring frequency may be reduced to twice per year if the pollutant concentrations have not exceeded Action Levels identified in Part X of this Order or applicable dry-weather TMDL WLAs in any samples taken at the outfall during the previous 12 months.

Non-Storm Water Outfall-Based Monitoring Program

- Monitoring may be discontinued at a high-priority non-stormwater outfall if an RPA is conducted on a qualifying data set and it is determined that the discharge has no reasonable potential to cause or contribute to an exceedance of water quality standards in the receiving water.
- A qualifying data set shall consist of at least 10 samples distributed over a minimum period of at least 12 months and shall include all monitoring data collected at the outfall during the same period.

Non-Storm Water

Outfall-Based Monitoring Program

- Each Permittee shall use the monitoring results to identify pollutant sources and in conjunction with the IC/ID program.
- Each Permittee shall include in its Annual Report the results of its investigations and report:
 - For each outfall with significant flow during dry-weather conditions, the estimated volume contributed from the following sources:
 - Other NPDES permitted discharges,
 - Illicit connections/illicit discharges, and/or
 - Authorized non-stormwater discharges.
 - For each high-priority outfall:
 - The responsible party,
 - The type of activity resulting in the discharge, and
 - A description of corrective actions.

Questions?

TOTAL MAXIMUM DAILY LOADS (TMDL) BY WATERSHED MANAGEMENT AREA (WMA)

- A. Santa Clara River Watershed Management Area
 - 1. Santa Clara River Nitrogen Compounds TMDL
 - 2. Upper Santa Clara River Chloride TMDL
 - 3. Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (*Lake Elizabeth only*)
 - 4. Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL (In approval process)

- B. Santa Monica Bay Watershed Management Area
 - 1. Santa Monica Bay Beaches Bacteria TMDL
 - 2. Santa Monica Bay Nearshore and Offshore Debris TMDL (In approval process)
 - 3. Santa Monica Bay TMDL for DDTs and PCBs (*USEPA in progress*)

 - 4. Malibu Creek Subwatershed
 - a. Malibu Creek and Lagoon Bacteria TMDL
 - b. Malibu Creek Watershed Trash TMDL
 - c. Malibu Creek Watershed Nutrients TMDL (*USEPA established*)

 - 5. Ballona Creek Subwatershed
 - a. Ballona Creek Trash TMDL
 - b. Ballona Creek Estuary Toxic Pollutants TMDL
 - c. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL
 - d. Ballona Creek Metals TMDL
 - e. Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (*USEPA in progress*)

 - 6. Marina del Rey Subwatershed
 - a. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
 - b. Marina del Rey Harbor Toxic Pollutants TMDL

- C. Dominguez Channel and Greater Harbors Waters Watershed Management Area
 - 1. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)
 - 2. Machado Lake Trash TMDL
 - 3. Machado Lake Nutrient TMDL
 - 4. Machado Lake Pesticides and PCBs TMDL (In approval process)
 - 5. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL (In approval process)

- D. Los Angeles River Watershed Management Area
 - 1. Los Angeles River Watershed Trash TMDL
 - 2. Los Angeles River Nitrogen Compounds and Related Effects TMDL
 - 3. Los Angeles River and Tributaries Metals TMDL
 - 4. Los Angeles River Watershed Bacteria TMDL (In approval process)
 - 5. Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (*USEPA in progress*)
 - 6. Los Angeles Area Lakes TMDLs¹ (*USEPA in progress for Lake Calabasas, Echo Park Lake, Lincoln Park Lake, and Peck Road Park Lake*)

¹ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

- E. San Gabriel River Watershed Management Area
 - 1. San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (*USEPA established*)
 - 2. Legg Lake Trash TMDL
 - 3. Los Angeles Area Lakes TMDLs¹ (*USEPA in progress for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake*)

- F. Los Cerritos Channel and Alamitos Bay Watershed Management Area
 - 1. Los Cerritos Channel Metals TMDL (*USEPA established*)
 - 2. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

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¹ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

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
Los Angeles (County of)	X	X	X	X
Los Angeles County Flood Control	X	X	X	X
Santa Clarita	X	X		X

Multi-Jurisdictional Permittees

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS												
	Santa Monica Bay Beaches Bacteria TMDL (Wet and Dry Weather)	Santa Monica Bay Nearshore and Offshore Bacteria TMDL	Santa Monica Bay TMDL for DDTs and PCBs [U.S. EPA in progress]	Malibu Creek and Lagoon Bacteria TMDL	Malibu Creek Watershed Trash TMDL	Malibu Creek Nutrient TMDL [U.S. EPA established]	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Scarpalveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation [U.S. EPA in progress]	Marina del Rey Harbor Mothers' Beach and Beck Basins Bacteria TMDL	Marina del Rey Subwatershed
Arcata Hills	X	X	X	X	X	X	X	X	X	X	X	X	
Bel Air Hills	X	X	X	X	X	X	X	X	X	X	X	X	
Calabasas	X	X	X	X	X	X	X	X	X	X	X	X	
Calver City	X	X	X	X	X	X	X	X	X	X	X	X	
El Segundo	X	X	X	X	X	X	X	X	X	X	X	X	
Hermosa Beach	X	X	X	X	X	X	X	X	X	X	X	X	
Hidden Hills	X	X	X	X	X	X	X	X	X	X	X	X	
Inglewood	X	X	X	X	X	X	X	X	X	X	X	X	
Los Angeles (City of)	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	
Los Angeles County Flood Control	X	X	X	X	X	X	X	X	X	X	X	X	
Malibu	X	X	X	X	X	X	X	X	X	X	X	X	
Manhattan Beach	X	X	X	X	X	X	X	X	X	X	X	X	
Palos Verdes Estates	X	X	X	X	X	X	X	X	X	X	X	X	
Rancho Palos Verdes	X	X	X	X	X	X	X	X	X	X	X	X	
Redondo Beach	X	X	X	X	X	X	X	X	X	X	X	X	
Rolling Hills	X	X	X	X	X	X	X	X	X	X	X	X	
Rolling Hills Estates	X	X	X	X	X	X	X	X	X	X	X	X	
Santa Monica	X	X	X	X	X	X	X	X	X	X	X	X	
Torrance	X	X	X	X	X	X	X	X	X	X	X	X	
West Hollywood	X	X	X	X	X	X	X	X	X	X	X	X	
Westlake Village	X	X	X	X	X	X	X	X	X	X	X	X	

Multi-Jurisdictional Permittees

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS					Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL		
Carson		X	X	X		X
Compton						X
El Segundo						X
Gardena						X
Hawthorne						X
Inglewood						X
Lawndale						X
Lomita		X	X	X		
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
Manhattan Beach						X
Palos Verdes Estates		X	X	X		
Rancho Palos Verdes		X	X	X		
Redondo Beach		X	X	X		X
Rolling Hills		X	X	X		
Rolling Hills Estates		X	X	X		
Torrance		X	X	X		X

Multi-Jurisdictional Permittees

ACTIVE TMDLS							
Los Angeles River Watershed Management Area Permittees	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	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (U.S. EPA in progress)	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, Lincoln Park Lake, and Peck Road Park Lake (U.S. EPA in progress)	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Alhambra	X	X	X	X			
Arcadia	X	X	X	X		X	
Bell	X	X	X	X			
Bell Gardens	X	X	X	X			
Bradbury	X	X	X	X		X	
Burbank	X	X	X	X			
Calabasas	X	X	X	X		X	
Carson	X	X	X	X			
Commerce	X	X	X	X			
Compton	X	X	X	X			X
Cudahy	X	X	X	X			
Downey	X	X	X	X			
Duarte	X	X	X	X		X	
El Monte	X	X	X	X		X	
Glendale	X	X	X	X			
Hidden Hills	X	X	X	X			
Huntington Park	X	X	X	X			
Inglewood	X	X	X	X			
Irwindale	X	X	X	X		X	
La Canada Flintridge	X	X	X	X			X
Lakewood	X	X	X	X			X
Los Angeles (City of)	X	X	X	X		X	X
Los Angeles (County of)	X	X	X	X	X	X	X
Los Angeles County Flood Control	X	X	X	X	X	X	X
Lynwood	X	X	X	X			
Maywood	X	X	X	X			
Monrovia	X	X	X	X		X	
Montebello	X	X	X	X			
Monterey Park	X	X	X	X			X
Paramount	X	X	X	X			
Pasadena	X	X	X	X			
Pico Rivera	X	X	X	X			
Rosemead	X	X	X	X			
San Fernando	X	X	X	X			
San Gabriel	X	X	X	X			
San Marino	X	X	X	X			
Santa Clarita	X	X	X	X			
Sierra Madre	X	X	X	X		X	
Signal Hill	X	X	X	X	X		X
South El Monte	X	X	X	X			
South Gate	X	X	X	X			
South Pasadena	X	X	X	X			
Temple City	X	X	X	X			
Vernon	X	X	X	X			

Multi-Jurisdictional Permittees

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (U.S. EPA established)	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake (U.S. EPA in progress)	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Arcadia	X			
Artestia	X			
Azusa	X		X	
Baldwin Park	X			
Bellflower	X			X
Bradbury	X			
Cerritos	X			
Claremont	X		X	
Covina	X			
Diamond Bar	X			
Downey	X			
Duarte	X			
El Monte	X	X	X	
Glendora	X			
Hawaiian Gardens	X			
Industry	X			
Irwindale	X		X	
La Habra Heights	X			
La Mirada	X			
La Puente	X			
La Verne	X		X	
Lakewood	X			
Los Angeles (County of)	X	X	X	X
Los Angeles County Flood Control	X	X	X	X
Monrovia				
Norwalk	X			
Pico Rivera	X			
Pamona	X		X	
San Dimas	X		X	
Santa Fe Springs	X			
South El Monte	X	X	X	
Walnut	X			
West Covina	X			
Whittier	X			

Multi-Jurisdictional Permittees

LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	Los Cerritos Channel Metals TMDL (U.S. EPA established)	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
Bellflower	X		X
Cerritos	X		
Downey	X		
Lakewood	X		
Los Angeles (County of)	X	X	X
Los Angeles Flood Control	X	X	X
Paramount	X		
Signal Hill	X		

Multi-Jurisdictional Permittees

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	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					
Inglewood		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				
Monrovia		X				
Montebello		X				
Monterey Park		X				
Paramount		X				
Pasadena		X	X			
Pico Rivera		X				
Rosemead		X				
San Fernando				X		
San Gabriel		X				
San Marino		X				
Santa Clarita						
Sierra Madre		X				
Signal Hill	X					
South El Monte		X				
South Gate	X	X				
South Pasadena		X				
Temple City		X				
Vernon	X	X				

Multi-Jurisdictional Permittees

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												X		
Bell	X															
Bell Gardens	X													X		
Bradbury		X												X		
Burbank			X							X						
Calabasas												X				
Carson		X									X					
Commerce	X	X									X					
Compton	X	X									X					
Cudahy		X												X		
Downey		X												X		
Duarte														X		
El Monte		X	X					X		X				X		X
Glendale													X			
Hidden Hills		X						X								
Huntington Park		X								X						
Inglewood																
Irwindale														X		
La Canada Flintridge			X					X								X
Lakewood	X															
Los Angeles (City of)	X	X	X	X	X			X	X	X	X	X	X	X	X	X
Los Angeles (County of)	X	X	X	X	X			X	X	X	X	X	X	X	X	X
Los Angeles County Flood Control	X	X	X	X	X			X	X	X	X	X	X	X	X	X
Lynwood	X										X					
Maywood		X														
Monrovia														X		
Montebello		X												X		
Monterey Park		X												X		
Paramount	X	X														
Pasadena		X	X											X		X
Pico Rivera								X						X		
Rosemead														X		
San Fernando																
San Gabriel														X		
San Marino														X		
Santa Clarita									X							
Sierra Madre														X		
Signal Hill	X															
South El Monte														X		
South Gate		X									X			X		
South Pasadena		X						X						X		
Temple City														X		
Vernon		X									X			X		

Multi-Jurisdictional 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
SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES									
Agoura Hills									
Beverly Hills									
Calabasas	X							X	
Culver City		X							
El Segundo		X			X				
Hermosa Beach					X	X			
Hidden Hills									
Inglewood									
Los Angeles (City of)	X	X	X				X	X	
Los Angeles (County of)	X	X	X			X	X	X	X
Los Angeles County Flood Control	X	X	X		X	X	X	X	X
Malibu									
Manhattan Beach		X			X	X			
Palos Verdes Estates							X		
Rancho Palos Verdes					X	X	X		
Redondo Beach							X		
Rolling Hills							X		
Rolling Hills Estates							X		
Santa Monica		X	X			X		X	
Torrance									
West Hollywood									
Westlake Village								X	X

Multi-Jurisdictional Permittees

San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (U.S. EPA established)									
	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	
SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES									
Arcadia							X		
Artestia			X	X					
Azusa	X							X	
Baldwin Park	X					X	X		
Bellflower				X					
Bradbury									
Cerritos			X	X					
Claremont	X	X							
Covina	X								
Diamond Bar		X	X						
Downey				X	X				
Duarte								X	
El Monte						X	X		
Glendora	X							X	
Hawaiian Gardens			X						
Industry	X	X			X	X			
Irwindale	X					X	X		X
La Habra Heights		X	X						
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	X	X	X
Los Angeles County Flood Control	X	X	X	X	X	X	X	X	X
Monrovia									
Norwalk			X	X					
Pico Rivera					X	X			
Pamona	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			

Multi-Jurisdictional Permittees

Part 7. TOTAL MAXIMUM DAILY LOADS (TMDLs) PROVISIONS

The provisions of this Part implement and are consistent with the assumptions and requirements of the waste load allocations (WLAs) from TMDLs for which some or all of the Permittees in this Order are responsible.

- Part 7 of this Order incorporates provisions to assure that Los Angeles County MS4 Permittees comply with WLAs and other requirements of TMDLs covering impaired waters impacted by the Permittees' discharges.
- The Permittees shall comply with the following effluent limitations and/or receiving water limitations, consistent with the assumptions and requirements of the waste load allocations documented in the Implementation Plans, including compliance schedules, associated with the State adoption and approval of the TMDL at compliance monitoring points established in each TMDL or its approved monitoring plan (40 CFR §122.44(d)(1)(vii)(B); Cal. Wat. Code §13263(a)).

A. TMDLs in the Santa Clara River Watershed Management Area

1. Santa Clara River Nitrogen Compounds TMDL

- a) Permittees subject to the provisions below are identified in Table X.
- b) Permittees shall comply with the following effluent limitations for discharges to the Santa Clara River Reach 5¹:

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

2. Upper Santa Clara River Chloride TMDL

- a) Permittees subject to the provisions below are identified in Table X.
- b) Permittees shall comply with the following effluent limitation for discharges to the Santa Clara River Reaches 5 and 6:

Constituent	Effluent Limitation (mg/L)
Chloride	100

¹ The Basin Plan Chapter 7-9 Santa Clara River Nitrogen Compounds TMDL uses the USEPA Santa Clara River reach designations. USEPA Santa Clara River Reach 7 corresponds to the Regional Board Santa Clara River Reach 5.

3. Lake Elizabeth Trash TMDL

- a) Permittees subject to the provisions below are identified in Table X.
- b) Permittees shall comply with the final effluent limitation of zero trash discharged to Lake Elizabeth no later than March 6, 2016 and every year thereafter.
- c) Permittees shall comply with interim and final 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)
March 6, 2008	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

- d) Permittees shall comply with the interim and final effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X.X [Permit Provisions to Implement Trash TMDLs].

4. Santa Clara River Indicator Bacteria TMDL

- a) Permittees subject to the provisions below are identified in Table X.
- b) Permittees shall comply with the following final effluent limitations for discharges to the Santa Clara River Reaches 5, 6 and 7 during dry weather no later than [11 years after the effective date of the TMDL] and during wet weather² no later than [17 years after the effective date of the TMDL].

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

² Wet weather is defined as days with 0.1 inch of rain or more and the three days following the rain event.

c) Receiving Water Limitations

- (1) Permittees shall comply with the following interim receiving water limitations for the Santa Clara River Reaches 5, 6, and 7:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (daily sampling)	Deadline
Dry Weather	17	[4 years after TMDL effective date]
Wet Weather	61	[4 years after TMDL effective date]

- (2) Permittees shall comply with the following final receiving water limitations for the Santa Clara River Reaches 5, 6, and 7:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (daily sampling)	Annual Allowable Exceedances of the Geometric Mean Objective (daily sampling)	Deadline
Dry Weather	5	0	[11 years after TMDL effective date]
Wet Weather	16	0	[17 years after TMDL effective date]

DRAFT

MS4 Permit Provisions to Implement Trash TMDLs

- A. Effluent Limitations: Permittees shall comply with the interim and final trash effluent limitations set forth in this Permit for the following Trash TMDLs:
- (1) Lake Elizabeth Trash TMDL
 - (2) Santa Monica Bay Nearshore and Offshore Debris TMDL
 - (3) Malibu Creek Watershed Trash TMDL
 - (4) Ballona Creek Trash TMDL
 - (5) Machado Lake Trash TMDL
 - (6) Los Angeles River Trash TMDL
 - (7) Legg Lake Trash TMDL
 - (8) Peck Road Park Lake
 - (9) Echo Park Lake
 - (10) Lincoln Park Lake
- B. Compliance:
- (1) Pursuant to 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:
 - (a) Full Capture Systems:
 - 1) The Los Angeles Region's Basin Plan authorizes the 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" (See Appendix X)¹
 - 2) Permittees are authorized to comply with their effluent limitations through certified *full capture systems* provided the requirements of paragraph 3), immediately below, and any conditions in the certification, continue to be met.
 - 3) 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, Malibu Creek, Ballona Creek, Machado Lake, the Los Angeles River system, Legg Lake, Peck Road Park Lake, Echo Park Lake, and Lincoln Park Lake are addressed. For purposes of this Permit, attainment of the effluent limitations shall be conclusively presumed for any drainage area to Lake Elizabeth, Malibu Creek (and its tributaries), Ballona Creek (and its tributaries), Machado Lake, the Los Angeles River (and its tributaries), Legg Lake, Peck Road Lake, Echo Park Lake, and Lincoln Park Lake where certified *full capture systems* treat all drainage from the area, provided that the *full capture systems* are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Los Angeles Water Board.
 - i. Permittees shall be deemed in compliance with their final effluent limitations if the Permittee demonstrates that all drainage areas under its authority are serviced by appropriate certified *full capture systems* as described in paragraph (a)(3).

¹ The Los Angeles 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.

- ii. Permittees shall be deemed in compliance with their 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, Permittees may propose a schedule for installation of *full capture systems* in areas under its 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. Permittees shall be deemed in compliance with their interim effluent limitations provided it is fully in compliance with any such approved schedule.
- (b) **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*.²
- 1) 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.³ 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.
 - 2) Except as provided in subdivision 3) 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.⁴ 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 events⁵, and shall be re-calculated every year thereafter unless a less frequent period for recalculation is approved by the Executive Officer. The DGR shall be calculated as the total amount of trash collected during this period divided by the length of the collection period.

$$DGR = (\text{Amount of trash collected during a 30-day collection period}^6) / (30 \text{ days})$$

The DGR for the applicable area under the Permittees' 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.⁷ The *Storm Event Trash Discharge* for a given rain event in the Permittees' 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

² 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*.

³ Performance shall be demonstrated under different conditions (e.g. low to high trash loading).

⁴ 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.

⁵ Provided no special events are scheduled that may affect the representative nature of that collection period.

⁶ Between June 22nd and September 22nd

⁷ Amount of trash shall refer to the uncompressed volume (in gallons) or drip-dry weight (in pounds) of trash collected.

basins.⁸ For each day of a storm event that generates precipitation greater than 0.25 inch, the Permittees shall calculate a *Storm Event Trash Discharge*.

Storm Event Trash Discharge = [(Days since last street sweeping * DGR)] - [Amount of trash recovered from catch basins]⁹

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

Total Storm Year Trash Discharge = Σ Storm Event Trash Discharges from Drainage Area

- 3) 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 Permittees' storm drains.
- (c) 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 the Permittees relies on a combination of approaches, it shall demonstrate compliance with the interim and final effluent limitations as specified in (a)(3) in areas where *full capture systems* are installed and as specified in (b)(2) in areas where *partial capture devices and institutional controls* are applied.
- (d) Minimum Frequency of Assessment and Collection:
If approved by the Executive Officer and specified in the TMDL, Permittees may alternatively comply with the effluent limitations by implementing a program for minimum frequency of assessment and collection (MFAC) in conjunction with BMPs. To the satisfaction of the Executive Officer, the MFAC/BMP program must meet the following criteria:
- 1) 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
 - 2) The MFAC/BMP Program includes reasonable assurances that it will be implemented by the responsible Permittees.
 - 3) The MFAC/BMP Program includes a Trash Monitoring and Reporting Plan, as described in the Monitoring and Reporting, and a requirement that the responsible Permittees will self-report any non-compliance with its provisions. The results and report of the Trash Monitoring and Reporting Plan must be submitted to Regional Board on an annual basis.

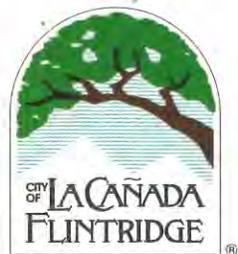
⁸ Any negative values shall be considered to represent a zero discharge.

⁹ 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.

- 4) MFAC protocols may be based on SWAMP protocols for rapid trash assessment, or alternative protocols proposed by Permittees and approved by the Executive Officer.
 - 5) 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.
 - 6) The 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.
 - 7) At the end of the implementation period, a revised MFAC/BMP program may be required if the Executive Officer determines that the amount of trash accumulating between collections is causing nuisance or otherwise adversely affecting beneficial uses.
 - 8) With regard to (i), (ii) or (iii), above, the Executive Officer is authorized to allow responsible Permittees to implement additional structural or non-structural BMPs in lieu of modifying the monitoring frequency.
- (2) If a Permittee is not in compliance with the applicable interim and/or final effluent limitation then it shall be in violation of this permit.
- (a) A Permittee relying on *partial capture devices* and/or *institutional controls* that has violated its interim or final effluent limitation 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.
 - (b) 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 Los Angeles 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.
 - 1) A Permittee may overcome this presumption by demonstrating (using any of the methods authorized in this Part B(1)(b)) that the actual or calculated discharge for that drainage area is in compliance with the applicable interim or final effluent limitation.
- (3) Permittees shall be held liable for violations of the effluent limitations assigned to their area. If the Permittees compliance strategy includes *full or partial capture devices* and they choose 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 Water Code section 13383)

- (1) On October 31, 2012 and every year thereafter, the Permittees shall submit a TMDL Compliance Report detailing compliance with the interim and final effluent limitations. Reporting shall include the information specified below. The report shall be submitted on the reporting form specified by the Los Angeles Water Board Executive Officer. The report shall be signed under penalty of perjury by the Permittees Director or other agency head (or their delegee) that is responsible for ensuring compliance with this permit. Permittees shall be charged with and shall demonstrate compliance with the relevant effluent limitations beginning with their October 31, 2012 TMDL Compliance Report.
- (a) 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 Executive Officer in the certification.
- (b) Reporting Compliance based on Partial Capture Systems and/or Institutional Controls:
- 1) Using Performance Data Specific to the Permittees' Area: Permittees 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, in their TMDL Compliance Report.
- 2) 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 Los Angeles Water Board for inspection upon request. Permittees shall provide the annual DGR, calculated storm year discharge, and compliance with the applicable effluent limitation, in its TMDL Compliance Report.
- (c) Reporting Compliance based on Combined Compliance Approaches: Permittees shall provide the information specified in subsection (a) for areas where *full capture systems* are installed and that specified in subsection (b)(1) or (b)(2), as appropriate, for areas where *partial capture devices* and *institutional controls* are applied. Permittees shall also provide information on compliance with the applicable effluent limitation based on the combined compliance approaches, in its TMDL Compliance Report.
- (2) Violation of the reporting requirements of this Part shall be punishable pursuant to inter alia Water Code subdivision (a)(1) of section 13385.1 and/or subdivision (a)(3) of section 13385.



City Council
 David A. Spence, Mayor
 Stephen A. Del Guercio, Mayor Pro Tem
 Michael T. Davitt
 Laura Olhasso
 Donald R. Voss

January 31, 2012

Mr. Sam Unger
 Executive Officer
 Regional Water Quality Control Board
 Los Angeles Region
 320 W 4th Street
 Suite 200
 Los Angeles, CA 90013



Attn: Ivar Ridgeway

Subject: Comments on Draft Core Permit Requirements-Development Construction Program for the Los Angeles County MS4 permit

Dear Mr. Unger:

Thank you and your staff for distributing the Draft Core Permit Requirements for the upcoming Los Angeles County MS4 permit. In my review of the Draft Core Permit Requirements, I have used the adopted Ventura permit process to evaluate what the final language will likely be and my comments should be understood to reflect the language that appears in the Ventura permit. In general terms, the Board has determined that the previous versions of the MS4 permit for Los Angeles County have not been adequately implemented by the permittees, so the Regional Board is providing specific guidance on how you believe that the Order should be followed. While I understand and agree with your findings, I believe that the language of the proposed Order must consider the reality of the economy and the industries that are being regulated by this Order.

At the bottom of page one (1) the Board Staff sets the requirement for each permittee to "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 Permittees." Section F7 of the Ventura County permit contains virtually the same language. While the creation of the electronic tracking system would pose problems for most agencies, it is at a level that is supported by current technology. **I would request that the Board consider setting a minimum size project that must be included in this database.** Since section F7 of the

Ventura Permit is silent on the subject, it is my belief that the Regional Board does not want "every permit" that may cause a disturbance be listed. For example, if a resident asked for a permit to plant a parkway tree, it would likely require the City to issue an encroachment permit or construction permit. The resident would buy a tree, dig a hole and plant the tree. The resident would disturb the land, but the project would be done and stabilized on the same day or maybe the same hour as the work began. It is my belief that a minimum size project needs to be established for the information to be of real value to the Regional Board and understood by the individuals that must collect the data. **I would suggest the following criteria be considered for inclusion within the data base:**

- 1. Residential addition over 500 square feet,**
- 2. Excavation within a street for utility purposes that disturbs more than 500 square feet or**
- 3. Grading on private land that disturbs 50 cubic yards of soil.**

This will also make the data generated more relevant, in the event of public inquiries.

On page two (2) of the Core permit requirements document the Board staff proposed to require an erosion and sediment control plan (ESCP) be prepared for both Grading and Building projects that disturb the land. This provision is referenced to the SWRCB's Draft Small MS4 General Permit. The closest provision that is in the Ventura permit is in section F5 that requires sites that disturb more than 1 acre to prepare a Local SWPPP. As established by the Ventura permit the use of a minimum sized project for the applicability is the correct approach. The one acre limit may be high because that is the limit where controls are under the Construction General Permit (CGP) issued by the State Water Board. It would seem reasonable that anyone constructing a new home on a vacant site should prepare a local SWPPP. Residential additions of a certain minimum size could cause significant soil disturbance and, thus, warrant the preparation of an ESCP. **I ask that the Regional Board establish a reasonable minimum size project for which an ESCP is required**, rather than no minimum which requires all projects prepare an ESCP.

The last item on page two (2) establishes criteria for review of the ESCP. Most of the discussion is logical for construction projects of less than one acre in size. However, the one portion of this discussion that I cannot agree with is the portion of the statement that reads, "...and tailored to the risk posed by the project." To associate the CGP Risk Level evaluation to a project that will be less than one acre in size is excessive. Risk level one project requires minimum Best Management Practices (BMPs). For projects that are less than one acre and are surrounded in an urban setting the discussion of risk is not appropriate because the property cannot be interpreted as posing a risk to any environmental area. **If it is imperative that risk be considered, the Board staff needs to establish the key areas where risk may**

actually be important. Areas such as those adjacent to a State Board established ASBS or another ESHA may warrant risk consideration, but projects in the urban core do not rise to that level and should not be saddled with risk.

On page three (3) of the Core document the Board staff lists the elements that must be included in the ESCP/SWPPP. I can see the logic for all of the elements but one. That one element is the Rain Event Action Plan (REAP). By including this element in the ESCP the Board has elevated these small, less than one acre projects, to a Risk level 2. This is unreasonable. For a four to ten thousand square foot project to be raised to the level of requiring an REAP cannot be justified. The vast majority of projects in this less than one acre size have the grading done in two to four weeks maximum. A REAP is just not warranted when the grading activity will not likely face a rain event during the grading process. Once the rough grade levels are reached, the ESCP for the rough stage will remain in place for the balance of construction. **I would ask the Regional Board to remove the requirement for a REAP for a small project of less than one acre.**

On page four (4) of the core document the certification for ESCP/SWPPP is discussed. Item B is confusing to me. It states that "Each Permittee shall require that all structural BMPs be designed by a California licensed engineer." The origin is cited as the State CGP and the Ventura County MS4 permit. The CGP has a list of eight different professionals that are qualified to prepare and certify the CGP SWPPP document. The Ventura County permit, section F(5)(a)(1)(A)(ii) includes the requirement that the Project architect, engineer of record, or authorized qualified designee, must sign a statement on the Local SWPPP..." Neither one of these documents limits the preparation nor signature of the ESCP/SWPPP to a licensed engineer. **I would ask that the Board staff reconsider this requirement and allow the same list of individuals that are permitted by the CGP.**

In item C of this section the Regional Board describes the "certification" that must be made by the Landowner or his agent. Over the past several years for various legal reasons, the word Certify has evolved to the word "State". **I ask that the Regional Board consider the use of the word "Statement" instead of the word "Certification".**

The last item on page four (4) of the Core Permit Requirements is the "Confirmation of coverage under other permits". Verification that a project has coverage under the State CGP is a normal requirement today for every City. This is a normal part of processing a grading permit today. The Boards addition of the verification of the 401, 404, and 1600 documents for the Department of Fish and Game, or the Army Corp of Engineers is a significant increase in responsibility. First, these actions are not required for every project that disturbs more than an acre of land. By making this an obligation of the City to confirm, it will force projects that have no impact under these programs to contact the Department of Fish and Game or the Army Corp

to verify that they are not involved with their process. In 80% of the cases, they will not be involved so the time of the Fish and Game agent or the Army Corp officers will be interrupted reviewing a case that would not normally have been directed to them. **I would request that the City verification that 401, 404 or 1600 permits or clearances be removed from the MS4 permit.**

On page five (5) of the Core Permit Requirements the Regional Board Staff is proposing that Cities revise their inspection and enforcement procedures to include a review of the applicable ESCP/SWPPP to determine that all BMPs have been selected, installed, implemented and maintained according to the approved plan. This is a significant expansion of the authority and responsibility of the inspector into areas that they, in most cases, are not qualified to address. An inspector who is likely only a Qualified SWPPP Practitioner (QSP) is not qualified to "select" BMPs for a project. He certainly is qualified to verify the installation, implementation and maintenance for the BMPs selected, but he is not qualified to select the BMPs for use. For the Board Staff to impose this obligation on the inspection staff of cities in Los Angeles County is unreasonable. Secondly, the Board staff is asking that the inspector review the approved plan. In the case of a State CGP project, I am not aware that the State Water Resources Control Board is issuing approvals for the ESCP/SWPPP. So, if there is no approved ESCP for a State CGP what is the inspector to review? In reading section F8 of the Ventura County permit, there is no reference to this level of review. **I request that the Regional Board reconsider the Inspection Procedures Section of the Core document and do the following:**

- 1. Remove the review of the State SWPPP document by the local inspector, because it is not an approved document, and**
- 2. Remove the obligation of the local inspector to verify that BMPs were selected correctly for the project.**

I request that a distinct clarification be made by the Regional Board acknowledging its understanding that the State Board does not want local agencies reviewing and approving a State SWPPP.

On page six (6) of the core permit document, under inspection procedures, the item numbered (6) requires the City to amend their inspection procedures to include sampling and analysis of storm water runoff discharges from property when visual observation indicates turbidity in the storm water discharge. I must respectfully object to this transfer of responsibility from the project QSP to the City inspector. The sampling and analysis of the storm water discharge from a Risk level 2 site is clearly the responsibility of the QSP. That individual is obligated by the State CGP to have the needed equipment, the knowledge for the calibration of the equipment, and the obligation to take action if Action levels are exceeded. The City inspector on the other

hand does not have such equipment, has never been trained in sampling rain runoff and does not have the authority to tell the contractor to make necessary changes other than the legal authority afforded by City Ordinance to issue correction notices and citations when a violation is detected. **I ask that the Regional Board remove the requirement for the City inspection procedure to be revised to include sampling and analysis of the storm water runoff from construction projects. This requirement is not in the Ventura permit and it is not a logical extension of any inspection authority that cities currently have.**

On page seven (7) of the core permit requirements under the Training of Permittee staff, it appears that the Regional Board is imposing a mandate that Plan Review staff members be qualified under the State QSD program and that Inspection staff be qualified under the QSP program. This is a significant expansion of the provisions of the State CGP which does not require that City staff be trained or qualified as a QSD/QSP. The vast majority of plan reviewers and field inspectors have not undertaken this training and would be disqualified to review or inspect construction projects if the requirement is imposed on cities and counties. I see nothing similar in the Ventura County permit under their Development Construction Program. **I request that the Regional Board remove the requirement that Plan Reviewers be qualified under the QSD program and that inspectors be qualified under the QSP program. At a minimum, the Regional Board must allow an adequate "grace period" whereby Plan Review Staff and Inspection Staff can obtain the proper certifications.**

Finally, on page seven (7) and eight (8) it appears that the Regional Board staff is introducing a mandatory program for cities to educate contractors on the proper selection, installation, implementation and maintenance of site BMPs. This is an impossible task in today's society. With contractors chasing fewer and fewer projects, they are forced to leave their comfort zone and perform work in cities that they have never worked in before. Because of this nomadic nature, contractors move from city-to-city at will. For a city to be responsible for training the contractors that work within their community is not possible. This should either be a State responsibility (much like the QSD/QSP programs currently run by the State) or a county responsibility because they have control over the regional market. In addition to the contractors, I believe that it will be necessary that the Engineering and Architectural professions be included in the training program since they will likely be the parties that will be preparing the ESCP/SWPPP for smaller projects. **I therefore ask that the provision that the cities offer training to contractors, engineers and architects be removed from the proposed permit language in favor of a State or county mandate for a Statewide or Countywide Training Program.**

Again, I would like to thank the Regional Board for distributing the Core Permit Requirement tables so that the cities can submit their input. For the most part, the Development

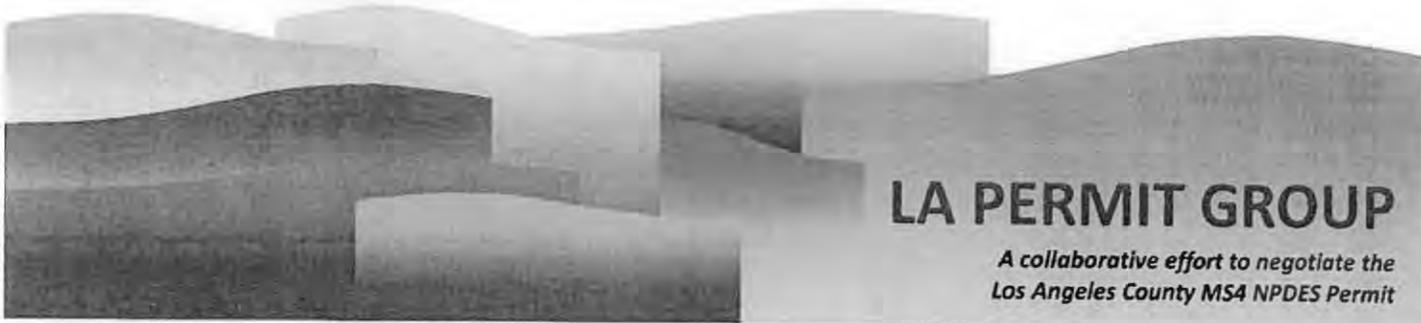
Construction Program can be supported by the cities but, as with any regulatory document, input is necessary to ensure that the cities and the Regulators have the same understanding of the proposed regulatory language.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark R. Alexander", written in a cursive style.

Mark R. Alexander
City Manager

cc: Public Works Director



February 9, 2012

Sam Unger, Executive Officer
 Los Angeles Regional Water Quality Control Board
 320 West Fourth Street, Suite 200
 Los Angeles, CA 90013

SUBJECT: *LA Permit Group Comments Regarding the 1/23/12 Workshop on Monitoring and TMDLs*

Dear Mr. Unger:

The LA Permit group appreciates the opportunity to provide comments regarding the Regional Board's January 23, 2012 Workshop on the proposed Monitoring and TMDL programs for the upcoming Los Angeles County MS4 NPDES permit. Detailed comments and recommendations regarding each of these programs are attached (Monitoring Program Comments – Exhibit A and TMDL Program Comments – Exhibit B). The LA Permit Group recognizes that the upcoming MS4 NPDES permit is a very difficult and complicated permit to develop, especially given the integration of many TMDLs. However; the permit must contain provisions that are economically achievable and sustainable and that will not expose permittees to unreasonable compliance issues. We look forward to continued discussion and collaboration with you and your staff in order to cooperatively develop economically achievable and sustainable permit provisions.

The LA Permit Group is a collaborative effort developed to negotiate the Los Angeles County MS4 NPDES Permit. Over 60 Los Angeles County municipalities are actively participating in the effort to develop and provide comments and recommendations throughout the MS4 NPDES Permit development process. Comments and recommendations are developed by each of the LA Permit Group's four Technical Sub-Committees (Land Development, Reporting & Core Programs, Monitoring, and TMDLs) which are then approved by the LA Permit Group; the group's consensus is represented by the Negotiations Committee. The LA Permit Group's comments and recommendations contained in Exhibits A and B of this letter have been developed by the Monitoring and TMDL Technical Sub-Committees and were approved by the LA Permit Group at our February 8, 2012 meeting.

Thank you for the opportunity to comment on the proposed Monitoring and TMDLs programs and we look forward to meeting with you to discuss our comments and recommendations presented in this letter. Please feel free to contact me at (626) 932-5577 or hmaloney@ci.monrovia.ca.us if you have any questions regarding our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Heather M. Maloney", is written over a horizontal line. The signature is fluid and cursive.

Heather M. Maloney
 Chair, LA Permit Group

cc: LA Permit Group
 Deborah Smith, Los Angeles Regional Water Quality Control Board
 Renee Purdy, Los Angeles Regional Water Quality Control Board
 Ivar Ridgeway, Los Angeles Regional Water Quality Control Board
 San Gabriel Valley Council of Governments
 Senator Ed Hernandez

**LA Permit Group
Comments on Monitoring Provisions Proposed at RWQCB Workshop on 1/23/12**

The LA Permit group appreciates the opportunity to provide comments regarding the Regional Board's 1/23/12 workshop on the proposed monitoring program for the upcoming NPDES permit. The comments are organized to provide our overall general comments regarding the monitoring program and then our specific comments on the details presented in the workshop.

General Comments

In our 11/10/11 presentation to the Regional Board, The LA Permit Group identified an Integrated Watershed Monitoring Program (IWMP) approach supporting a comprehensive and focused monitoring program. Although the Board staff indicated interest in the approach, we were disappointed to see the approach was not well captured in the 01/23/12 workshop. We still would submit that the overarching monitoring program should be based on the concepts found in an IWMP (see attached proposal for an IWMP, p.5 & 6).

Regional Monitoring Programs

1. Duplicative efforts. The proposed regional monitoring programs appears to duplicate ongoing studies/activities by other permittees in southern California, thus, we question what new and useful information will be provided that is not already being developed.

Recommendation: Modify the requirement for regional monitoring programs to account for existing and on-going regional monitoring efforts (also see our Special Comments on this issue).

Stormwater and Non-stormwater Monitoring Programs

1. Need to Promote a Watershed Approach. The proposed monitoring strategy appears to minimize instead of promote a watershed approach to monitoring and provides little insights into the water quality issues within a watershed. Instead it focuses exclusively on individual permittees.

Recommendation: It is recommended that the monitoring program be based on a watershed and TMDL and that it:

- a. evaluates the current conditions in impaired water bodies (identified by effective TMDLs),*
- b. facilitates the attainment of WLAs and assessment of effectiveness and improvement of BMPs to effectively address each impairment to the extent it is potentially contributed by the MS4, and*
- c. identifies the extent to which the impairment may be caused by factors or sources other than discharges from the MS4*
- d. promotes the IWMP and provides time schedule incentives.*

The LA Permit Group has developed a position paper that captures this fundamental strategy (see attachment). The strategy, we believe, would better serve as the framework for the monitoring program than the one currently being considered by the Regional Board.

2. Lack of Clear Goals and Objectives. The proposed strategy for stormwater and non-stormwater lacks well defined goals and management questions. Instead the strategy appears to be a resource-intensive, far reaching attempt to collect monitoring data for collection sake without any explanation as to how the data will be used to guide management decisions. The monitoring program must be designed to answer specific management questions and/or objectives. The program must provide a comprehensive but focused attempt to address a number of management

LA Permit Group**Comments on 1/23/12 LARWQCB Monitoring Program Presentation****Page 2 of 6**

questions. Furthermore the proposed strategy isolates the stormwater/non-stormwater monitoring from other elements of the monitoring program such as receiving water and tributary monitoring. As a result it is difficult to understand the overall relationships between the various monitoring efforts and limits the Permittees' ability to direct their monitoring efforts according to local and watershed specific concerns.

Recommendation: We strongly recommend that the Regional Board revisit the stormwater monitoring programs to incorporate an integrated watershed monitoring strategy that addresses water quality management based questions and TMDLs. Similarly, we recommend that the monitoring program reflect an adaptive management approach such that we have the ability to modify our monitoring efforts as monitoring data and information are gathered.

Specific Comments

Although we have fundamental concerns with the overall approach provided in the 1/23/12 workshop and strongly recommend modifications in the approach, we have none-the-less developed specific comments on the Regional Board approach. These comments are provided below.

Regional Monitoring Programs

1. **Pyrethroid Study**. We suggest that the Surface Water Ambient Monitoring Program would be a better vehicle for assessing the overall impacts of pesticides (pyrethroids) in the watersheds than the MS4 stormwater programs. This is especially true since pyrethroid is a statewide issue and not just a potential Los Angeles area issue.
2. **Hydromodification Study**. Many municipalities discharge directly or indirectly into concrete channels thus calling into question the value of a hydromodification study for these municipalities. Furthermore, the Southern California Coastal Water Research Project (SCCWRP) has a number of studies focused on hydromodification including one that assesses the impacts of hydromodification and identifies management practices that could offset the impacts¹. Thus we would suggest that the proposed hydromodification study for the LA permittees be eliminated and instead allow SCCWRP efforts in this area to be the base studies.
3. **Low Impact Development Study**. As with the hydromodification study we believe that there is already ongoing research with LID and that the proposed study for the LA permittees is unwarranted. The Southern California Monitoring Coalition had previously identified this area for research and received grant monies to assess the effectiveness of LID strategies. This work was recently conducted by the SCM. In addition, the SCM Coalition conducted a study to identify impediments to LID implementation and this study is also just now being completed. Thus we question the value of LA permittee specific studies for LID.

Recommendation: Modify the requirement for regional monitoring programs to account for existing and ongoing regional monitoring efforts.

1

<http://www.sccwrp.org/ResearchAreas/Stormwater/Hydromodification/AssessmentAndManagementOfHydromodification.aspx>

Stormwater and Non-stormwater Monitoring Programs

1. Clear Logic Needed for Deciding Monitoring Efforts. The logic for both stormwater and non-stormwater monitoring efforts is confusing and in some cases appears to be in conflict. Furthermore, there appears to be little nexus between TMDLs and the proposed monitoring effort.

Recommendation: It is absolutely necessary that a logical decision tree be developed to guide the Permittees. The development of a decision tree could be part of the integrated watershed monitoring plan.

2. Confusing objectives for non-stormwater monitoring. The proposed non-stormwater monitoring (slides 21-23²) does not address the stated requirement in slide 24 to determine the relative flow contribution of other permitted discharges. Also it is unclear what will be gained by the extensive monitoring effort. Furthermore the time line proposed to complete this work is woefully inadequate (9 months). If the purpose of the non-stormwater monitoring is to assess the categorical exemptions, then the current framework is inadequate.

Recommendation: We recommend that a well defined regional study be incorporated into the IWMP that already includes flow monitoring in numerous locations to assess categorical exemptions instead of the each permittee based approach currently proposed.

3. Aquatic Toxicity Monitoring. Slide 18 indicates that stormwater monitoring includes aquatic toxicity monitoring. We would submit that it is premature to conduct outfall toxicity monitoring until it has been established that toxicity is present in the receiving water. Furthermore we would submit that should toxicity monitoring be required, acute toxicity is the appropriate toxicity test given the short duration of stormwater discharges.

Recommendation: Toxicity monitoring should be acute and be limited to the receiving water and not be a part of an outfall monitoring program unless dictated by a TMDL. Aquatic Toxicity monitoring is required by a number of TMDLs and could be extracted from IWMP.

4. Technical concerns include the following:
 - a. Unclear how baseline non-stormwater flows are established.
 - b. Possible conflicting criteria regarding the use of land uses to identify outfalls and the minimum number of outfalls (slides 15-16).
 - c. Need better definition for "significant" non-stormwater flows. The requirement noted in slide 21 regarding 10% above the lowest rolling average needs to be evaluated more closely as it appears that all outfalls will qualify under this criteria.

² Slide numbers are based on Regional Board 1/23/12 presentation by PG Environmental.

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- d. When are field measurements and grab samples collected during a storm event? Logistically it will be difficult and costly to require grab samples in addition to the flow weighted samples. Most stormwater data are categorized as event mean concentrations which is a flow weighted composite sample. Grab samples do not reflect EMC but rather just a point in time concentrations.
- e. The use of bacteria as a monitoring parameter to identify sources of sewage is questionable given bacteria is ubiquitous in our environment and difficult to track. Bacteria source tracking should be addressed in the TMDL on a case by case situation.
- f. Without receiving water data the MS4 is limited in its ability to determine whether non-stormwater discharges are causing or contributing to exceedances of water quality standards. However there is no receiving water monitoring coupled with the non-stormwater monitoring.
- g. The 1/23/12 presentation introduced some new as well as some not so new terms. Given the relatively early stage of development of the stormwater permitting program, it is important to clearly define these terms to avoid confusion and misunderstanding during the permit approval process. We realize that the adopted Permit will have a definition section but to assist in the permit development and adoption stage it would be useful to provide definitions upfront including the definition for outfalls, major or otherwise.

Recommendation: Conduct case studies for Torrance and the Los Angeles River watershed and others as appropriate to address a range of different conditions (e.g. size, receiving waters, TMDLs, etc.). These case studies will likely clarify the purpose and approach of the monitoring and lead to improvements in the monitoring program. Furthermore we believe it would be constructive to have PG Environmental participate in these discussions.

Closing

The LA Permit Group again appreciates the opportunity to provide these comments and look forward to working with the Regional Board especially in evaluating case studies to better craft a long term, constructive and cost effective monitoring program.

**LA Permit Group
Comments on 1/23/12 LARWQCB Monitoring Program Presentation
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LA Permit Group, proposal for

INTEGRATED WATERSHED MONITORING PLANS

It is the MS4 Co-Permittees' intent to utilize Total Maximum Daily Load (TMDL) monitoring as the primary monitoring program requirement in the next MS4 Permit. The Co-Permittees support a TMDL-driven monitoring program that:

- evaluates the current conditions of recognized impaired water bodies (identified by the 303d List),
- facilitates the attainment of WLAs and assessment of effectiveness and improvement of BMPs to effectively address each impairment to the extent it is potentially contributed by the MS4, and
- identifies the extent to which the impairment may be caused by factors or sources other than discharges from the MS4

The Co-Permittees wish to work cooperatively with the assistance of outside experts, e.g., Council for Watershed Health³ or consulting firm, to prepare Integrated Watershed Monitoring Plans to meet TMDL monitoring requirements. Currently the adopted TMDLs require each agency or subwatershed group to submit separate TMDL Monitoring and Reporting Plans and to prepare individual annual monitoring reports for each TMDL. The end result will be numerous monitoring plans that are not coordinated, with redundancies between monitoring programs, without standard sampling or analysis methods to ensure data comparability, and with the potential for data gaps, which will create a multitude of annual reports which must be reviewed by Regional Board staff that do not provide a comprehensive picture of watershed health.

The goal of Integrated Watershed Monitoring Plans would be to provide:

- TMDL objective-driven monitoring plan designs,
- comprehensive data management and reporting,
- SWAMP-compatible QA/QC and data validation,
- data synthesis and interpretation on a watershed scale, and
- single, comprehensive annual monitoring reports for each watershed addressing all the adopted TMDLs in that watershed.

Integrated Watershed Monitoring Plans will be developed and implemented for each major watershed in the County. The Co-Permittees recognize the efficiencies that can be obtained by preparing Integrated Watershed Monitoring Plans that address all TMDLs for that watershed. During the process of developing the Integrated Watershed Monitoring Plans the Co-Permittees would bring together watershed stakeholders, compile an inventory of existing or pending monitoring efforts, develop a comprehensive list of monitoring questions to address the identified watershed impairments and design coordinated monitoring programs. The provisions of the 3rd term permit Monitoring and Reporting Program and the relevant TMDL monitoring requirements will be incorporated into each Integrated

³ The Council for Watershed Health (Council) has worked with the Wastewater Treatment Plants to prepare coordinated monitoring plans for the Los Angeles and San Gabriel River watersheds.

LA Permit Group
Comments on 1/23/12 LARWQCB Monitoring Program Presentation
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LA Permit Group, proposal for
INTEGRATED WATERSHED MONITORING PLANS, cont.

Watershed Monitoring Plan and the requirement for implementing individual TMDL monitoring plans would be eliminated once they have been incorporated into the approved Integrated Watershed Monitoring Plan. The Co-Permittees would need to develop a Memorandum of Understanding to contract for preparation of the Integrated Watershed Monitoring Plans and Annual Reports.

The Co-Permittees recognize the value of having Integrated Watershed Monitoring Plans to assess the extent of MS4 contribution to TMDL-listed impairments and to design and evaluate BMPs to reduce those contributions to attain WLAs, but also recognize that the same monitoring data can be used by the Regional Board to issue Notices of Violation and/or for Third Party lawsuits. Such regulatory and legal actions would be counterproductive and would obstruct the iterative adaptive process needed to efficiently and effectively improve water quality, thus the co-permittees request that the MS4 Permit language for Monitoring and TMDLs be written to require Integrated Watershed Monitoring Plans but to clearly state that so long as a Co-Permittee is carrying out its obligations in implementing measures in accordance with the provisions of an approved TMDL Implementation Plan and participating in a cooperative MOA to carry out the Integrated Watershed Monitoring Plans, that during this Permit term exceedances of Water Quality Standards, TMDL Waste Load Allocations, or Effluent Limits will not constitute a Permit violation. Integrated Watershed Monitoring Plans approved by the Executive Officer would supersede previously approved TMDL Monitoring and Reporting Plans.

Permittees that do not want to participate in the Integrated Watershed approach shall develop and/or utilize existing or future TMDL monitoring plans and schedules. Existing TMDLs should have the option to be included in the Integrated Watershed approach, and resulting timeframe adjustments, if they so chose.

EXHIBIT B

LA Permit Group
Draft Comments on TMDL Provisions Proposed at RWQCB Workshop on 1/23/12

The Los Angeles Permit Group appreciates the opportunity to provide input to RWQCB staff on the elements of TMDL WLA incorporation into the MS4 permit as provided in the presentation and handouts during the workshop on 1/23/12.

The group supports many of the concepts outlined in the presentation, particularly the multiple methods of demonstrating compliance, which includes the implementation of rigorous implementation plans using an adaptive management strategy as a method of compliance. However, the group has a few key concerns with the proposal that we would like to share.

Reasonable Assurance Plan

We request that the Reasonable Assurance Plan (RAP) not be used as the mechanism for identifying the BMPs that will be used to comply with the TMDL WLAs. Rather, we request that the requirements to meet TMDL WLAs be incorporated into the Stormwater Quality Management Plan, as described below.

1. Stormwater Quality Management Plans, based on the TMDL implementation plans and other elements, can be developed with a watershed/sub watershed based or individual permittee approach rather than a "one size fits all" approach.
 - a. Permittees shall develop a process to evaluate BMPs that will fall under one or more of the following categories:
 - i. Operational source control BMPs that prevent contact of pollutants with rainwater or stormwater runoff;
 - ii. Runoff reduction BMPs;
 - iii. Treatment control BMPs where effectiveness information is available;
 - iv. True source control BMPs that eliminate or greatly reduce a potential pollutant at the original source pursuant to a legislative or regulatory time schedule; or
 - v. Research and development for pollutant types where effective BMPs have not been identified.
 - b. These categories will be incorporated as part of the Stormwater Quality Management Plans.
 - c. Stormwater Quality Management Plans will identify effective BMPs to be implemented in an iterative manner to attain the WLAs based on the design storm.
2. Stormwater Quality Management Plans designed to attain the TMDL WLAs will include:
 - a. specific, targeted steps scheduled to attain the WLAs through the use of BMPs;
 - b. specific procedures for evaluating BMP effectiveness; and
 - c. provisions for special studies if needed.

The Stormwater Quality Management Plans can incorporate BMPs identified in implementation plans to address the TMDL requirements.

LA Permit Group
Comments on 1/23/12 LARWQCB TMDLs Program Presentation
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TMDL Compliance

Our second, and primary concern, is the way in which compliance with TMDL permit provisions is being discussed. It is our understanding from the presentation, that at the end of a TMDL implementation schedule, if a permittee is not meeting the numeric values assigned as WLAs in the TMDL, the permittee will be considered out of compliance with the permit requirements. We have significant concerns with this approach to developing the permit for a number of reasons.

It is our understanding that this approach would result in the inclusion of numeric effluent limitations as the mechanism for incorporating the TMDL WLAs. For those TMDLs whose compliance dates have passed, permittees would be considered in violation of the permit if they are not meeting the numeric effluent limitations from the moment the permit is effective. If warranted, the Regional Board would use a Time Schedule Order (TSO) to provide some additional time for coming into compliance. If this is the proposed approach, in essence, the permittees would be going from complying with the current permit that includes only a few TMDL requirements to potentially being out of compliance for requirements that have never been in their permit.

Permittees are planning on taking actions as outlined in the Stormwater Quality Management Plan above to make significant progress towards improving water quality. However, we have concerns that requirements being proposed go beyond MEP given the economic and staff resources available to achieve the WLAs for an unprecedented number of TMDLs being incorporated into this permit. These concerns are based on a number of factors including but not limited to:

- TMDLs were developed using inadequate data with the intent that TMDL provisions would be revised through TMDL reconsiderations and special studies. Most of the TMDLs have not been reconsidered.
- Other sources may prevent attainment of standards in the receiving water no matter what actions are taken by the MS4 permittees.
- Many WLAs cannot be met within the permit term.
- Regulation of the sources of some pollutants are outside of MS4 permittees control.
- The design storm has not yet been defined and implementation of BMPs to ensure compliance under all conditions, including extreme storm events, could be extremely costly and technically infeasible.

Although we recognize that additional requirements and rigor need to be added to the permit to address TMDLs, we feel that there are straightforward ways to do this that do not represent such a significant shift in the regulation of stormwater discharges and place dischargers into an untenable situation of potentially being out of compliance with their permit from the effective date.

To address these concerns, the group would like to propose the following approach for compliance with TMDL WLAs.

1. Implement TMDL WLAs as BMP-based water quality based effluent limitations (WQBELs) in the permit. This is consistent with federal regulations (40 CFR 122.44(d)(1)(vii)(B) which require inclusion of effluent limits, defined at 40 CFR 122.2 as "any restriction imposed by the Director on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from

LA Permit Group**Comments on 1/23/12 LARWQCB TMDLs Program Presentation****Page 3 of 4**

- “point sources”, which are “consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA.”
2. Define BMP-based WQBELs as “Implementation of BMPs included in a Regional Board Executive Officer approved Stormwater Quality Management Plan. The Stormwater Quality Management Plan (SQMP) shall describe the proposed BMPs and the documentation demonstrating that when implemented, the BMPs are expected to attain the WLAs, and a process for evaluating BMP effectiveness and implementing additional actions if necessary to meet the TMDL WLAs.” This is consistent with other recently adopted permits in California and with the requirements as described in the 1/23/12 RWQCB presentation.
 3. Consistent with the four methods for demonstrating compliance with TMDLs as presented in the 1/23/12 RWQCB presentation, a co-permittee which is achieving WLAs at the outfall (or equivalent point of compliance within the drainage system) or in receiving waters may cease implementing additional BMPs if appropriate.
 4. Violations of the BMP based WQBEL provisions would consist of the following provisions, in keeping with the 1/23/12 RWQCB presentation:
 - a. Not submitting the SQMP.
 - b. Not implementing all elements of the SQMP in accordance with the approved schedule.
 - c. Not implementing additional BMPs or revising the SQMP per the process outlined in the SQMP or on schedule.

We can provide example permit language to help expand upon the approach outlined above. We appreciate your consideration of this approach and would like to meet to discuss these important issues related to TMDLs.

Additional Comments on the Proposed Text

In addition to the general topics outlined above, we have some concerns about the draft language that was provided for the TMDLs. First, we request that a non-trash example be provided to allow a better understanding of how compliance will be determined for constituents that do not have a clear method of determining compliance outlined in the TMDL. Additionally, we feel that some of the language proposed is not consistent with the approach outlined in the presentation. We have highlighted the language of potential concern below.

Part 7. Total Maximum Daily Loads (TMDLs) Provisions

The second bullet states “The Permittees shall comply with the following effluent limitations and/or receiving water limitations...” This is followed by tables with the numeric WLAs.

We have three concerns with this language:

1. The language implies that the effluent limitations are strictly numeric.
2. The language does not include any reference to how compliance will be determined, with the exception of the trash TMDL.
3. The language refers to both effluent limitations and receiving water limitations for the Santa Clara River Bacteria TMDL. We feel this does not accurately reflect the language in the TMDL and creates confusion related to the receiving water limitations outlined in a separate portion of the document.

LA Permit Group
Comments on 1/23/12 LARWQCB TMDLs Program Presentation
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We feel that these concerns could be addressed through the approach outlined above for incorporation of TMDL WLAs.

MS4 Permit Provisions to Implement Trash TMDLs

We appreciate the incorporation of language to define alternative methods of compliance (i.e. full capture) and hope to see similar language for other constituents. However, we feel that some minor language modifications may be necessary to clearly show the linkage and ensure the permit is clear.

In B. (1)(d) Language regarding compliance through an MFAC program is not clearly defined. We feel that the language should clearly state that the permittee is deemed in compliance through implementing an approved MFAC program.

In B.(2), the language discussing violations of the permit should reference the previous section where compliance is defined.

LA Permit Group - Designated Voting Agencies

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



GAIL FARBER, Director

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

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 P.O. BOX 1460
 ALHAMBRA, CALIFORNIA 91802-1460

February 9, 2012

IN REPLY PLEASE
 REFER TO FILE WM-9

Ms. Renee Purdy, Chief
 California Regional Water Quality
 Control Board – Los Angeles Region
 Regional Programs Section
 320 West Fourth Street, Suite 200
 Los Angeles, CA 90013

Dear Ms. Purdy:

**COMMENT LETTER – LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM
 SEWER SYSTEM PERMIT WORKSHOP ON JANUARY 23, 2012**

On behalf of the Los Angeles County Flood Control District and the County of Los Angeles, thank you for the opportunity to comment on the California Regional Water Quality Control Board, Los Angeles Region's presentation on January 23, 2012, on the Los Angeles County Municipal Separate Storm Sewer System Permit. Enclosed are our comments for your review and consideration.

We look forward to working with you on developing draft language for the next Municipal Separate Storm Sewer System Permit. If you have any questions, please contact me at (626) 458-4300 or ghildeb@dpw.lacounty.gov or your staff may contact Ms. Angela George at (626) 458-4325 or ageorge@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
 Director of Public Works

GARY HILDEBRAND
 Assistant Deputy Director
 Watershed Management Division

AT:jtz

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Enc.

cc: Chief Executive Office (Dorothea Park)
 County Counsel (Judith Fries)

COMMENTS OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT AND
THE COUNTY OF LOS ANGELES REGARDING INFORMATION PRESENTED
DURING THE LOS ANGELES WATER QUALITY CONTROL BOARD WORKSHOP
DATED JANUARY 23, 2012

Thank you for the opportunity to comment on the presentations dated January 23, 2012, which focused on the TMDLs and monitoring elements of the new Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit. The Los Angeles County Flood Control District (LACFCD) and the County of Los Angeles (County) appreciate Los Angeles Water Quality Regional Board (LARWQCB) staff's efforts to solicit stakeholders' input before the release of the draft MS4 Permit. These comments are preliminary, and the LACFCD and the County and reserve the right to make additional comments on the TMDL provisions of the new permit as it continues through the permit development process.

TMDL PROVISIONS

The LACFCD and the County support the use of the action-based Reasonable Assurance framework to implement TMDLs. Our comments below focus on various details of how that framework should be implemented.

1. Effect of *NRDC, Inc. v. County of Los Angeles*

Under the decision of the United States Court of Appeal for the Ninth Circuit in *NRDC, Inc. v. County of Los Angeles* improved flood control channels operated by the LACFCD are considered to be portions of the MS4 and not a navigable water. This includes, but is not limited to, all improved portions of the Los Angeles River, San Gabriel River and Ballona Creek, as well as their improved channels and tributaries. Because these channels are MS4, they are not navigable waters to which any TMDL is applicable and the LARWQCB has no jurisdiction to apply TMDLs to them. While the County and the LACFCD do not agree with the reasoning of the Ninth Circuit and are awaiting a decision from the United States Supreme Court as to whether it will hear the case, that decision is currently binding on the County, LACFCD and the LARWQCB. TMDLs do not apply to any improved water body under the jurisdiction of the LACFCD and should not be included in the permit.

2. Action-based compliance approach should apply to final Wasteload Allocations (WLAs) as well as interim WLAs.

Staff indicated during the workshop that the action-based compliance approach is currently only applicable to interim WLAs, and that although a final decision has not been made, compliance with final WLAs may be assessed using numeric effluent limits. There is no logical basis for not using the same approach to assess compliance with final WLAs.

In fact, two MS4 permits issued by the Santa Ana Regional Board, Order R8-2010-0033 and Order R8-2010-0036, which apply to municipalities within Riverside and San Bernardino Counties, provide that permittees shall comply with final dry weather WLAs for the Middle Santa Ana River Bacteria Indicator TMDL through the implementation of an approved Comprehensive Bacteria Reduction Plan (CBRP) which is conceptually similar to the Reasonable Assurance Plan being proposed by the LARWQCB staff. The CBRP also contains interim compliance requirements and detailed reporting and scheduling requirements. It also may be updated by order of the Santa Ana Regional Board if monitoring reflects that Best Management Practices (BMPs) are not sufficient to attain compliance with the WLAs. We urge LARWQCB staff to apply the action-based approach to final WLAs compliance for TMDLs in the Los Angeles Region.

3. Instead of Time Schedule Order, LARWQCB should require compliance with TMDLs developed by EPA and TMDLs with past compliance dates through the action based compliance and Reasonable Assurance Plans.

Staff is proposing that Permittees may request a Time Schedule Order (TSO) if immediate "non-compliance" is anticipated for TMDLs, such as for USEPA's "technical" TMDLs which were developed without implementation plans, or for TMDLs that have passed compliance dates. Staff has said that TSOs, if granted, would provide Permittees with only up to five years to meet the final WLAs, although they have not indicated the basis for this position. Such an approach would be legally defective, an administrative nightmare and would result in a permit that could not be complied with, since there could be an immediate finding that the Permittees were in violation of its terms.

TSOs are authorized under Water Code § 13300, which provides:

Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board . . . the board may require the discharger to submit for approval of the board . . . a detailed time schedule of specific actions the discharger will take in order to correct or prevent a violation of requirements.

Time schedule orders are issued where the discharger cannot immediately meet permit requirements. A time schedule should include only dates for complete design, complete financial arrangements, start of construction, 50% completion of work, and full compliance with requirements. 22 Cal. Code Reg. § 2231.

Instead, the LARWQCB can accomplish its goals and reflect the provisions of these TMDLs by including in the permit a schedule of interim compliance dates or provisions for action-based compliance as a means for complying with these TMDLs.

The plain language of the statute indicates that a TSO is not to be issued unless the regional board finds that a waste discharge is occurring "that violates or will violate requirements prescribed by the regional board, or the state board." The permittees cannot be in violation of TMDLs that did not include a compliance schedule. In the case of the EPA TMDLs, EPA itself has recommended that the TMDLs be incorporated into MS4 permits in the form of BMPs, which can be adjusted as necessary based on monitoring. See "Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" (EPA 2002).

We are very concerned that the TSO approach lacks regulatory consistency and does not provide Permittees sufficient time to comply. For example, the Los Angeles River Metals TMDL, developed by LARWQCB staff, provides a 22-year timeline to achieve final WLAs. USEPA has adopted a Metals TMDL for the neighboring San Gabriel River Watershed without a compliance schedule. If the TSO approach is adopted, Permittees could be required to meet final WLAs for the same pollutants within five years.

The TSO approach would also present significant logistical challenges for LARWQCB staff because Permittees would be required to submit a large number of TSO applications upon adoption of the new permit. The administrative burdens associated with this process will be significant. Also, Permittees have the right to challenge a TSO to the State Board, potentially increasing those burdens.

We believe that the appropriate course for the LARWQCB would be to implement these TMDLs through BMP-related action plans such as that contemplated by the draft Part 7 provisions. Such an approach would remain enforceable through the permit but would not subject the Permittees to the immediate threat of possible litigation. We look forward to meeting with LARWQCB staff to further explore the issues associated with the implementation of these TMDLs.

4. TMDLs should be grouped by watershed.

Two of the handouts from the January 23 workshop – one entitled "MS4 Permit Provisions to Implement Trash TMDLs" and the other entitled "Part 7. Total Maximum Daily Loads (TMDLs) Provisions" – appear to provide two conflicting ways of organizing TMDLs in the new permit. The former would suggest an organization based on pollutant type, while the latter would suggest an organization based on watershed.

We support organizing TMDLs by watershed, because such organization is more conducive to efficient and effective implementation.

5. Factual corrections to the responsible agencies matrix.

One of the handouts during the January 23 workshop was a matrix summarizing the responsible agencies for TMDLs to be incorporated into the new permit. Following are errors in the matrix and should be corrected:

- For the Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL, the LACFCD should not be listed as a responsible agency because as these waterbodies are located outside of LACFCD's service area, and the TMDLs themselves do not identify the LACFCD as a responsible agency.
- For the Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL, the County should not be listed as a responsible agency because there is no unincorporated County area within this subwatershed, and the TMDL itself does not identify the County as a responsible agency.
- For the Colorado Lagoon TMDL, the County should not be listed as a responsible party, because there is no unincorporated County area within this subwatershed, and the TMDL itself does not identify the County as a responsible party.

6. Proposed TMDL language

Finally, at the request of LARWQCB staff, the we would like to provide the draft language below for staff's consideration.

"Part 7 - Total Maximum Daily Load Provisions

A. General Provisions

1. Part 7 of this Order incorporates provisions to assure that Los Angeles County MS4 Permittees comply with Wasteload Allocations (WLAs) and other requirements of TMDLs as they apply to each Permittee. TMDLs are grouped by watershed in Part 7.D through 7.X.
2. Each Permittee shall attain the storm water WLAs incorporated into this Order by using one of the following approaches:
 - a. Numeric Effluent Limit, or
 - b. Action Based with Reasonable Assurance

Each approach is described in detail in Sections B and C below.

3. The TMDLs shown in Table 1 below assign WLAs to Permittees and have an interim and/or final WLA attainment deadline during the permit term and/or have milestones scheduled for completion during the permit term. The TMDLs shown in Table 2 assign WLAs to Permittees but have no compliance

schedule or specific implementation requirements for attaining the WLAs. Permittees shall comply with these TMDLs pursuant to Section B or C below.

Table 1: List of TMDLs

Resolution Name	Resolution No.	Effective Date
Ballona Creek Estuary Toxic Pollutants	2005-008	11-Jan-06
Ballona Creek Metals TMDL	2007-015	29-Oct-08
Ballona Creek Trash TMDL	2001-014	28-Aug-02
Ballona Creek Trash TMDL-Revision	2004-023	11-Aug-05
Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL	2006-011	27-Apr-07
Colorado Lagoon Pesticides, PAH's, PCB, Metals etc TMDL	R09-005	14-Jun-11
Lake Elizabeth, Munz Lake, Lake Hughes Trash TMDL	2007-009	6-Mar-08
Legg Lake Trash TMDL	2007-010	6-Mar-08
Los Angeles Harbor Bacteria TMDL	2004-011	10-Mar-05
Los Angeles Metals TMDL (Revised)	R10-003	3-Nov-11
Los Angeles Metals TMDL	2007-014	29-Oct-08
Los Angeles River Nutrient TMDL (Revision of Interim WLAs)	2003-016	27-Sep-04
Los Angeles River Nutrients TMDL	2003-009	23-Mar-04
Los Angeles River Trash TMDL	2001-013	28-Aug-02
Los Angeles River Trash TMDL Revised	2007-012	23-Sep-08
Machado Lake Nutrient TMDL	2008-006	11-Mar-09
Machado Lake Trash TMDL	2007-006	6-Mar-08
Malibu Creek Bacteria TMDL	2004-019R	24-Jan-06
Malibu Creek Trash TMDL	2008-007	7-Jul-09
Marina del Rey Back Basins Bacteria TMDL	2003-012	18-Mar-04
Marina del Rey Harbor Toxics TMDL	2005-012	22-Mar-06
San Gabriel East Fork Trash TMDL	1999-015	17-Apr-01
San Gabriel East Fork Trash TMDL (Revision of Implementation Schedule) - see 1999-015	2000-010	17-Apr-01
Santa Clara River Nutrients TMDL	2003-011	23-Mar-04
Santa Monica Bay Beaches Dry Weather Bacteria TMDL	2002-004	15-Jul-03
Santa Monica Bay Beaches Wet Weather Bacteria TMDL	2002-022	15-Jul-03
Upper Santa Clara River Chloride TMDL	2004-004	4-May-05
Upper Santa Clara River Chloride TMDL Implementation Plan Re-Consideration	2006-016	12-Jun-08
Upper Santa Clara River Chloride TMDL Implementation Plan Reconsideration & Revise Chloride WQ Objectives	2008-012	6-Apr-10

Table 2: List of TMDLs (EPA Established)

Resolution Name	Resolution No.	Effective Date
Los Cerritos Channel Metals TMDLs for Copper, Lead and Zinc	EPA Established	17-Mar-10
Malibu Creek Nutrient TMDL	EPA Established	21-Mar-02
San Gabriel River Metals and Selenium TMDL	EPA Established	26-Mar-07

B. Numeric Effluent Limitations

1. Permittees choosing the Numeric Effluent Limit approach shall attain the numeric WLAs in accordance with the applicable TMDL's Basin Plan Amendment and/or as specified in the specific TMDL section of this Order.
2. Attainment of the numeric WLA shall be demonstrated through monitoring conducted either in the receiving waters or at stormdrain outfalls in accordance with a monitoring plan approved by the Executive Officer.
3. Permittee shall complete specific actions (monitoring plans, implementation plans, special studies) as required by each TMDL.
4. A Permittee shall be deemed in compliance with the TMDL WLAs if one of the following is attained:
 - a. No exceedances of WLAs are detected at the representative outfalls, or
 - b. No exceedances of the WLAs are detected in the receiving waters at or downstream of the Permittee's discharge, or
 - c. No discharge occurs from the Permittee's jurisdictional area.

C. Action Based with Reasonable Assurance

1. Permittees choosing the Action Based with Reasonable Assurance approach shall attain the numeric WLAs by implementing BMPs in accordance with a Reasonable Assurance Plan approved by the Executive Officer.
2. The Reasonable Assurance Plan must be submitted to the Executive Officer for approval within one year of the effective date of this Order and must include the following elements:
 - a. Describe specific BMPs each Permittee will implement within the watershed during the term of this Order to address each pollutant of concern,
 - b. Detailed schedules for BMP implementation within the term of this Order,

- c. Quantitative analyses showing reasonable assurance that the proposed BMPs will (1) attain applicable interim and/or final WLAs during the term of this Order and/or (2) represent progress towards attaining interim and/or final WLAs outside of the term of this Order,
 - d. A monitoring program designed to assess the effectiveness of the proposed BMPs.
3. Structural BMPs shall be sized to treat stormwater runoff from the Water Quality Design Storm (WQDS). The WQDS is defined as the 85th percentile 24-hour runoff volume specific to the watershed in question.
 4. Within 6 months upon a determination by the Executive Officer that interim or final WLAs are not being met, Permittees shall propose additional BMPs for the approval of the Executive Officer.
 5. At any time during implementation of a Reasonable Assurance Plan, a Permittee with good cause (for example, unexpected delays outside of the Permittee's control in obtaining necessary regulatory permits) may petition the Executive Officer for modifications to the approved Reasonable Assurance Plan.
 6. A Permittee shall be deemed in compliance with TMDL WLAs if it is implementing its Reasonable Assurance Plan in good faith and implements additional BMPs as described in Part 7.C.4 above.

MONITORING PROGRAM

The monitoring program as described during the January 23 workshop consists of four elements: regional monitoring, TMDL compliance monitoring, wet-weather storm drain outfall monitoring, and dry-weather storm drain outfall monitoring. At this time, our comments will focus on two main areas: regional monitoring and outfall monitoring.

In particular, we are very concerned about the proposed outfall monitoring requirements, which do not appear to consider the massive scale and highly complex nature of the storm drain network within Los Angeles County. We urge LARWQCB staff to reconsider the proposed approach and work collaboratively with Permittees to develop a more workable program.

Regional Monitoring

1. The mass emissions monitoring program should be scaled back.

As indicated in its November 2010 Report of Waste Discharge, the LACFCD believes that the monitoring frequency for the mass emissions monitoring program can be scaled back and still provide the necessary data to assess long term trends

in receiving water quality. Scaling back the mass emissions monitoring program would free up resources to conduct additional monitoring such as in tributary watersheds.

Secondly, the Permit should make clear that the mass emissions monitoring is to measure the mass of pollutants in the receiving water in order to identify trends and to facilitate additional BMPs and is not for compliance. Because the mass emissions stations measure pollutants from all sources including non-MS4 sources, the monitoring is not to be used for compliance purposes.

2. The LID special study should be reconsidered.

The proposed regional monitoring program includes a requirement to study the effectiveness of LID implementation. As LARWQCB staff may be aware, the Stormwater Monitoring Coalition has conducted a Low Impact Development for Southern California study since 2007 in which the LACFCD has been a participant. Any new requirement to study LID effectiveness should be informed by past and current efforts to avoid redundancy.

Outfall Monitoring

3. The outfall monitoring requirements are unrealistic, overly prescriptive, and should be completely revised.

The proposed outfall monitoring requirements, especially those for non-stormwater runoff, are not workable for a number of reasons as discussed below. However, we acknowledge the importance of outfall monitoring as part of a robust and accountable stormwater program. As such, where possible, in addition to describing our concerns regarding the proposed requirements, we have also provided general feedback towards the development of a more workable outfall monitoring program to reduce stormwater and non-stormwater pollutant loading incrementally and more cost-effectively. We look forward to further discussions with LARWQCB staff to explore these ideas more fully.

Our first concern with the proposed requirements is that they do not appear to fully consider the massive scale and the complex nature of the stormdrain system within Los Angeles County. Los Angeles County Permittees collectively own thousands of stormdrain outfalls, all of which would be subject to a highly resource intensive screening process (i.e. seven-day flow measurements plus concurrent daily bacteria grab samples) under the proposed approach. We do not believe that the proposed "shot-gun" approach is an effective way to reduce dry-weather pollutant loading in such a massive and complex system. Instead, we urge LARWQCB staff to consider a tiered approach combined with some form of representative sampling of "major outfalls" as defined by 40 CFR § 122.26¹.

¹ 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

The concept of representative sampling is crucial for entities such as the County, which consists of approximately 80 unincorporated islands throughout the Permit area, resulting in potentially a very large number of monitoring locations under the proposed requirements. To map, inventory, determine the drainage area of each outfall, characterize flow contributions from dischargers covered under other NPDES permits and Waste Discharge Requirements (WDRs), and propose monitoring locations based on analysis of all the information collected would require significantly more time than the proposed schedule allows.

Second, the proposed requirements do not appear to consider the highly variable and episodic nature of most non-stormwater runoff. For most non-stormwater runoff, a one-time seven-day screening of an outfall is simply a snap-shot and is not representative of non-stormwater runoff.

Third, the proposed requirements appear to require Permittees to identify "high priority" outfalls by determining the relative flow contributions from 1) other permitted discharges, 2) authorized non-stormwater discharges, and 3) illicit discharges. Attempting to characterize non-stormwater runoff in this manner is futile in a highly complex and comingled stormdrain network because most non-stormwater runoff is episodic and highly variable and the attempt would not likely provide meaningful results. Also the responsibility of determining the contribution of flows from other NPDES/WDR permittees should not lie with MS4 Permittees. Instead the LARWQCB should direct those dischargers to provide that information. We urge LARWQCB staff to consider a more strategic and targeted approach to identifying "high priority" drains such using factors such as land use and drainage area or data from available trend analyses.

It is critical to program sustainability that Permittees have the flexibility to focus response on high priority locations and larger issues. Laboratory analyses require approximately one week to complete. By the time the results are available for Permittees to review and take action, the "one-time" illicit discharge would have passed through the system. It would be unrealistic to expect an upstream investigation conducted over a week after the illicit discharge was observed to detect the source. This issue is highlighted in a dry-weather screening and monitoring program evaluation submitted as part of San Diego MS4 Permittees' Report of Waste Discharge. The approach taken by the North Orange County MS4 Permittees (Santa Ana Region) in implementing their dry-weather reconnaissance program is to focus on outfalls with persistent issues. Rather than pursue every result above a tolerance interval (or action level), they are allowed to prioritize and focus on discharges of greater concern; e.g., outfalls with persistent issues

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).

(2 consecutive hits or more), outfalls known to drain problematic areas, etc., and take appropriate steps for investigation and corrective action.

Recommendation – The Permittees should be given at least one year to collaboratively evaluate the MS4 system and propose an integrated monitoring program and response protocols for the approval of the Executive Officer. The proposal would assess stormwater and non-stormwater runoff from Permittees' jurisdictional areas and should be based on the following general framework:

- The outfall monitoring program should be integrated with existing monitoring efforts throughout the Los Angeles Region (e.g., TMDL monitoring, monitoring by other NPDES permittees, etc).
- Non-stormwater outfall monitoring should be done at the same outfalls where stormwater monitoring will occur. This will allow for a more effective use of resources and provide an appropriate baseline characterization of non-stormwater runoff. Additional non-stormwater outfall monitoring may be conducted based on a set of approved triggers.
- For Permittees that have disconnected jurisdictional areas, such as the County, representative outfalls should be selected.
- Outfall monitoring site selection criteria should be based on drain size, drainage area, history, land use, staff knowledge and experience, etc.
- Outfall monitoring should be limited to "major outfalls." A Permittee may propose an alternative monitoring location (e.g., manhole, where a drain crosses jurisdictional boundaries, catch basin, etc.) if it is not able to find an outfall location.
- Should monitoring results indicate a cause for concern (e.g., results above a pre-determined threshold), response protocols can be triggered to investigate the sources.

4. Miscellaneous comments

- a. **Action levels** – We support the concept of action levels, provided they are based on thresholds proposed by Permittees as part of the monitoring program. For example, the Orange County MS4 Permittees in the Santa Ana Region developed tolerance intervals and used them as action levels to trigger corrective action.
- b. **Please provide clarification on the following terms: jurisdictional boundaries, significant non-stormwater or dry-weather flow, and baseline non-stormwater flows** – We recommend that jurisdictional boundaries be tied to land use authority, since the selection criteria for proposed outfall monitoring locations is dependent upon the representative land uses of outfall drainage. Should flow be utilized as part of an action level, further evaluation is required to establish thresholds for "significant non-stormwater flows" and "baseline non-stormwater flows."



California Regional Water Quality Control Board
Los Angeles Region

RB-AR1129



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Matthew Rodriguez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

TO: MS4 Permittees and Interested Persons

FROM: Renee A. Purdy, Section Chief
Regional Programs

DATE: February 16, 2012

SUBJECT: NOTICE OF STAFF LEVEL PUBLIC WORKSHOP ON THE DEVELOPMENT
OF THE UPDATED GREATER LOS ANGELES COUNTY MUNICIPAL
SEPARATE STORM SEWER SYSTEM (MS4) NPDES PERMIT

Immediately after the Los Angeles Regional Water Quality Control Board's (Los Angeles Water Board or Board) regularly scheduled meeting on March 1, 2012, Board staff will hold a public workshop to discuss tentative requirements proposed to be incorporated in the updated Greater Los Angeles County MS4 Permit. MS4 permittees and interested persons are invited to the staff level public workshop on:

Thursday, March 1, 2012
1:30 - 4:00 PM
The Metropolitan Water District of Southern California
Board Room
700 North Alameda Street, Los Angeles, CA

A quorum of Los Angeles Water Board members may be present during the workshop. However, no action or voting will take place at the workshop.

At the workshop, Board staff will discuss with MS4 permittees and interested persons some of the following topics:

- Water Quality Based Effluent Limits (WQBELs)
- Monitoring requirements
- Tentative permit requirements for the following minimum control measures comprising co-permittees' core stormwater management program:
 - Development Construction Program
 - Planning and Land Development Program
 - Public Agency Activities Program
 - Industrial/Commercial Facilities Control Program
 - Public Information and Participation Program
 - Illicit Connections and Illicit Discharges Detection and Elimination Program

California Environmental Protection Agency

A board level workshop will be held on April 5, 2012 during the Los Angeles Water Board's regularly scheduled meeting regarding additional items for the MS4 permit. An agenda will be published at least 10 days prior to the meeting.

Permittees and interested persons will have an opportunity to ask questions of Los Angeles Water Board staff and provide initial feedback. Please contact me at (213) 576-6622 or rpurdy@waterboards.ca.gov or, alternatively, Mr. Ivar Ridgeway at (213) 620-2150 or iridgeway@waterboards.ca.gov with questions.

LYRIS MAILING

RB-AR1131

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1/21/2012 19:26 emmanuel.riclet@gmail.com	EMMANUEL RICLET
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State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board
PUBLIC WORKSHOP - LA COUNTY MS4 PERMIT

SPEAKER REQUEST CARD

Date: March 1, 2012

I wish to speak during the Workshop:

- I wish to speak on Water Quality Based Effluent Limitations (WQ BELS).
- I wish to speak on Minimum Control Measures (MCM).
- I wish to speak on MONITORING.

Name: Patricia Elkins

Representing Self
 Representing: Carson

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board
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3 min. after 1st presentation.

Name: Shahram Kharaghani

Representing Self
 Representing: City of LA

Environmental Protection Agency

Water Resources Control Board

Los Angeles Regional Water Quality Control Board

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Name: Heather Malmer LA Permit Group (Heather Malmer, John Dettle, Joe Bellomo)

Representing Self

Representing: LA Permit Group

Environmental Protection Agency

Water Resources Control Board

Los Angeles Regional Water Quality Control Board

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Name: MARGARET CLARK

Representing Self

Representing: CITY OF ROSEMONT

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board
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- I wish to speak on MONITORING.
- COMBINATION OF ALL AT END

Name: ANGELA GEORGE

- Representing Self
- Representing: LOS ANGELES COUNTY ~~FLOOD CONTROL~~ +
LOS ANGELES COUNTY FLOOD CONTROL

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board
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↳ Requested 20 minutes prior to meeting

Name: Noah Garrison / Kirsten Jones

- Representing Self
- Representing: NRDC / Heal the Bay

State of California
Environmental Protection Agency
Water Resources Control Board
Los Angeles Regional Water Quality Control Board
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Name: RAY TALLIA

Representing Self

Representing: CONDORA, CROMER, TAWINORIL

**Los Angeles MS4 Permit:
Workshop
Minimum Control Measures**

Metropolitan Water District

March 1, 2012

Storm Water Management Program: Minimum Control Measures

40 CFR 122.26(d)(2)(iv)

- Industrial / Commercial Program
- Development Construction Program
- Illicit Connections/Illicit Discharges Elimination Program
- Public Agency Activities Program
- New Development/Redevelopment Program
- Public Information and Participation Program

Minimum Control Measure – Industrial/Commercial Sources

- Key Objective: Ensure the implementation of BMPs at industrial/commercial facilities to reduce the contribution of pollutants to the MS4 from industrial/commercial activities.
- Key Requirements
 - Watershed-based database of all industrial and commercial facilities
 - 2 Inspections of all designated industrial/commercial facilities within 5 years
 - Ensure BMP implementation (e.g. CASQA manual)
 - Verification of Permit Coverage and No Exposure Condition (if Necessary)
 - Investigation of Regional Board Submitted Complaints

Minimum Control Measure – Development Construction Program

- Key Objective: Ensure the implementation of BMPs at construction sites to reduce the contribution of pollutants to the MS4 from construction activities.
- Key Requirements
 - Inventory of grading permits, encroachment permits, demolition permits, building permits, or construction permits
 - **Development, review and written approval of a Erosion and Sediment Control Plan (ESCP)**
 - BMP implementation (per CASQA or Caltrans manual)
 - **Tiered Requirements**

Minimum Control Measure – Development Construction Program

- Significant Comment(s)
 - Substitution of State SWPPP (GCASP) for Erosion and Sediment Control Plan

Minimum Control Measure –Illicit Connections and Illicit Discharges Elimination (Non-stormwater Discharges Oversight)

- Key Objective: Effectively prohibit non-storm water discharges to the MS4.
- Key Requirements
 - Development procedures for conducting source investigations for IC/IDs
 - Development of procedures for eliminating for IC/IDs

Minimum Control Measure – Public Agency Activities Program

- Key Objective: Minimize storm water pollution impacts from permittee owned or operated facilities and activities.
- Key Requirements
 - Maintain an inventory and map of all Permittee-owned or operated facilities.
 - Implement activity specific BMPs (such as catch basin cleaning, open channel maintenance, street sweeping, and appropriate pesticide application)
 - Training of employees and contractors.

Minimum Control Measure- New Development and Redevelopment

- Key Objective: Minimize the impacts of development and significant re-development projects on water quality and hydrology.
- Key Requirements
 - **On-site retention of the storm water runoff volume resulting from the 85th percentile, 24-hour storm or the 0.75 inch 24-hour storm, whichever is greater.**
 - Off-site mitigation required where on-site retention is technically infeasible.
 - Development of a prioritized list of off-site mitigation projects
 - **Offsite Alternatives**
 - **Retrofit Incentive**
 - **Groundwater Replenishment**

Minimum Control Measure- New Development and Redevelopment

- Significant Issue(s)
 - Equivalency Demonstration of Local LID Ordinances.
 - The allowance of infiltration to augment groundwater recharge in lieu of on-site infiltration.

Minimum Control Measure- New Development and Redevelopment

Hydromodification (Sites < 50 acres)

- Applies to “Natural Drainage Areas”
- Requirements
 - On-site retention of the volume of runoff from the 95th percentile, 24-hour storm, or
 - BMP implementation to ensure 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.
 - The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study

Minimum Control Measure- New Development and Redevelopment

Hydromodification (Sites > 50 acres)

- Applies to “Natural Drainage Areas”
- Requirements
 - On-site project infiltration of at least the runoff from a 2-year, 24-hour storm event, or
 - BMP implementation to ensure 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. These conditions must be substantiated by hydrologic modeling acceptable to the Permittee, or
 - The Erosion Potential (Ep) in the receiving water channel <1.

Minimum Control Measure - Public Information and Participation Program

- Key Objective: To measurably increase the knowledge of the target audience about the adverse impacts of storm water pollution and change the waste disposal and storm water pollution generation behavior of target audiences.
- Key Requirements
 - 12.5 Impressions per Resident Annually
 - Watershed-wide reporting hotline
 - Storm water pollution prevention advertising campaign
 - Distribution of outreach materials
 - Conduct storm water pollution prevention public service announcements
 - Provide schools within each school district in the watershed storm water pollution prevention materials

Storm Water Management Program: Minimum Control Measures (Implementation)

- “Implementation Scale”
 - County-wide
 - Watershed-based
 - Municipality
- Program Substitution

Water Quality Based Effluent Limitations

“WQBEL”

a restriction on the quantity or concentration of a pollutant that may be discharged necessary to achieve a water quality standard

3/1/2012

Greater LA County MS4 Permit Workshop

What do federal regulations say about WQBELS?

- NPDES permits shall include requirements in addition to or more stringent than TBELs necessary to achieve WQS
- Permits for discharges from MS4s must require controls to reduce the discharge of pollutants to the maximum extent practicable, and where necessary water quality-based controls
- WQBELs must be consistent with the assumptions and requirements of available WLAs established in TMDLs

3/1/2012

Greater LA County MS4 Permit Workshop

When are WQBELs needed in NPDES permits?

- Where the discharge has the reasonable potential to cause or contribute to an exceedance of water quality standards and TBELs are not sufficient to achieve water quality standards
- For discharges that are assigned a WLA in a TMDL

3/1/2012

Greater LA County MS4 Permit Workshop

What is the basis for WQBELs?

- Water Quality Standards
- TMDL Wasteload Allocations

3/1/2012

Greater LA County MS4 Permit Workshop

How has the LA Water Board expressed WQBELs in MS4 permits?

- LA River Trash TMDL
 - WQBELs based on:
 - Numeric TMDL Compliance Points; or
 - % Jurisdictional Area Covered by FCS (quantitative surrogate parameter)
- Ventura County MS4 Permit
 - WQBELs = Numeric WLAs from TMDLs

3/1/2012

Greater LA County MS4 Permit Workshop

What is the proposed scope of WQBELs in the LA County MS4 Permit?

- Included where WLAs assigned to stormwater and non-stormwater discharges from the MS4 in established TMDLs

3/1/2012

Greater LA County MS4 Permit Workshop

WQBELs and BMPs: Two Different Concepts

Effluent Limitations

Effluent limitation: any restriction imposed on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from "point sources" into "waters of the United States"

40 CFR §122.2

BMPs

Best management practices ("BMPs"): schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States."

BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

40 CFR §122.2

3/1/2012

Greater LA County MS4 Permit Workshop

How can MS4 Permittees demonstrate compliance with WQBELs?

- Dual path approach
- Either:
 - Implementation of approved "reasonable assurance program" (RAP)
 - Direct comparison of MS4 monitoring data results with WQBELs

3/1/2012

Greater LA County MS4 Permit Workshop

Greater LA County MS4 Permit - Monitoring Program Requirements

Staff-level Workshop

March 1, 2012

3/1/2012

LA Co. MS4 Permit - Staff-level Workshop

Overarching Monitoring Program Objectives

- Assess the chemical, physical and biological impacts of MS4 discharges on receiving waters
- Determine compliance with WQBELs and RAP
 - Direct comparison to WQBELs
 - Validate BMP performance / outcome expectations for "Reasonable Assurance Program"
- Help target implementation actions

3/1/2012

LA Co. MS4 Permit - Staff-level Workshop

Elements of the Monitoring Program

- TMDL Compliance Monitoring Programs
- MS4 outfall monitoring of stormwater discharges
- MS4 outfall monitoring of non-stormwater discharges
- Regional Monitoring Programs

3/1/2012

LA Co. MS4 Permit - Staff-level Workshop

Specific Objectives

- **TMDL Compliance Monitoring Programs**
 - Assess whether the applicable interim and final WQBELs and RWLs are being achieved
- **Stormwater Outfall-Based Monitoring Program**
 - Characterize the quality of stormwater discharges and their impact on receiving waters
 - Measure the effectiveness of Permittees' Stormwater Management Program (i.e. MCMS/RAP)
- **Non-Stormwater Outfall-Based Monitoring Program**
 - Identify outfalls with significant non-stormwater discharges
 - Characterize the quality of non-stormwater discharges to determine whether these non-stormwater discharges are a source of pollutants
- **Regional Monitoring Programs**
 - Assess whether receiving waters are fully supporting beneficial uses
 - Identify pollutants that are causing or contributing to an exceedance of water quality standards

3/1/2012

LA Co. MS4 Permit - Staff-level Workshop

Need for MS4 Outfall Monitoring

- Identified by EPA in federal regulations
- Provides data to determine impact of MS4 discharges on receiving water
- Provides data to evaluate whether authorized non-stormwater discharges are a source of pollutants
- Provides data to determine effectiveness of stormwater management programs and illicit discharge detection and elimination programs

3/1/2012

LA Co. MS4 Permit - Staff-level Workshop

Integration of TMDL and Outfall Monitoring Requirements

Machado Toxics TMDL Monitoring Program

- Three wet weather events each year, including first large storm
- Appropriate locations in the subwatershed

Proposed Outfall Monitoring Program

- Three storms per year, including the first storm of the season
- At least one outfall within each subwatershed

3/1/2012

LA Co. MS4 Permit - Staff-level Workshop

Comparison of Monitoring Requirements

Existing LA County MS4 Permit

- Mass Emissions
- Tributary
- Shoreline
- Trash Monitoring
- Bioassessment
- BMP Effectiveness
- Peak Discharge Impact Study

Proposed Requirements

- Receiving water
- TMDL/outfall monitoring
- Shoreline (TMDL driven)
- Trash (TMDL driven)
- Bioassessment
- LID Effectiveness Study
- Hydromodification Study
- Pyrethroids Special Study

3/1/2012

LA Co. MS4 Permit - Staff-level Workshop

Development of Monitoring Program Framework for Permit

- Outfall monitoring
 - Program objectives
 - Outfall / site selection criteria or screening process
 - Minimum frequency
 - Process for adaptive monitoring
- TMDL monitoring requirements
- Regional monitoring requirements/special studies

3/1/2012

LA Co. MS4 Permit - Staff-level Workshop

Timing of New Monitoring Requirements

- Within first year
 - Update inventories of MS4 outfalls
 - Develop integrated monitoring plans
 - Continue TMDL monitoring
 - Continue mass emission monitoring and other on-going regional monitoring programs
 - Begin screening of outfalls for non-stormwater discharges

Committee on the
Development of the Central LA County MS4 NPDES Permit
March 19, 2012

LA PERMIT GROUP

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

LA Permit Group

61 Voting Agencies

- * Agoura Hills
- * Alhambra
- * Arcadia
- * Artesia
- * Azusa
- * 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

LA Permit Group Structure

LA Permit Group
 (Heather Maloney, City of Monrovia)

Negotiating Committee

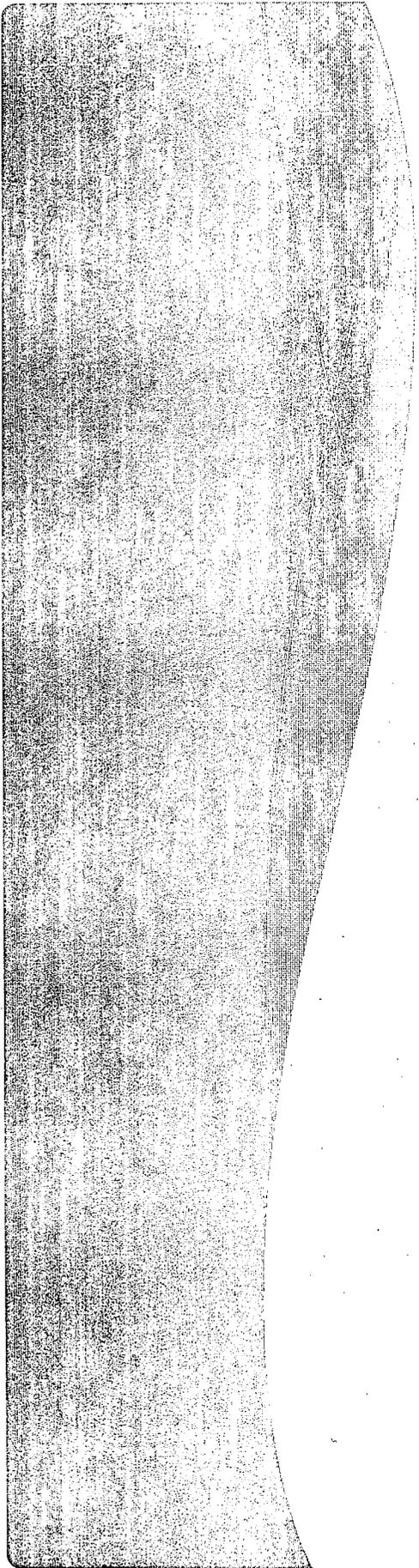
Technical Sub-Groups

Development Programs
 (Kosta Kaporis, City of Los Angeles)

Monitoring
 (John DeNile, City of Torrance)

Reporting & CORE Programs
 (Joe Belomo, Westlake Village & Agoura Hills)

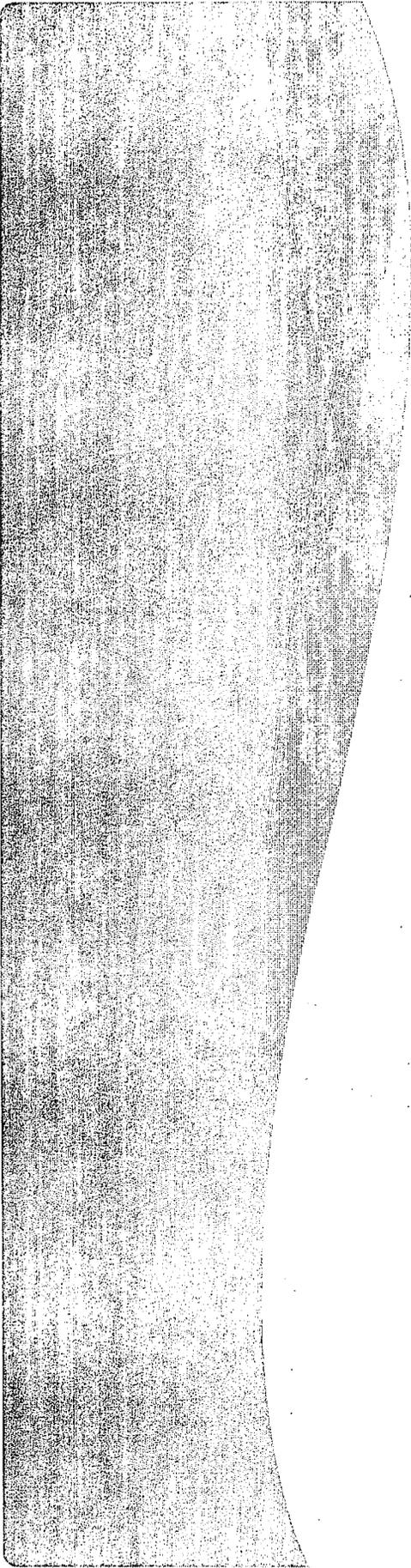
TMDLs
 (Heather Merenda, City of Santa Clarita)



WQBELS

Water Quality Based Effluent Limitations

- * BMP-based WQBELs that allow the implementation of Best Management Practices to be utilized as a method of compliance for meeting TMDL WLAs
- * Final TMDL WLAs are not required to be put in as numeric WQBELs
- * The definition of numeric WQBELs as proposed by staff would put permittees out of compliance with the permit from day one and would not recognize the significant efforts that have been implemented to date to comply with TMDLs



Monitoring

TMDL WATER QUALITY MONITORING

- * TMDL Monitoring is excessive and costly
- * 88 cities and 32 TMDLS results in over 250 plans and annual reports for Permittees and Board
- * TMDL monitoring per City is redundant with adjacent cities
- * TMDL monitoring data per City has limited use for BMP siting and sizing
- * Cost for typical City of 150,000 est. at \$800,000 per year

ADDITIONAL WATER QUALITY MONITORING

* **Regional Monitoring:**

- * Hydromodification
- * LID
- * Pyrethroid

* **Stormwater Monitoring:**

- * each outfall for flow
- * 303(d) listed pollutants
- * misc. physical parameters
- * aquatic toxicity

* **Non-Stormwater Monitoring:**

- * outfalls for “significant” flows with analysis for 303(d) listed pollutants
- * TMDL
- * TSS
- * constituents with potential to contribute to exceedences of water quality standards

LA PERMIT GROUP CONCERNS ABOUT WATER QUALITY MONITORING

- * Regional Monitoring for Hydromodification, LID and Pyrethroid is redundant with existing studies
- * Stormwater Monitoring is duplicative of TMDL monitoring and lacks clear goals
- * Non-Stormwater Monitoring is duplicative of TMDL monitoring and pollutant source investigations
 - * Elimination of dry weather flows will harm wetlands, rivers and lakes dependent on urban run off
- * Limits Permittees' ability to direct monitoring efforts and prepare integrated compliance plans
- * Additional costs on top of TMDL monitoring

INTEGRATED WATERSHED MONITORING

Monitoring Program Proposal:

- * Permittees recognize benefits of having Integrated Watershed Monitoring Plans (IWMP) for all TMDL and Permit monitoring within each Watershed
- * Cities would pool their resources and implement a plan based on targeted monitoring of high priority sub-watersheds and receiving water bodies
- * IWMPs eliminate redundancy and data gaps and **give the Big**

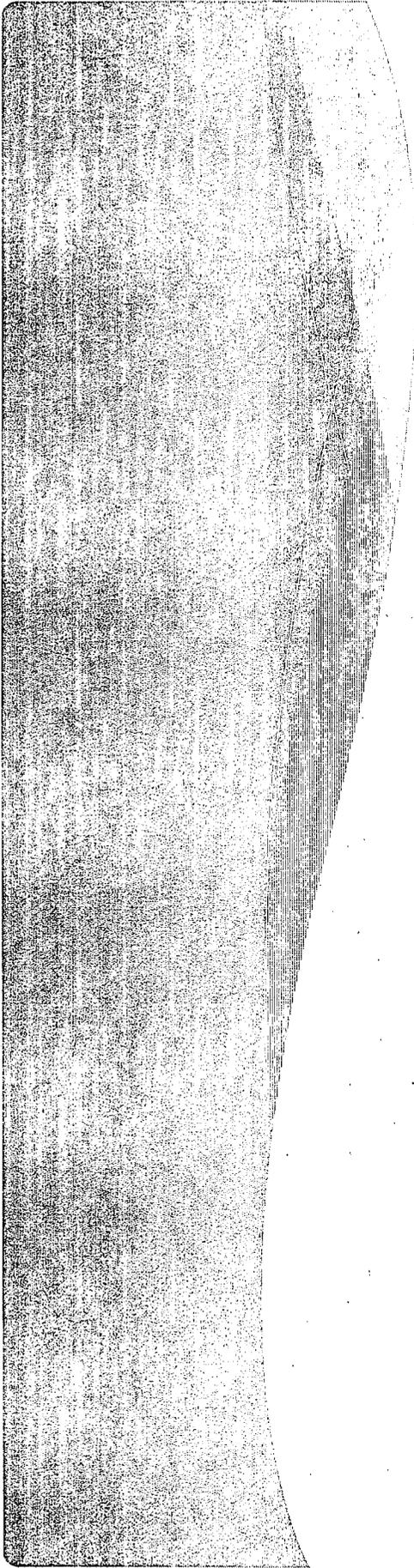
Picture for Watershed Health

- * One monitoring plan and annual report for each Watershed for all TMDLs and permit monitoring

INTEGRATED WATERSHED MONITORING

Monitoring Program Proposal cont...

- * Provides data needed to prepare Integrated Stormwater Quality Management Plans that address multiple pollutants
- * Provides data needed to implement BMPs where multiple pollutant loads are highest
- * Provides for the development of watershed storm drain maps and identifies outfalls with significant dry weather flows
- * Provides for the MOST COST EFFECTIVE water quality monitoring program



Minimum Control Measures

Development Programs

- * Development Programs should be based on the goal of improving stormwater quality not on specific control strategies
- * Development Programs should be tailored to the unique characteristics of LA County
- * Development Programs should be based on a design storm
- * Municipality should be able to prioritize BMPs based on its unique characteristics and TMDLs for in their watershed(s)

CONSTRUCTION PROGRAM COMMENTS

Review on the Draft Core Permit Requirements Table (Oct 2014)

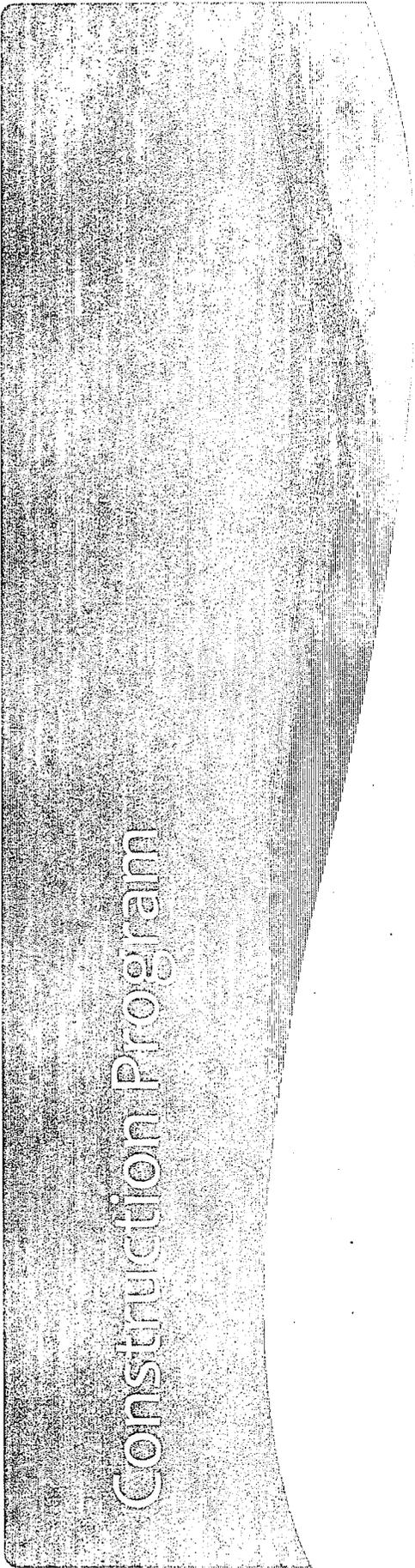
**Applicable to all activities involving soil disturbance
(Denuded Hillsides vs. Backyard Patio)**

Requirements:

- * Use electronic tracking system to inventory grading, encroachment, demolition, building and construction permits
- * Prior to issuance of grading/building permit, approve ESCP

Suggestion:

Establish reasonable thresholds, excessive number of projects and parameters to keep track of and manage (i.e. L.A. issues 40,000 building permits/year).



Construction Program

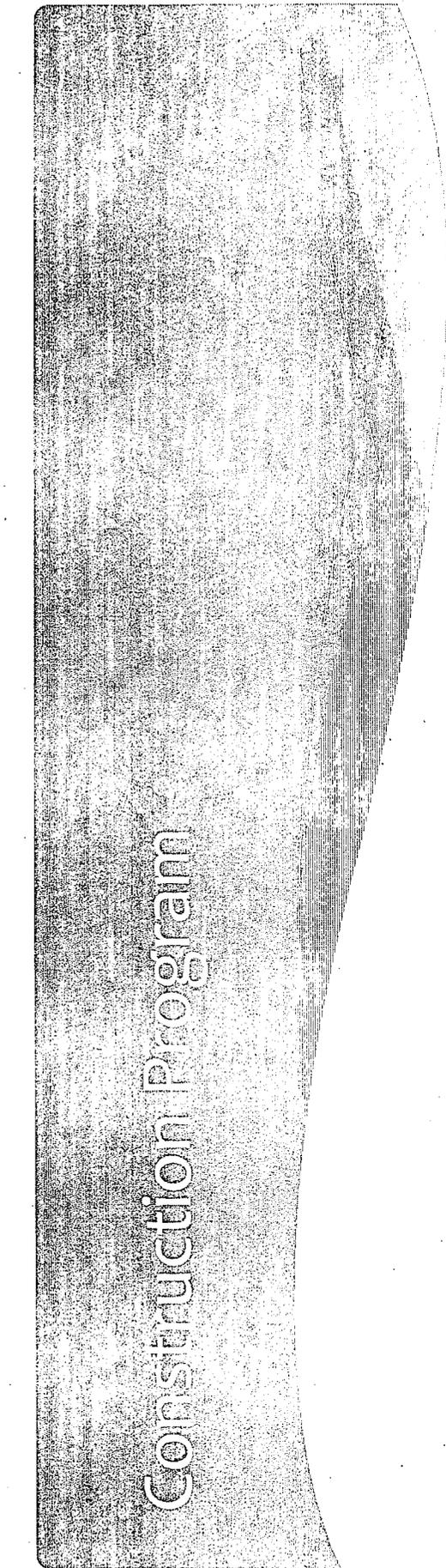
Requirements:

- * The ESCP must include the elements of a SWPPP including risk-based BMPs
- * ESCP should include a Rain Event Action Plan (REAP)

Suggestion:

Support 1-acre threshold provided by State General Construction Permit

- * Never intended for small sites (typical SWPPP cost is \$20,000 per project)
- * Keep the <1-acre SWPPP requirement basic



Construction Program

Requirement:

The Permittee shall inspect all phases of construction including

- 1) prior to land disturbance, 2) Grading & Land Development
- 3) Streets and Utilities, 4) Vertical Construction,
- 5) Final Landscaping and Site Stabilization

Suggestion:

The requirement is overtly burdensome and they serve no benefit. The only reasonable inspection would be during the grading phase and upon project completion and as part of existing inspections.

PLANNING AND LAND DEVELOPMENT FOCUSED COMMENTS

Suggestions:

- * Requirements should have clear water quality benefits.
- * Reduce 1.5 times the volume of water for use of biofiltration on-site and off-site mitigation to 1.0;
- * Self-Inspection of post-construction BMPs by parcel owners. Agencies to function as an auditor of maintenance and repair records of BMPs on a random and as-needed basis.

Volume of Water to Retain On-Site

Suggestions:

- * Retainage should be based on soil characteristics
- * Roadway construction – Ventura Permit requirements have low thresholds are not appropriate for LA County public roadway construction where most projects are retrofits.
- * Hydromodification Control - Ventura Permit criteria are not appropriate especially the use of Erosion Potential

Minimum Control Measures

General Comments

- * **Provide the requirement, allow the Permittee the flexibility to implement**
 - Maintain a watershed/jurisdiction-based map in GIS
 - Installation of trash excluder devices on catch basins or outfalls of MS4
- * **Provide the time necessary to comply with the requirements**
 - Some requirements affect agency budgeting processes, contracting agreements, and stakeholder involvement
- * **Provide clear definition of key terms**
- * **Consider the cost to comply**

Water Quality Based Effluent Limits (WQBELs)

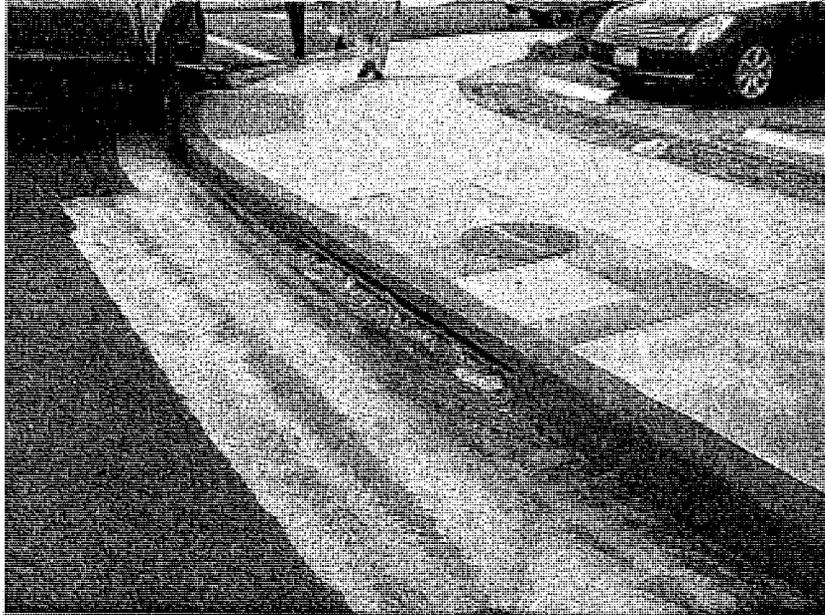
Ray Tahir

Cities of Baldwin Park, Compton, Gardena, Irwindale, Inglewood, and
South El Monte

Concerns

- **Concerns with WQBELs**
 - A WQBEL is a federal stormwater requirement that translates a water quality standard (includes TMDL numeric waste load allocations) into BMPs or other actions to achieve compliance
 - BMPs operate to reduce or eliminate pollutants in stormwater discharges to the maximum extent practicable (MEP)
 - BMPs do this by preventing stormwater contact with pollutants, or, if not possible, by treating or preventing runoff before it enters the MS4 (streets, catch basins, storm drains)

Trash BMP



Infiltration (LID) BMP for New Developments



Concerns

- Concerns with WQBELS
 - Absence of WQBELS has resulted in enforcement action against 22 cities in 2008
 - Santa Monica Bay Beaches Dry Weather TMDL (placed in the current permit in 2007) contained a bacteria WLA that had to be met no matter what)
 - It did not allow for WQBELS to translate its waste load allocation into BMPs (even though USEPA's 2002 memo required WQBELS for TMDL WLAs)
 - Affected permittees thought that by implementing BMPs they would be in compliance (some permittees spent millions of dollars diverting non-stormwater runoff away from the beaches to the sewer system) but were still in violation)
 - Fortunately, two court decisions invalidated the enforcement actions

Concerns

- Concerns with WQBELS
 - Regional Board staff proposes to apply numeric WQBELS to all of the TMDLs to be placed into the next MS4 permit
 - Problem: Regional Board staff interprets numeric WQBELS to mean absolute compliance with TMDL WLAs (which are numeric) -- **by any BMP means necessary**
 - Permittees must meet the 32 numeric WLAs or be out of compliance
 - Non-compliance would require enforcement action or exposure to third party litigation

Concerns

- Cities are concerned about Regional Board's staff application of WQBELs
 - It is not certain if the Regional Board can at this time can legally compel compliance with numeric limits
 - We do know that a Blue Ribbon Panel convened by the State Water Resources Control Board concluded that numeric limits are not feasible at this time
 - A Sacramento Superior Court recently ruled that numeric limits in the General Construction Stormwater Activity NPDES Permit are impermissible
 - USEPA issued a memo issued last year clarifying its November 2010 guidance memo on WQBELs:
 - *A key issue addressed in the 2010 memorandum is the feasibility of including numeric effluent limitations in NPDES permits for stormwater discharges. Some stakeholders are concerned that the 2010 memorandum can be read as advising NPDES permit authorities to impose end-of-pipe (outfall) limitations on each outfall in an MS4. In general, EPA does not anticipate that end-of-pipe effluent limitations on each outfall will be used frequently.*

Concerns

- But numeric Limits Are Infeasible:
 - Because of costs:
 - For example, according to the Regional Board's own data, the cost of complying with the L.A. River bacteria TMDL WLAs is estimated to be 5.4 billion over a 22 year period
 - The City of Bradbury's annual cost would be \$1.2 million per year; its annual budget is only \$800,000
 - The City of Cudahy is one of the poorest cities in the County – its cost will be \$1.4 million per year (7% of its total budget) -- raises environmental justice issues
 - The bacteria TMDL is just one TMDL – there are 31 others
 - Regional Board has not effectively addressed these costs and how cities are expected to meet them

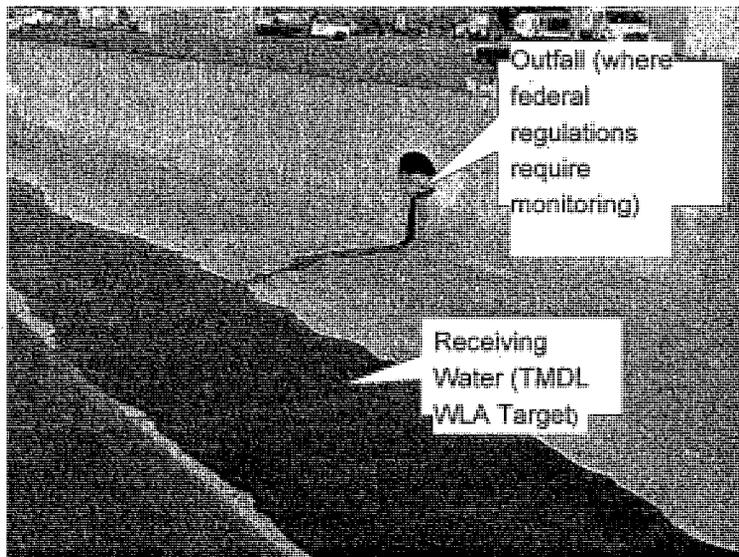
Concerns

LAR Bacteria TMDL Implementation Plan Watershed Cost Estimate May 11, 2010			
City	Watershed Area sq miles	Percentage	Estimated Annual Costs for 25 Year Implementation Period \$216,000,000
Alhambra	7.60	1.22583%	\$3,171,760
Arcadia	10.93	1.76293%	\$4,088,267
Bell	2.74	0.44194%	\$1,834,131
Bell Gardens	2.48	0.40001%	\$1,762,671
Bradbury	1.40	0.22581%	\$1,465,322
Burbank	17.35	2.79843%	\$5,856,246
Caltrans	11.24	1.81293%	\$4,173,588
Calabasas	5.58	0.90001%	\$2,616,785
Carson	0.88	0.14194%	\$1,322,203
Commerce	6.56	1.05808%	\$2,885,510
Compton	8.60	1.38712%	\$3,446,980
Cudahy	1.12	0.18065%	\$1,388,258
Downey	5.66	0.91292%	\$2,637,803
Duarte	2.30	0.37097%	\$1,713,030
El Monte	6.97	1.12421%	\$2,998,355
Glendale	30.62	4.93879%	\$9,507,550
Hidden Hills	1.57	0.25323%	\$1,512,111
Huntington Park	3.03	0.48872%	\$1,913,948
Irwindale	1.89	0.30484%	\$1,600,186
La Canada Flintridge	8.57	1.38228%	\$3,438,723
Long Beach	16.66	2.88714%	\$5,666,336
Los Angeles	281.44	45.39428%	\$78,540,800
Lynwood	4.85	0.78227%	\$2,414,867
Maywood	1.18	0.19033%	\$1,404,772

Concerns

- Numeric Limits Are Infeasible:
 - There's **no outfall data** showing that an MS4 permittee has not met the TMDL WLA
 - Although federal regulations require stormwater monitoring at the outfall for compliance, the Regional Board has never required outfall monitoring
 - Regional Board staff has relied on receiving water monitoring to determine compliance

Concerns



Concerns

- Numeric Limits Are Infeasible:
 - Because the TMDL WLAs are based on improper receiving water monitoring methodology (did not follow State SWAMP policy)
 - The WLAs are based on non-ambient monitoring (i.e., samples were taken during rain events only)
 - Ambient monitoring requires samples from the receiving water taken after it rains (48 to 72 hours)
 - So what's the difference?
 - Monitoring conducted during a storm event is when the water body is at its worse -- resulting in a more stringent standard
 - Ambient monitoring provides a more accurate characterization of the health of a receiving water body because it is done when things have calmed down
 - The Regional Board's SWAMP unit knows this

Remedies

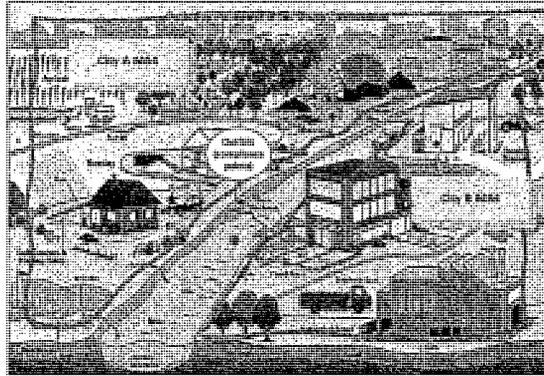
- Okay, Now What?
 - How do permittees comply with the 32 TMDLs that will be placed into the next MS4 permit?
 - Re-open those TMDLs that set the compliance point in the receiving water and change it to the outfall (unless the permittees can show compliance in the receiving water or that there is no exceedance there)
 - Eliminate the compliance schedules in the TMDLs
 - Conduct SWAMP monitoring in the receiving waters (as the Regional Board has already done to some extent for L.A. basin water bodies) to **re-set** TMDL waste load allocations
 - Allow compliance with “pending” TMDLs through revised BMPs now implemented through the current MS4 permit and will be modified and carried-over to the next MS4 permit

Remedies

- Okay, Now What? -- continued
 - The proposed “enhanced” BMPs would be implemented through the core programs as they are now through Stormwater Quality Management Plan **instead** of a Reasonable Assurance Plan as proposed by Regional Board Staff – for example:
 - Focus public education outreach on TMDLs
 - Adjusting industrial/commercial inspections to identify and control TMDL-pollutants used, stored, or handled at such facilities
 - Implement low impact development (LID) strategies retain more runoff on-site
 - Conduct more or modified street sweeping (through the public agency program)

Remedies

- Okay, Now What? -- continued
 - Conduct outfall monitoring over the 5-year term of the permit to characterize each permittee's MS4 for TMDL pollutants and to evaluate BMP performance vis-à-vis TMDL WLAs



Remedies

- Okay, Now What? – continued
 - In the 5th permit year (2017), propose in the next MS4 permit application (known as the Report of Waste Discharge) additional or more intensified BMPs based on outfall monitoring data
 - Determine if TMDLs should continue or be de-listed
 - Recommend ramped-up BMPs – if warranted (this is adaptive/management-iterative process)

Remedies

- Approach may not be perfect but it is sane under the circumstances

Remedies



Thanks!

BEFORE THE LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

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TRANSCRIPT OF AUDIO RECORDING

Los Angeles, California

Thursday, March 1, 2012

Transcribed by:
LORI ODELL KENNEDY
CSR No. 3320

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1 LOS ANGELES, CALIFORNIA, THURSDAY, MARCH 1, 2012

2
3 MR. UNGER: On the MS-4 permit, I'm Sam Unger. I'm the
4 Executive Officer of the Regional Board, and I would like to
5 welcome everyone.

6 To update you on several key areas of development
7 of the MS-4 permit, our workshop will cover control
8 measures, the WQ BELS, and the monitoring.

9 Although this meeting has been publicly noticed so
10 our Board Members can attend, we're going to hold it as if
11 it were just a Staff Level Workshop, that is similar to
12 previous Staff Level Workshops you may have attended on each
13 of these topics.

14 Board Staff will present the current status of
15 development of these sections of the permit. In the case of
16 the WQ BELS, there will be WQ BELS, and the discussion will
17 focus on the clarification of what Q BELS are, and how they
18 will be utilized in the permit.

19 And following each of those topical presentations,
20 staff will both entertain questions, and there's some people
21 have requested blocks of time to speak on those; and those
22 times, Theresa Rogers will be monitoring your time. You can
23 come up here and present your comments, and I would just
24 like to say, the key here is the Board is here just to
25 listen.

1 They're not here to deliberate, as they were in
2 November. They're not here to provide their opinions.

3 If they have questions, they will be writing them
4 down, they will be forwarding them to me, and I will move
5 them on. They may ask questions just simply for clarity, if
6 they don't understand an issue; but that's basically the
7 extent of their interaction at this Staff Level Workshop.

8 There will be other workshops scheduled as
9 Board-level workshops, in which case, it will be run more as
10 it was in November, and you will have an opportunity to
11 interact and respond directly to their questions.

12 And before I introduce Ivar Ridgeway, I would also
13 let you know, for those of you who may not have been here
14 this morning, that during the Executive Officer Report out
15 to the Board, I announced that the permit schedule has been
16 -- is going to be delayed from May of this year to September
17 of this year. And so I thought you'd all be interested in
18 knowing that as you make your summer plans.

19 And with that, I would like to turn it over to Ivar
20 Ridgeway, who is going to talk about the minimum control
21 measures. So with that, Ivar, please?

22 For those of you who brought some presentations, we
23 may -- we have been experiencing difficulties with the
24 audio/visuals. One of the things, I'd say too, we had this
25 scheduled to end at 4:00, we'll move it to 4:30 to account

1 for this time that we have lost.

2 So I think, Ivar, you're going to have to get
3 started because, in the interest of time, and the fact is
4 that we don't really control the audio/visual system here.
5 So we may or may not have it. It may come back on.

6 For those of you planning to make presentations, be
7 prepared to make them without the benefit of the
8 audio/visual system. Thank you.

9 MR. RIDGEWAY: Good afternoon. I'm Ivar Ridgeway, Unit
10 Chief of the Storm Water Permitting Unit. And I would like
11 to briefly describe some of the proposed requirements for
12 the measures required under 40 CFR.

13 Well, it's not -- if the audio/video comes up, we
14 have bolded and underlined the provisions that are unique to
15 our region, for the first time. The provisions for all six
16 memo control measures apply to the permittees.

17 With an industrial or commercial -- with an
18 industrial or commercial program, the Inspector Frequency
19 proposed is identical to what is required in the current
20 2001 L.A. MS-4 permits, and the current Ventura MS-4 permit,
21 two inspections for designated facility, within five years.

22 The most significant change from the 2001 LA MS-4
23 permit is the use of prescriptive BMPs from the California
24 Storm Water Quality Association Manual.

25 The requirements for the construction program are

1 largely based on those on the current Ventura MS-4 permit.
2 Prior to issuing a grading or building permit, permittees
3 are required to have the project proposal, and submit an
4 erosion and sediment control plan. The erosion and sediment
5 control plan will include all the elements of a storm water
6 pollution prevention plan, which specifies control measures
7 to be implemented to reduce or eliminate pollutants in storm
8 water.

9 The controls for the construction activities are
10 derived from the California Storm Water Quality Association
11 Manual, for construction activity, or the Caltrans Handbook
12 for transportation-related construction projects.

13 Inspection frequency and level of controls required
14 on-site are based on the risks posed by the project.

15 In response to permittee input, staff are proposing
16 to include language to allow the State SWPP to substitute
17 for the erosion and sediment control plan, and those who
18 apply for sites one acre and above.

19 MR. UNGER: Tell them what SWPP is.

20 MR. RIDGEWAY: The Storm Water Prevention Plan, which is
21 a document that specifies the controls required on-site. It
22 would specify what best management practices are appropriate
23 or required to use.

24 The list of connection on Discharge Elimination
25 Program is one which has changed significantly, what's

1 proposed in the earlier MS-4 permits, and what was presented
2 in workshops.

3 Staff are now proposing to have the committees
4 identify priority areas in the MS-4, and identify minimum of
5 stations within those areas, at which field observations,
6 field screen monitoring, and possibly analytical monitoring,
7 are conducted, which will be done as part of the monitoring
8 program this time, rather than as part of the illicit
9 connection, and illicit discharge elimination program.

10 The illicit discharge -- the illicit
11 detection/elimination program this time will solely be
12 focused on the elimination of illicit discharges. It would
13 be those identified by dry weather monitoring and those
14 reported to the permittees as currently done in the 2001
15 permit.

16 The requirements for the Public Agency Activities
17 Program is very similar to what's in the current L.A. MS-4
18 Permit, and virtually identical to what's in the recently
19 adopted Ventura MS-4 Permit.

20 Staff are proposing to continue permit
21 requirements, such as catch basin cleaning, open channel
22 maintenance, and street sweeping.

23 For the new development and redevelopment program,
24 the provisions are similar to what's in the current Ventura
25 MS-4 Permit. Staff are proposing to incorporate an L.I.D.

1 design storm, similar to the current Ventura MS-4 Permit,
2 and current L.A. MS-4 sub-sizing.

3 Those designated new development and redevelopment
4 projects would retain on-site the storm water runoff,
5 resulting from the 85th percentile, 24-hour storm or the
6 three-quarter-inch, 24-hour storm, or whichever is greater.

7 When a permittee finds that project applicant has
8 demonstrated technical infeasibility, just as at Ventura,
9 has taken all steps feasibly to comply with those on-site
10 requirements, Staff is proposing committees require the
11 applicant to provide off-site mitigation.

12 Unique to this permit -- unique to this permit,
13 Staff intends to incorporate language which would allow
14 off-site retrofit projects and groundwater replenishment
15 projects to be implemented in lieu of the on-site B.M.P.
16 controls.

17 As one of the issues brought up, Staff will include
18 language to allow those, if permittees that have L.I.D.
19 ordinances to substitute their L.I.D. ordinance, if they can
20 demonstrate that their current ordinances would result in
21 equivalent or improved water quality benefits.

22 Low Impact Development, L.I.D., is practices green
23 building, it's practice is designed to mimic natural
24 conditions for hydrology; meaning, we'll be looking for an
25 infiltration of groundwater, rather than the runoff of

1 hardened surfaces usually contribute.

2 The hydro modification requirements Staff intend to
3 incorporate are largely derived from the current
4 requirements in the Ventura MS-4 Permit.

5 The key difference in this provision, compared to
6 the Ventura MS-4 Permit is we're allowing an on-site
7 retention from a larger storm event than the L.I.D. storm
8 event, to comply with those hydro modification requirements.

9 For those projects over 50 acres, 50 acres or
10 above, the proposed requirements are virtually identical,
11 with the exception that the volume of runoff is from a
12 larger hydro modification design storm, and hydrologic
13 modeling is required to demonstrate the maximum of
14 pre-development and post-development conditions.

15 The Public Information Program is based on the
16 current Ventura MS-4 Permit, and fairly similar to what's in
17 the current L.A. MS-4 Permit. Staff are proposing that
18 permittees conduct the storm water pollution prevention
19 advertising campaign, and distribute storm water pollution
20 prevention education materials to potential entities such as
21 automotive parts stores, and home improvement centers.

22 In addition, Staff are proposing that permittees
23 develop and implement or continue the implementation of a
24 reporting hotline to serve as the general public reporting
25 contact for reporting of listed discharges and dumping.

1 And lastly, on the scale of implementation for all
2 of these program measures, Staff has crafted language that
3 applies to all the fixed minimal control measures, allowing
4 the compliance on those to be conducted on a countywide
5 program, on a watershed scale, or within an individual
6 municipality.

7 As part of the reasonable assurance plans that our
8 municipalities will be developing to comply with the TMDL
9 requirements, we'll also allow provisions within those RAPS,
10 or Reasonable Assurance Plans, to substitute for any of
11 those home program elements, in whole or partly. That
12 concludes my presentation.

13 MR. KHARAGHANI: Good afternoon, Madam Chair, Board
14 Members, my name is Shahram Kharaghani. I'm the Watershed
15 Protection Program Manager for City of Los Angeles.

16 I know you're running late, so I'll make my remarks
17 very short. I really appreciate that your Board and Staff
18 have provided this type of workshop for the permittees to
19 provide their input.

20 In particular, I want to thank Mr. Unger,
21 Ms. Smith, Ms. Birdy, and Mr. Ridgeway, to have constant
22 communication with permittees regarding the development of
23 this permit.

24 We believe this kind of cooperation would create a
25 permit that all could support and implement to improve water

1 quality for our citizens. Thank you so much.

2 MR. GARRISON: Good afternoon, Members of the Board and
3 Board Staff. Thank you for hosting this workshop. I'm Noah
4 Garrison, with the Natural Resource Defense Council. And
5 I'm going to be partnering with Kirsten James, of Heal the
6 Bay.

7 Just to very quickly give an overview of two issues
8 that we've noted with the minimum control measures. First
9 is with respect to loan back development. We are very glad
10 to see that the Board Staff have effectively taken the
11 Ventura permit as a floor for what's to be required.

12 A couple points that we would push to the Board,
13 which I didn't note up there, is just in the case that there
14 is technical infeasibility, that bio-filtration should be
15 required at a multiplier for the volume that is required to
16 be retained on-site.

17 That is, if you're unable to retain water on-site,
18 and you're going to use bio-treatment as a secondary means
19 of addressing that runoff, you should be required to treat a
20 larger volume of water than you would have been required to
21 retain on-site.

22 And that's in order to ensure an equivalent water
23 quality benefit is achieved.

24 With that, regardless of whether a specific
25 multiplier is set in the Ventura Permit, they require that

1 you have to bio-treat 1.5 times the volume of water that is
2 retained on-site through on-site retention practices.

3 The site must ensure that equivalent water quality
4 benefit or pollutant loading reduction is achieved, so that
5 even if you meet that 1.5 times multiplier, if the site
6 can't demonstrate that equivalent pollutant loading
7 reduction will be achieved by the bio-treatment, then you
8 would still have to increase the amount of bio-treatment
9 that results.

10 I would also point that in the event that regional
11 projects are allowed, we certainly would encourage regional
12 projects that retain water, either infiltrating it,
13 evaporating it or putting that water to beneficial use
14 through capture.

15 But where regional projects in it may be suggested
16 that would allow for treatment and discharge of the runoff,
17 such as a managed wetland, or other regional project that
18 will ultimately allow in water being discharged from the
19 site, we would say that is inappropriate where on-site
20 retention is feasible, and that such a regional project
21 should not be allowed, and that's something that needs to be
22 included in the permit.

23 Finally, with respect to the off-site provisions
24 that are being mentioned here, I believe for the first time,
25 I don't believe we've seen those previously.

1 We would caution that while we absolutely do want
2 to see that groundwater is recharged, or the water that is
3 retained is put to the best possible benefit, whether that's
4 captured or recharging of groundwater supplies, we need to
5 make sure that an absolutely equivalent pollutant load
6 reduction is achieved, or at the same time, that the runoff
7 from that site, that site that is using an in lieu feature,
8 is treated in some manner.

9 Under Regional Board Order from 2000 -- or excuse
10 me, State Board Order from 2000, all sites must treat their
11 runoff, and there is no exemption for that.

12 So even if they're going to choose to do off-site
13 practices, they have to treat the water on-site.

14 As a second point that Ms. James will talk about in
15 more detail, we want to bring up the fact that while all
16 this will apply to new development and redevelopment
17 projects, and absolutely should, under the Clean Water Act's
18 MEP Standard, that's not going to be enough to address the
19 region's water problems. And we really need to start
20 getting at the existing built environment, not just the new
21 development projects or the redevelopment projects.

22 And we would strongly encourage the Board to
23 include a retrofit provision, or some sort of retrofit
24 program within the new permit.

25 There are plenty of opportunities to implement

1 retrofit projects that will result in retention, whether it
2 is redevelopment of streets, to create green streets,
3 parking lots, other public buildings.

4 There's a lot of opportunity to retrofit the
5 existing environment, and start getting at the root of the
6 problem that's causing this. And under M.E.P., where the
7 Clean Water Act requires that this program reduce pollutants
8 in storm water runoff to the maximum percent practicable,
9 retrofits should be incorporated under that.

10 It's not just the new development that's a problem,
11 and I'll let Ms. James speak in more detail as to the
12 retrofit issue.

13 MS. JAMES: Retrofit of existing development with storm
14 water treatment controls, including low impact development,
15 is necessary to address storm water discharges from existing
16 development that cause or contribute to water quality
17 standards exceedances. And the good news here is that there
18 have been a lot of work done in this area.

19 A lot of your fellow regional boards have put
20 forward permits that start to include these retrofit
21 concepts. I just got back from a conference in Washington,
22 D.C., where that city was talking about all that they've
23 done in the retrofit arena. So there is a lot that we can
24 build on, because we really need to go from just looking at
25 new and redevelopment, to the entire watershed, and what we

1 can do in the entire built environment.

2 So just to get into some of the specifics that we
3 would really like to see in the draft permit is, first of
4 all, at a minimum, this should reply -- all these
5 requirements should apply to water bodies listed as impaired
6 by one or more pollutants on the 303-D list. This is really
7 critical to get these impaired water bodies off that 303-D
8 list, and meeting water quality standards attainment.

9 The Regional Board should specify a volume of storm
10 that should be treated through these retrofit requirements,
11 and then as far as the process goes, we believe that the
12 permittees should start to identify and inventory existing
13 areas of development, you know, whether it's municipal,
14 industrial, commercial, residential, that are good
15 candidates for retrofitting.

16 So, you know, take an inventory of their local
17 area, and see what might be a possible upcoming project, and
18 then to take that list and evaluate it, and prioritize and
19 rank those projects, so that we can really start the ball
20 going on these retrofit projects.

21 And we also encourage that the permittees
22 prioritize on-site retention in these retrofit projects,
23 over the more traditional treat and release, for the
24 benefits that Noah stated earlier.

25 As I said, retrofit has moved forward in other

1 parts of the nation. We really need to do this in L.A., and
2 be a leader on this issue. And frankly, that's how we're
3 going to get to water quality standards attainment. So we
4 encourage Board and Staff to push forward retrofit
5 requirements. Thank you.

6 MS. MALONEY: Hi. Good afternoon. My name is Heather
7 Maloney, and I'm with the City of Monrovia, and also the
8 Chair of the L.A. Permit Group. And I'll be presenting with
9 Joe Bellamo, who is the Chair of our Reporting and Core
10 Program Sub Group. The L.A. Permit Group is a collaborative
11 effort developed to negotiate the Los Angeles County MS-4
12 NPDES permit.

13 Over 60 Los Angeles County municipalities are
14 actively participating in the effort to develop and provide
15 comments and recommendations throughout the MS-4 NPDES
16 permit processes. The current voting agencies are listed
17 above, we currently have 60 that are listed on the slide --
18 or 61, excuse me.

19 In order to reach consensus with this group,
20 comments and recommendations are developed by each of the
21 L.A. permit groups, four technical subcommittees. We have
22 development programs, reporting and core programs,
23 monitoring and TMDL subcommittees, which are then approved
24 the -- the talking points are then approved by the L.A.
25 Permit Group as a whole, and the consensus is represented by

1 the negotiations committee.

2 I'm going to turn the discussion over to Joe, who
3 is going to talk to the Minimum Control Measures.

4 MR. BELLAMO: Good afternoon. I would just like to
5 start off with the Minimum Control Measures, and the
6 comments that the group has compiled with the development
7 programs.

8 Some general comments that the group has regarding
9 the development programs, and this would be the development
10 construction, and development planning.

11 The programs, you know, the goal of it would be
12 based on improving water quality, not to dictate specific
13 control strategies. The development program should be
14 tailored to the need characteristics of Los Angeles County.

15 The development programs should be based on a
16 designed storm, it sounds like from Ivar's presentation,
17 that that is the goal, that's the direction it will be
18 going. And so it was encouraging to hear that.

19 Municipalities should be allowed to prioritize
20 B.M.P.s based on its unique characteristics, and TMDL's for
21 their watersheds.

22 For the construction programs in this, our review
23 was based upon the prior release of the minimum control
24 measures, and it seemed to be applicable. There didn't seem
25 to be any differentiating between a small construction site

1 and a large construction site. So we'd like to, you know,
2 keep the -- the difference between a large denuded hillside,
3 versus a backyard patio in mind, as we're going through
4 these couple of requirements, as we are seeing these things,
5 as we went through the prior release of the information.

6 So there's the electronic tracking, and
7 inventorying of creating encroachment, demolition, building
8 and construction permits, and the other requirement prior to
9 issuance of a grading permit, that the erosion and sediment
10 control plan be approved.

11 Our suggestion is that the -- that there be an
12 establishment of a reasonable threshold. As the -- as is
13 currently proposed, it's an excessive number of projects and
14 parameters to keep track of and manage.

15 To give you an idea, Los Angeles City has about
16 40,000 building permits that is not -- in addition to the --
17 the grading and encroachment permits, that we added to that
18 number.

19 The erosion and sediment control plan seems to
20 mirror what the requirements of the SWPP, as dictated by the
21 State's general construction permit, such as risk-based
22 B.M.P.'s and the range of inaction plans, which is unique to
23 a Risk II and Risk III project under the State's general
24 construction permit.

25 The group would like to recommend support for that

1 one acre lower threshold, as provided by the State's general
2 construction permit, as it was never intended for smaller
3 construction sites.

4 To give you an idea, the cost of a SWPP, in
5 general, is about \$20,000 dollars for an average project,
6 that's required to, under the State's general construction
7 permit.

8 And that current -- to keep the projects that are
9 less than an acre, their SWPP requirements for those
10 projects basic, as they currently are in the permit.

11 The requirement for the permittees to inspect
12 construction, all phases of construction projects, that
13 would include the prior land disturbance, grading and land
14 development, streets, utilities, road construction, and
15 final landscape, the requirement is overtly burdensome; and
16 they serve no benefit.

17 The only reasonable inspection would be during the
18 grading phase, and then upon completion of the project,
19 there's always a process where we have an inspector going
20 out and verifying certain things that are done.

21 And then our current permit requires that we do
22 rain inspections, you know, as part of the -- our program.

23 So looking at the planning and land development
24 programs, the group is recommending several things here.

25 That the requirements should be clearly based on

1 water quality benefits. It sometimes is not clear that they
2 are when you read through the minimum control measures. A
3 reduction of the 1.5 times volume for water that's used in
4 bio-filtration off-site, on-site or off-site, be reduced to
5 one. It's punitive, the way it's currently proposed, and as
6 the prior speakers were suggesting.

7 The self-inspection of post-B.M.P.'s be done by
8 parcel owners, and that the agencies function as an auditor
9 in the program, collecting information from those property
10 owners, when, you know, on a random basis or as needed;
11 again, to perform an audit as needed.

12 The retainage be based on soil characteristics of
13 the site. Roadway construction, as is currently proposed in
14 the Ventura Permit, has a lower threshold where we don't
15 feel it's appropriate for Los Angeles and the built-out
16 environment.

17 A lot of our streets are being retrofitted through
18 other means, and other requirements.

19 The hydro-modification, you know, Ivar had some
20 more information on that in his presentation. So I think
21 that this bullet point is not relevant right now.

22 In the minimum control measures, and the general
23 comments, we're asking that you provide the requirement and
24 allow the permittees the flexibility to implement. Two
25 examples of this: Maintaining a watershed and

1 jurisdiction-based map in G.I.S.; and we're asking that you
2 allow the permittees the flexibility to determine the format
3 and how it's done.

4 The installation of trash excluding devices on all
5 catch basins or outfalls of the MS-4. This is contrary to
6 what's provided for in the language under the trash TMDL's,
7 at least in the Malibu Creek Watershed.

8 We ask that you provide the time necessary to
9 comply with the requirements; some of these requirements
10 affect agencies' budgeting processes, contracting
11 agreements, and stakeholder involvements.

12 Clear -- provide clear definition of key terms such
13 as MS-4, where does that end, where does that start,
14 especially when you're in the Malibu Creek Watershed, and
15 you have a receiving water body followed by an MS-4.

16 And lastly, the cost to comply is a key point.
17 Thank you.

18 MR. UNGER: Theresa, just to be clear, we have two
19 speaker cards on this item, and then we're going to move on
20 to the next item, for everyone's -- and these are the two.
21 We have another one on another topic.

22 UNIDENTIFIED SPEAKER: (Inaudible).

23 MR. UNGER: Got it? Thank you.

24 MS. ELKINS: Good afternoon. My name is Patricia
25 Elkins. I'm the storm water -- sorry. Storm Water Programs

1 Manager -- it's a real long title -- for the City of Carson.

2 If you haven't seen it on T.V. already, please go
3 to the [www.tobaccofreecalifornia -- CA.com](http://www.tobaccofreecalifornia.ca.com), and watch the
4 T.V. ad titled, "Thrown Away."

5 The ad shows a cigarette butt that is dropped into
6 the street, rolls into the catch basin, floats to the storm
7 drain system, and ends up in the ocean, where it is washed up
8 onto the beach, and sniffed out by a dog.

9 During the ad, the narrator says, "Cigarettes are
10 not just dangerous when they're smoked, they're dangerous
11 long after. Cigarette butts are toxic. They release
12 chemicals that poison our water and harm wildlife. And
13 millions are polluting our environment."

14 This is a powerful message. The website and the
15 ads are the product of the California Department of Public
16 Health. I am working with their media specialist to allow
17 this particular ad to be used on cities' website and cable
18 channels, at a minimum. I'm very excited to report that
19 their response has been very positive.

20 Why do I bring this up? It's costly to do public
21 information participation programs, and I believe that
22 coordinating public education efforts like these in economic
23 times is paramount.

24 I'm here to comment on two, in particular,
25 requirements, of the Draft Minimum Requirements.

1 One of the requirements is that the cities train
2 contractors. As a former construction manager, I can attest
3 to the fact that cities do take this seriously, and do
4 address storm water issues with contractors, most often in
5 the capital improvement program project pre-construction
6 meetings.

7 But it is my opinion that the Contractor's State
8 License Board should be responsible for administering the
9 training of contractors.

10 A volunteer committee, headed by the Regional
11 Board, could prepare the materials, and all contractors,
12 regardless of their license type, general or specialty,
13 would be required to have at least one individual in their
14 company trained.

15 The training materials could be made available
16 online, and the test could be administered online. A
17 minimal fee could be charged to offset the administration.

18 I'm a licensed contractor, and I would not object
19 to paying the fee. But then again, I am a little bit
20 biased.

21 The second minimum control measure I am concerned
22 about is the dry weather observation of storm drain outfalls
23 36 inches or greater. This requirement needs to provide for
24 significant flexibility.

25 The number of outfalls varies by cities. Carson

1 has 83 outfalls, greater than 36 inches to the Dominguez
2 Channel Estuary alone. That doesn't count the Torrance
3 Lateral. I'm looking forward to working out a reasonable
4 cost efficient method of achieving this goal. Thank you.

5 UNIDENTIFIED SPEAKER: Okay. So at this point in the
6 workshop, we're going to go ahead and turn our attention to
7 the next topic that was noticed, which was the water quality
8 based effluent limitations.

9 And I want to apologize to everybody right now.
10 Unfortunately, I don't have a Power Point to put up on the
11 screen. Apparently, my flash drive is corrupted, and that's
12 the only place that it exists. So some of you probably got
13 copies of the presentation.

14 If not, we'll make sure to post the presentation on
15 the website after the workshop. So share with your
16 neighbor, and we'll get a copy up afterwards.

17 And we actually do have more copies coming. So you
18 might be able to take one with you before you leave today.

19 So thanks for your patience, and I apologize for
20 that, again. So like I said, what I wanted to do today is
21 talk about water quality-based effluent limitations.

22 We often refer to these as WQ BELS or Q BELS, and
23 they are a permitting construct that's designed to achieve
24 water quality standards. And effluent limitation,
25 generally, is defined in federal regulations as any

1 restriction that's imposed on the quantities, discharge
2 rates, and concentrations of pollutants, which are
3 discharged from point sources into waters of the United
4 States.

5 In the world of permitting, typically we have two
6 kinds of effluent limitations. We have technology-based
7 effluent limitations, which we refer to as T BELS, and then
8 we have the water quality-based effluent limitations that we
9 refer to as WQ BELS.

10 While both of these are the restrictions on the
11 quantity of a pollutant discharge, the basis for each one is
12 very different. A WQ BEL is an effluent limitation for a
13 pollutant that's calculated from the water quality standard,
14 itself; while a T BEL is an effluent limitation for a
15 pollutant that's based on the capability of a treatment
16 method to reduce a pollutant to a certain level.

17 And I'm going on to the next slide, for those of
18 you who do have a copy of the presentation.

19 The implementing regulations for the Clean Water
20 Act state that each NPDES permit shall include any
21 requirements in addition to, or more stringent than the
22 promulgated effluent limitation guidelines, which are
23 basically, the technology-based standards, as necessary to
24 achieve water quality standards.

25 And the other thing that I wanted to point out,

1 here is: In its 1990 rulemaking -- and that was the
2 rulemaking regarding the permitting of municipal storm water
3 discharges, E.P.A. stated that permits for discharges from
4 MS-4's specifically must require controls to reduce the
5 discharge of pollutant to the maximum extent possible, and
6 for necessary water quality-based controls.

7 Federal regulations also state that WQ BELS must be
8 consistent with the assumptions and requirements of
9 available waste load allocations that are established in
10 TMDL's.

11 So the next thing I wanted to touch on is when our
12 WQ BELS needed NPDES permits, and specifically, in MS-4
13 permits, like we're talking about today.

14 And I wanted to start out by saying that the
15 ultimate goal for all permits is to ensure that discharges
16 do not cause or contribute to exceedances of water quality
17 standards.

18 So permit requirements are developed with this goal
19 front and center. Generally, in the NPDES permitting
20 program, WQ BELS are required for discharges that have the
21 reasonable potential to cause or contribute to an exceedance
22 of water quality standards, and where technology-based
23 effluent limitations are not sufficient to achieve those
24 water quality standards quality based standards. And
25 federal regulations are clear that both of these types of

1 effluent limitations can be required in permits, both the T
2 BELS as well as the WQ BELS.

3 T BELS are typically the first step in controlling
4 pollutants and discharges, followed then, were necessary by
5 the water quality-based effluent limitations.

6 So using this framework, like I said, in its 1990
7 rulemaking regarding regulation of municipal storm water
8 discharges, E.P.A. indicated then in addition to controls to
9 reduce the discharge of pollutants in storm water to the
10 maximum extent practicable, which is basically a form of a
11 technology-based control, that water quality-based controls
12 may also be necessary in permits regulating municipal storm
13 water discharges, in order to achieve water quality

14 standards.

15 And recently, E.P.A. has stated that it does
16 recommend the use of WQ BELS to meet water quality standards
17 in MS-4 permits. E.P.A. recognizes that these water
18 quality-based effluent limitations will clarify permits,
19 permit requirements, and will also improve accountability in
20 the storm water program.

21 Now, when it comes to TMDL waste allocations, the
22 point that I want to make here is that where there is a
23 discharge that has been assigned a waste load allocation in
24 a TMDL, it's concluded that the discharge does have a
25 reasonable potential to cause or contribute to an exceedence

1 of a water quality standard.

2 Therefore, in that case, a water quality-based
3 effluent limitation must be developed for those discharges
4 that are assigned to waste load allocations in TMDL's.

5 And basically, the water quality-based effluent
6 limitation is a mechanism to implement the TMDL waste load
7 allocation in the permit.

8 So next, I want to turn to what is the basis then,
9 for these water quality-based effluent limitations, or WQ
10 BELS.

11 By definition, like I've said, a WQ BEL must be set
12 at a level necessary to achieve water quality standards and
13 any available waste load allocation in an established TMDL.

14 And I want to note here, that what the relationship
15 between a WQ BEL and a waste load allocation is, just to be
16 clear. Both are restrictions on the amount of a pollutant
17 that can be discharged, that are necessary to achieve water
18 quality standards.

19 A waste load allocation is basically the numeric
20 restriction on, that's placed in the TMDL, which is
21 typically incorporated into our water quality control plan
22 or basin plan; whereas the WQ BEL is the translation of that
23 waste load allocation into a numeric effluent limitation
24 that's put into a specific permit.

25 And often this is mainly a matter of semantics in

1 that waste load allocation is the term we use to describe
2 the restriction in the TMDL; and then the WQ BEL is the term
3 that we use in the permitting -- permitting realm.

4 The next thing that I want to do is I want to just
5 give you an example by talking about how the L.A. Water
6 Board has expressed water quality-based effluent limitations
7 in MS-4 permits within this region.

8 And I want to give you two examples of this. And
9 one, you've heard me talk about a number of times before, as
10 we've been developing this permit, and that's the L.A. River
11 Trash TMDL.

12 And for L.A. River Trash TMDL, when the provisions
13 for that TMDL were incorporated into the L.A. MS-4 permit,
14 we incorporated the waste load allocation as water
15 quality-based effluent limitation; and those were expressed
16 numerically, and were essentially equivalent to, in the
17 TMDL, what we call the compliance points, which is
18 essentially a three-year rolling average of the waste load
19 allocation.

20 So they're expressed as numeric water quality-based
21 effluent limitations. However, we also allowed within the
22 permit, for a jurisdiction or a permittee, to basically
23 document the percent of jurisdictional area covered by a
24 full capture device.

25 And as part of the TMDL process, the full capture

1 device was identified as a single B.M.P., that could,
2 essentially, achieve the goal of the TMDL.

3 And so in that case, basically, there's an option
4 to express -- and it has been expressed in the L.A. MS-4
5 permit -- as in a way, a quantitative surrogate parameter,
6 meaning, the percent of a jurisdiction area that's addressed
7 by a full capture system.

8 So that's one example. The other example that I
9 want to give you is the incorporation of TMDL provisions
10 into the Ventura County MS-4 permit, most recently in 2009
11 and 2010.

12 And in that case, we simply took the numeric waste
13 load allocations, and put them directly into the Ventura
14 MS-4 Permit as numeric limitation in the permit.

15 And so, those are two examples of how we've
16 incorporated these water quality or waste load allocations
17 as water quality-based effluent limitations in permits in
18 the L.A. Region.

19 The next thing that I want to briefly touch on is
20 what is the proposed scope of water quality-based effluent
21 limitations in the proposed L.A. County MS-4 Permit that we
22 are working on right now.

23 And for the upcoming permit, what we're
24 anticipating right now is including water quality-based
25 effluent limitations, where there are interim and final

1 waste load allocations that have been assigned to storm
2 water and non-storm water discharges from the MS-4 and
3 established TMDL's.

4 And at this point, those are the only waste load --
5 or water quality-based effluent limitations that we're
6 anticipating including in this permit, this next permit term
7 that we're working on.

8 The next thing that I want to talk about is the
9 relationship between water quality-based effluent
10 limitations and B.M.P., or Best Management Practices.

11 And I wish I had the slide for you guys to look at
12 at this point, but I know some of you do have a handout, and
13 on the handout there's basically a definition of what an
14 effluent limitation is, and what a best management practice
15 is.

16 According to federal regulations, both may be
17 requirements in an MS-4 permit. And as I stated at the
18 beginning, a water quality-based effluent limitation is a
19 restriction on the quantity of a pollutants that can be
20 discharged, that's necessary to achieve water quality
21 standards.

22 B.M.P.'s or Best Management Practices, on the other
23 hand, are management practices that are designed to prevent
24 or reduce pollution; and these might include structural
25 treatment devices, diversion facilities, activities, O&M

1 procedures, and prohibitions on certain types of practices.
2 And these two concepts work together in MS-4 permits; but
3 they're fundamentally different concepts.

4 The effluent limitation, again, is the restriction
5 that's placed on the amount of the pollutant that may be
6 discharged; where the B.M.P. is the structural device or the
7 action that is taken to actually achieve that effluent
8 limitation.

9 And there has been some discussion during the
10 permit development process by some, that we incorporate a
11 B.M.P.-based water quality-based effluent limitation, or WQ
12 BEL's in the MS-4 permit.

13 However, this is really conflating these two
14 different concepts.

15 So what I want to go to next -- and actually,
16 lastly, as part of this presentation, is how can then MS-4
17 permittees demonstrate compliance with these water
18 quality-based effluent limitations?

19 So I've talked about this in some of the previous
20 workshops that we've had during the development process, and
21 what we're proposing is basically a dual path approach to
22 demonstrating compliance.

23 And what we're anticipating is that we'll be
24 including two different things in the permit. We'll be
25 including the numeric water quality-based effluent

1 limitations, as I've just described, but we'll also be
2 including the possibility of developing what we're calling a
3 reasonable assurance program, that would basically outline a
4 set of structural and non-structural actions that will be
5 taken, and will demonstrate that those actions have a
6 reasonable assurance of achieving the numeric water
7 quality-based effluent limitations.

8 And compliance then can be demonstrated through
9 that reasonable assurance program, and that there will be a
10 process by which there will be a proposal by either a
11 permittee individually or ideally, collectively, on a
12 watershed basis, to propose a set of B.M.P.'s and actions to
13 the Regional Board, and then, that will be reviewed and
14 ultimately approved by the Executive Officer as a program
15 that can be implemented.

16 And during the TMDL implementation period, then
17 following that plan can be the mechanism for demonstrating
18 compliance with the numeric water quality-based effluent
19 limitations.

20 And with that, I want to end my presentation and
21 turn it over to the speakers that we have on this topic.

22 Theresa?

23 MR. GARRISON: Good afternoon. Noah Garrison, with the
24 Natural Resources Defense Council again.

25 I very briefly want to state that, reiterating the

1 Board's point, under federal regulations, NPDES permits must
2 contain effluent limits that are consistent with the
3 assumptions and requirements of available waste load
4 allocations, and the simplest and most straightforward thing
5 to do is simply to incorporate the waste load allocation,
6 the numeric waste load allocation into the permit.

7 And we absolutely support that approach, and it's
8 what E.P.A. in fact recommends. With regard to the Board's
9 proposal on potential B.M.P. programs or Reasonable
10 Assurance Programs, I do want to reiterate also, that time
11 and time again, over 20 years of permit implementation, that
12 we've seen in Los Angeles, we have found that B.M.P.
13 programs simply do not result in appreciable improvements in
14 water quality.

15 We find these programs tend to be difficult to
16 enforce, not to result in appreciable water quality
17 improvements, and ultimately, not to be the best route to
18 take, particularly to TMDL's. And I think Ms. James will
19 speak in greater detail about that.

20 Thank you.

21 MS. JONES: Kirsten James, Water Quality Director with
22 Heal the Bay.

23 Just to jump off on Noah's point about the proposed
24 reasonable assurance program and compliance demonstration
25 through that mechanism.

1 One thing I've mentioned to Staff before, is the
2 extreme resource burden of this.

3 So not only do we have to call into extreme
4 question that a B.M.P. program would actually get us to
5 water quality standards at the end of the day, but also,
6 this is a huge resource issue for Staff.

7 So what we did back at Heal the Bay, is we went
8 back through all the TMDL's for the L.A. Region, and looked
9 at how many responsible parties were included for each TMDL
10 in the MS-4. And we came to a number of over 300.

11 So what does that mean?

12 Well, that means, potentially, your Staff could be
13 getting 300 individual reasonable assurance plans, that they
14 need to evaluate in extreme detail, to make sure all the
15 complicated models, all the complicated B.M.P. programs are
16 actually going to help lead us to where we want to be.

17 That is an extreme burden on your staff, and also
18 along the way, out there inspecting to make sure they're
19 actually implementing this.

20 So is Staff really going to be able to do all of
21 these complicated reviews, and extremely technical reviews,
22 not only stakeholders like Heal the Bay, and N.R.D.C., that
23 would like to be involved in that, as well.

24 That is an extreme burden on staff that I don't
25 think they realize they're getting themselves into.

1 And furthermore, at the end of the day, we need to
2 make sure that beneficial uses are being met.

3 And so that is our goal at the end of the day.
4 That needs to be what we see as final compliance points.
5 These water quality standards that have been turned into
6 waste load allocations and put in these TMDL's, are the way
7 we're going to get to beneficial uses attainment; and so
8 that's what we need to remember at the end of the day.

9 The reasonable assurance plans, we don't have
10 confidence that Staff can adequately review them, or that
11 any plan can really get us to where we need to be. Thank
12 you.

13 UNIDENTIFIED SPEAKER: We put them all in together,
14 flipping through the slides. I'm sorry? (Inaudible).

15 UNIDENTIFIED SPEAKER: Well, thank you for letting us
16 speak on this topic. I first want to very quickly address
17 the prior group's comments that B.M.P.'s have been shown not
18 to be effective.

19 Those B.M.P.'s, one example of an effective B.M.P.
20 is some low flow diversions that have been installed, and
21 those are the very things -- B.M.P.'s structural and
22 non-structural, regardless of the R.A.P., will be
23 implementing. So they are effective, and that's really the
24 only tool that we have to meeting water quality standards.

25 So we are supportive of that, of a B.M.P. approach,

1 because that is exactly where we need to go to meet water
2 quality standards.

3 So rather than the approach proposed by Staff, the
4 L.A. Permit Group supports the use of water quality-based
5 effluent limitations, expressed as B.M.P.'s, that allow the
6 implementation of best management practices, to be utilized
7 as a method of compliance for meeting TMDL waste load
8 allocations.

9 We feel it is critical that municipalities be
10 allowed to comply with both interim and final waste load
11 allocations, through the implementation of B.M.P.'s. We
12 don't feel that the final TMDL waste load allocations are
13 required to be put as numeric WQ BELS, as stated by Staff.

14 There are several examples of other California storm
15 water permits. Language in the federal regulations, and
16 E.P.A. guidance that demonstrate B.M.P.-based WQ BELS, can
17 and should be utilized for incorporating both interim and
18 final waste load allocations.

19 We are concerned that the definition of numeric WQ
20 BELS, as proposed by Staff, would put permittees out of
21 compliance with the permit from day one, and would not
22 recognize the significant efforts that have been implemented
23 to date, to comply with the TMDL's.

24 Using numeric WQ BELS would mean that an agency
25 that has implemented all the actions outlined in an

1 Executive Officer-approved plan, but for some reason, is
2 still seeing exceedances of the numeric values of the waste
3 load allocations, would be held in violation regardless of
4 the steps being taken to find a solution and/or implement
5 those additional B.M.P.'s.

6 One example of this is the work that's been done on
7 the Santa Monica Beach Bacteria TMDL.

8 The city's recognized that there were some issues,
9 and reported that in their compliance report, and laid out
10 the specific strategies to work towards compliance. And
11 that still hasn't received a response from the Regional
12 Board. But they continue to work towards compliance and
13 water quality.

14 We, therefore, request that the Regional Water
15 Quality Control Board Staff, use B.M.P. based WQ BELS,
16 rather than numeric WQ BELS, as defined by Staff, for both
17 interim and final waste load allocations.

18 Thank you for your time.

19 MR. TAHIR: Good afternoon, Board Members. My name is
20 Ray Tahir. I'm a consultant with Techs Environmental, and
21 today I represent the cities that are mentioned on the
22 screen there.

23 And I'll be talking about this very arcane subject
24 of WQ BELS; and I hope that I can demystify some of the
25 issues that surround the usage of this term.

1 There are, as you just heard, concerns with WQ
2 BELS; but as you know, WQ BEL is a federal storm water
3 requirement that translates a water quality standard, and
4 this includes TMDL waste load allocations, into B.M.P.'s or
5 other actions to achieve compliance. B.M.P.'s operate to
6 reduce or eliminate pollutants and storm water discharges to
7 the maximum step practicable.

8 B.M.P.'s do this by preventing storm water contact
9 with pollutants, or if not possible, by treating or
10 preventing run-off before it enters the MS-4.

11 The MS-4 is, in effect, the municipal storm drain
12 system, that consists of streets catch basins and storm
13 drains.

14 As an example, a trash B.M.P. This is
15 debris-excluded screen located in Gardena. This is an
16 infiltration control at a parking lot, and this type of
17 design is typically used for new developments that are
18 subject to the current permits, standard Urban Storm Water
19 Mitigation Plan requirement.

20 This particular device infiltrates run-off, treats
21 it, you know, if there's any overflow, the overflowing will
22 go into the MS-4; but it will have been treated by that
23 time.

24 I should point out that there has been an absence
25 of WQ BELS in previously-adopted TMDL's, and under the

1 current permit, which has been reopened twice, there has
2 been no reference to WQ BELS in either of those documents.

3 The Santa Monica Bay Beach's dry weather TMDL,
4 which was incorporated in the current permit in 2007,
5 contained a bacteria waste load allocation. It had to be
6 met no matter what.

7 There were no WQ BELS. It did not allow for WQ
8 BELS to translate this waste load allocation to B.M.P.'s,
9 even though U.S. E.P.A.'s 2002 Guidance Memorandum required
10 WQ BELS for TMDL waste load allocations.

11 And affected permittees, and I mentioned that there
12 were 22 of them, thought that by implementing B.M.P.'s, they
13 would be in compliance.

14 And some permittees spent millions of dollars in
15 diverting non-storm water run-off away from the beaches to
16 the sewer systems; but they were still found in violation;
17 again, because there was no WQ BEL.

18 Fortunately, two court decisions invalidated the
19 enforcement actions.

20 These reports Staff proposes, apply numeric WQ BELS
21 to all the TMDL's to be placed in the next MS-4 permit.
22 There's a problem, though. The Regional Board, as Renee
23 just mentioned, interprets numeric WQ BELS to meet absolute
24 compliance with TMDL waste load allocations, which are
25 numeric, by any B.M.P. means necessary.

1 Permittees must meet the 32 numeric waste load
2 allocations associated with the TMDL's, or be out of
3 compliance. Noncompliance would require enforcement action
4 or exposure to third party litigation.

5 From this, one of the N.G.O.'s here, which is
6 Natural Resources Defense Council, which has already done
7 that.

8 Cities are concerned about the Regional Board Staff
9 application of WQ BELS, because it's not certain if the
10 Regional Board can at this time legally compel compliance
11 with numeric limits.

12 We do know that a Blue Ribbon Panel convened by the
13 the State Water Resources Control Board, concluded that
14 numeric limits are not feasible at this time.

15 And recently, a Sacramento Superior Court ruled
16 that numeric limits in the general construction storm water
17 activity permit are impermissible.

18 The U.S. E.P.A. issued a Guidance Memorandum last
19 year, clarifying its November 2010 Memorandum on WQ BELS, by
20 saying a key issue addressed in the 2002 memo is the
21 feasibility of including numeric effluent limitations in
22 NPDES permits for storm water discharges.

23 Some stakeholders are concerned that the 2002 memo
24 can be read as advising NPDES permittee authorities --
25 that's the Regional Board to impose end of pipe outfall

1 limitations on each fallout on MS-4.

2 In general, though, E.P.A. does not anticipate that
3 end of pipe effluent limitations on each outfall will be
4 used frequently.

5 But numeric limits are infeasible because of costs.

6 For example, according to the Regional Board's own
7 data, the cost of complying with the L.A. River Bacteria
8 TMDL, is estimated to be \$5.4 billion dollars over a 22-year
9 period. The City of Bradbury's annual cost would be
10 \$1.2 million a year. Its annual budget is only \$800,000 a
11 year.

12 The City of Cudahy is one of the poorest cities in
13 the county. Its cost will be \$1.4 million per year. That
14 is seven percent of its total operating budget. This raises
15 serious environmental justice issues.

16 The bacteria TMDL is just one TMDL. There are 31
17 others that are going to be incorporated into the next MS-4
18 permit.

19 The Regional Board, unfortunately, has not
20 effectively addressed these costs, and how cities are
21 expected to meet them. Here's an example: A cost breakdown
22 for the cost impact of the L.A. River Bacteria TMDL on each
23 of the 40 cities of the L.A. River.

24 I should mention one thing about the City of
25 Cudahy. The purpose of the L.A. River Bacteria TMDL is to

1 protect recreational uses; the City of Cudahy doesn't have a
2 swimming pool. The closest thing that it has to aquatic
3 recreation is a lawn sprinkler at a park next to City Hall.

4 Numeric limits are infeasible, also because there
5 is no outfall data showing that an MS-4 permittee has not
6 met the TMDL waste load allocation.

7 That is to say that there's no data that shows that
8 any particular municipality has cause to contribute to an
9 exceedance of a water quality standard.

10 Although federal regulation requires storm water
11 monitoring at the outfall for compliance, the Regional Board
12 has never required outfall monitoring. The Regional Board
13 Staff has relied on receiving water monitoring to determine
14 compliance.

15 Now, ladies and gentlemen, this is an outfall or
16 end of pipe, to give you an example here. This is where the
17 compliance point should be, at the outfall. In the
18 discharge from the outfall, not the discharge in the
19 receiving water.

20 The receiving water TMDL waste load allocation is a
21 target to shoot for through B.M.P.'s. It is not where
22 compliance is to be determined.

23 Numeric limits are also infeasible because the TMDL
24 waste load allocations are based on improper receiving water
25 monitoring methodology.

1 The waste load allocations that were set were based
2 on monitoring data provided by L.A. County Mass Emissions
3 Stations, for the most part.

4 But when the monitoring was conducted, when the
5 samples were conducted, they were conducted at the time it
6 was raining. That's the worst time to do a sample. SWPPP
7 policy requires monitoring to be done between 40 and
8 72 hours after a storm event. So what we're dealing with
9 here, are unjustifiably stringent waste load allocations.

10 So what's the difference between ambient monitoring
11 and non-ambient monitoring?

12 Again, monitoring conducted in a storm event is
13 when a water body is at its worst, resulting in a more
14 stringent standard. Because when it rains, you have all
15 that junk being presented to receding water at once.

16 When you take the sample, you're going to get high
17 reads of pollutants. It's like going in for a physical when
18 you have the flu, and then having your temperature taken.
19 Well, you're going to be sick. That's the worst time to
20 take a physical.

21 Same thing with the issue of ambient monitoring.
22 We want to do monitoring when things have settled down.
23 That hasn't happened. Ambient monitoring provides a more
24 accurate characterization of a healthy receiving water,
25 because it was done when things have calmed down.

1 The Regional Board SWPPP Unit knows this.

2 Okay. Now what? How do permittees comply with the
3 32 TMDL's that will be placed in the next MS-4 permit?

4 Reopen those TMDL's that set the compliance point in the
5 receiving water, and change it to the outfall, unless the
6 permittees can show compliance in the receiving water, or
7 that there is no exceedance there, or if there's no
8 discharges there. Eliminate the compliance schedules in the
9 TMDL.

10 There are schedules in the TMDL that would -- some
11 TMDL's that would, once the TMDL's are incorporated in the
12 permit, cities will be out of compliance with that TMDL.

13 Get rid of them. Conduct SWPPP monitoring in the
14 receiving waters, as the Regional Board has already done to
15 some extent, for L.A. Basin water bodies, to reset waste
16 water load allocations, so we have an accurate target to
17 shoot for, not something that is unreasonable and impossible
18 to meet.

19 Allow compliance with pending TMDL's to revise
20 B.M.P.'s now implemented to the current MS-4 permit, and
21 will be modified and carried over to the next MS-4 permit.

22 The proposed enhanced B.M.P.'s would be implemented
23 in the core programs as they are now, through a Storm Water
24 Quality Management Plan, instead of a reasonable assurance
25 plan proposed by Regional Board Staff.

1 The B.M.P.'s would, for example, focus on public
2 education, outreach on TMDLs; adjusting industrial
3 commercial inspections to identify and control pollutants
4 used, stored, or handled at such facilities.

5 Implement low impact development strategies to
6 retain more run-off onsite; conduct more or modified street
7 sweeping through the public agencies program.

8 More importantly, conduct outfall monitoring over
9 the five-year term of the permit, which could be considered
10 a B.M.P., to characterize each permittee's MS-4 for TMDL
11 pollutants, and to evaluate B.M.P.'s performance vis-à-vis,
12 TMDL waste load allocations. That's very important.

13 We really do not know to what extent any permittee
14 that is causing or contributing to an exceedance of any
15 water quality standard or waste load allocation for a TMDL.
16 The data just is not there.

17 In the fifth year of the permit, which would be
18 assuming that it's adopted this year, in 2017, we would
19 propose in the next MS-4 permit application, which is known
20 as the Report of Waste Discharge, which is the application
21 that is due 180 days prior to the expiration of an MS-4
22 permit, to provide or propose additional or more intensified
23 B.M.P.'s on outfall monitoring -- based on outfall
24 monitoring data.

25 And then determine if the TMDL's are to be

1 continued or to be delisted.

2 And then, recommend a ramped up B.M.P.'s, if
3 necessary, and this would be part of the adaptive management
4 (Inaudible) process, the trial and error process.

5 The approach may not be perfect, but it certainly
6 is sane, under these circumstances.

7 And that's all I have. Thank you very much for
8 your patience and indulgence.

9 UNIDENTIFIED SPEAKER: Okay. I think that's all the
10 speakers that we had on the water quality-based effluent
11 limitation.

12 So at this point, we are going to turn our
13 attention to the monitoring program element part of the
14 workshop.

15 And if you could just give me a minute, here.
16 Okay. So I'm going to go ahead and get started on the
17 monitoring program requirements that we're currently
18 considered for the upcoming L.A. MS-4 Permit.

19 Many of you may have been at the workshop that we
20 had on January the 23rd, in which we did talk about
21 monitoring program requirements for the upcoming L.A. MS-4
22 Permit.

23 So for this presentation, what I'm going to focus
24 on is the objectives overarching and more specific
25 objectives for the monitoring program requirements in the

1 permit.

2 I am also going to provide sort of a refresher for
3 what some of those key monitoring program elements are that
4 we're currently contemplating for the permit; and I will
5 talk about some of the significant issues that were raised,
6 both at the January 23rd workshop, as well as that we've
7 heard since that time, from permittees and stakeholders
8 regarding some of the proposed monitoring requirements.

9 And then I'll talk about the next steps that we're
10 taking, in consideration of some of these issues that have
11 been raised.

12 So for the monitoring program requirements, we have
13 several objectives, generally, for the monitoring program.

14 And one of the comments that was made by permittees
15 at the January 23rd workshop was the importance of very
16 clearly identifying the objectives of the monitoring program
17 up front, and using these objectives to guide the
18 development of the monitoring program requirements that are
19 to be included in the permit.

20 And we identified several overarching objectives
21 for the monitoring program; and these are, specifically,
22 first of all, to assess the chemical, physical, and
23 biological impacts of MS-4 discharges on receiving waters.
24 And there are two aspects to this first objective.

25 The first is assessing the impacts of storm water

1 discharges from the MS-4 on receiving waters; and the second
2 is identifying non-storm water discharges that may be a
3 source of pollutants to receiving waters.

4 The second objective relates to determining
5 compliance with TMDL provisions; and specifically, as we
6 just talked about, in the last topic, the water
7 quality-based effluent limitation, or the reasonable
8 assurance program.

9 And the third objective is for the monitoring data
10 to help inform implementation actions by permittees. And
11 this might occur by prioritizing drainages for illicit
12 discharge detection and elimination, or diversion of
13 non-storm water flows.

14 It could be identifying areas where retrofit of
15 existing developments should be prioritized. Or it also
16 could include evaluating the effectiveness, generally, of a
17 permittee's storm water management program; meaning their
18 core management program elements that Ivar discussed
19 earlier, and seeing whether any of those areas need
20 additional B.M.P.'s implemented, or enhancement of the
21 current B.M.P.'s that are being implemented.

22 So to achieve these overarching objectives, we've
23 contemplated four general areas for the monitoring program
24 and the permit.

25 The first and last of these, which are the TMDL

1 compliance monitoring programs, and the regional monitoring
2 programs, are already incorporated to a certain extent in
3 the MS-4 permit.

4 While the two middle ones on the slide, that some
5 of you do have copies of, are the MS-4 outflow monitoring of
6 storm water discharges, and then the outflow monitoring of
7 non-storm water discharges.

8 And these are newly proposed components; and you
9 just heard that from Ray Tahir, that these have not been
10 previously incorporated in the L.A. Permit, and we are
11 proposing them for the next round of the permit.

12 I do want to note, while I've listed all four of
13 these elements individually in the presentation, we do
14 expect that there's going to be significant overlap between
15 the four elements; meaning that the monitoring requirements
16 of one of these elements will most likely fulfill many of
17 the monitoring requirements of the other elements.

18 In particular, we expect that the TMDL compliance
19 monitoring programs and outflow monitoring programs will be
20 highly integrated, such that one monitoring location can
21 meet several monitoring program requirements.

22 So what I wanted to do now is just briefly go
23 through some of the more specific objectives of those four
24 monitoring programs.

25 For the TMDL compliance monitoring programs,

1 clearly, the objective there is to assess whether the
2 applicable interim and final water quality-based effluent
3 limitations are being achieved.

4 For the storm water outfall-based monitoring
5 program, we have two main objectives.

6 The first is to characterize the quality of the
7 storm water discharges and their impact on receiving waters;
8 and the second is to measure the effectiveness of
9 permittees' storm water management programs, and target
10 actions to improve those programs.

11 For the non-storm water outfall-based monitoring
12 program, the first objective is to identify outfalls that
13 have significant non-storm water discharges from them.

14 And the second objective is to characterize then
15 the quality of those non-storm water discharges, to
16 determine whether they are contributing pollutants to the
17 receiving waters.

18 And then for the regional monitoring programs, the
19 objectives of those are to assess whether receiving waters
20 are fully supporting their beneficial uses, and then to
21 identify the pollutants that are causing or contributing to
22 an exceedance of water quality standards, and an impairment
23 of beneficial uses.

24 So what I want to do now is take a moment to talk
25 about the need for the MS-4 outfall monitoring. Because

1 like I said, this is a new component that we're proposing as
2 part of the upcoming L.A. permit.

3 Federal regulations anticipated that MS-4
4 permittees would conduct outfall monitoring. Specifically,
5 the federal regulations identify several important outflow
6 monitoring tasks. And I want to list for you several of
7 those.

8 First of all, they anticipated conducting a mapping
9 inventory of MS-4 outfalls within a permittee's
10 jurisdiction. They also contemplated characterizing the
11 general quality of those discharges from MS-4 outfalls.

12 The federal regulations also anticipated conducting
13 field screening for non-storm water discharges from the
14 MS-4; and then, ultimately, to select representative
15 outfalls in consideration of a permittee's or a watershed's
16 water quality concerns to monitor during the permit term.

17 This outfall monitoring data is very critical to
18 determine the impact of MS-4 discharges on receiving waters.
19 To evaluate whether some of the non-storm water discharges
20 through the MS-4 are a source of pollutants, and to
21 determine the effectiveness of storm water management
22 programs, and illicit detection elimination programs that
23 are contained also within the storm water management
24 programs of the permittees.

25 As I mentioned, historically, outfall monitoring

1 has not been included as part of the monitoring requirements
2 in the L.A. County MS-4 Permit. I would say the requirement
3 that has been probably closest to outfall monitoring has
4 been some of the shoreline monitoring that's been conducted
5 at the point where the discharge initially mixes with the
6 surf zone, as part of the Santa Monica Bay Beaches Bacteria
7 TMDL monitoring requirements.

8 However, you may remember, and the Board probably
9 remembers, those who were on the Board at that time, when
10 the Ventura County MS-4 Permit was adopted in 2009, that
11 outfall monitoring was incorporated into that permit at 11
12 representative locations.

13 Clearly, Ventura County and the amount of
14 urbanization there is much less than it is in L.A. County.
15 So we do expect that the monitoring program will be
16 substantially bigger in L.A. County.

17 Additionally, for Ventura County, the Board
18 included dry weather analytical monitoring requirements as
19 well, for non-storm water discharges.

20 And each permittee in that permit was required to
21 identify locations where they would conduct that dry weather
22 analytical monitoring.

23 So the next thing that I want to talk about, that I
24 touched on briefly earlier, is the integration of the TMDL
25 and outfall monitoring requirements that I have just been

1 talking about.

2 Because another significant comment that we've
3 received in response to our initial discussion on the
4 monitoring program requirements at the January 23rd
5 workshop, was that the outfall monitoring program
6 requirements, and to a certain extent also the regional
7 monitoring program requirements, should be integrated with
8 TMDL monitoring requirements as much as possible, and that
9 these should be done on a watershed basis.

10 And there was some concern that was expressed that
11 this integration, as we described at the January 23rd
12 workshop, was not really being reflected in Staff's
13 proposal.

14 And so I want to clarify today that the integration
15 of TMDL and outfall-based monitoring requirements in the
16 L.A. MS-4 Permit that's upcoming is Staff's intent.

17 The TMDL's adopted by this Board have established a
18 lot of detailed monitoring requirements on a watershed
19 basis.

20 In many cases, these include outfall-based
21 monitoring of wet weather and dry weather discharges from
22 the MS-4.

23 These monitoring requirements have been further
24 detailed in TMDL coordinated monitoring plans, or C.M.P.'s,
25 as we often call them, and those have subsequently been

1 approved by the Executive Officer.

2 So it's our intent, as much as possible, to allow
3 permittees to utilize the existing TMDL monitoring, to meet
4 the requirements of the proposed outfall-based monitoring,
5 as well as some of the regional monitoring programs.

6 And what I did present, and I heard a flurry of
7 papers, so I think more copies have been passed out now, so
8 the slide, if you're at Slide 6, that's where I am in the
9 presentation.

10 It shows you just a simple example of how this
11 integration will likely occur. And it's just showing the --
12 some of the requirements for the Machado Toxics TMDL
13 Monitoring Program for wet weather, with some of what we're
14 anticipating for a proposed outfall monitoring program.

15 Just to show you that in both cases, there's a
16 requirement to sample three storm events each year;
17 including, in both cases, the first large storm at
18 appropriate locations within the sub-watershed area.

19 And so there will be opportunity to really align a
20 lot of these requirements and integrate those, so that there
21 won't be an additive, but they can complimentary.

22 So the other thing that I wanted to point out, is
23 that to the extent that a coordinated -- a TMDL coordinated
24 monitoring plan could be modified while still being
25 consistent with TMDL requirements to further align TMDL and

1 outfall-based monitoring requirements, Staff is going to
2 work with permittees to see where there's opportunities
3 exist.

4 So in response to the concerns that have been
5 expressed, one of the things that Staff is doing right now
6 as the next step, is we're working with the L.A. Permit
7 Group, and also with the City of L.A. to, basically, conduct
8 two case studies.

9 And we're hoping to get those kicked off in just
10 the next couple of weeks, to actually test out how this
11 integration of monitoring requirements might occur, both on
12 an individual permittee basis, as well as on a watershed
13 basis.

14 And that will help us better understand what the
15 scope of the proposed monitoring requirements will be for
16 the upcoming permit.

17 So if you would turn now to Slide 7 in the
18 presentation, I want to take a moment here to just generally
19 compare the monitoring requirements of the existing permit,
20 with the proposed requirements.

21 And you'll see, basically, on the left, the
22 existing requirements in the L.A. MS-4 Permit, and then on
23 the right, what Staff's current thinking is regarding
24 proposed requirements for the upcoming MS-4 Permit.

25 And the most significant difference is -- I had

1 these in color, if I only had my Power Point -- were the --
2 first of all, the replacement of the tributary monitoring,
3 with basically, the TMDL and outfall monitoring; and then
4 the addition of other TMDL monitoring requirements. Some of
5 those -- okay.

6 Some of those have already been incorporated into
7 the existing permit.

8 For example, for the L.A. River Trash TMDL, as well
9 as some requirements for the Shoreline Bacteria, as a result
10 of TMDL's. And then the final difference is Staff's
11 proposal to include several special studies.

12 And regarding the special studies, I wanted to take
13 a moment to talk about those.

14 Given the increasing focus on L.I.D., or Low Impact
15 Development, like you heard Ivar talking about, as a tool to
16 reduce run-off, and the discharge of pollutants to receiving
17 waters, we've proposed an L.I.D. Effectiveness Study; and
18 this is somewhat similar to something that we had in the
19 previous permit, that we referred to the B.M.P.
20 Effectiveness Study. But in this case, we're targeting it
21 to L.I.D.

22 We are currently evaluating, as a result of some
23 comments that we received, whether this study could be
24 integrated with some other regional efforts, to evaluate
25 L.I.D. practices throughout Southern California.

1 We've also proposed, as a possibility, a study of
2 hydro-modification impacts, and also a study on the
3 occurrence of Pyrethroid pesticides in the L.A. Region, and
4 specifically, L.A. County.

5 The hydro-modification study can be conducted
6 through the S.M.C., that's the Storm Water Monitoring
7 Coalition Effort, that being coordinated through SCCWRP, and
8 the State Water Board.

9 And then the Pyrethroid Study that's being proposed
10 is equivalent to the study that was included, again, in the
11 most recent Ventura County MS-4 Permit, but of course this
12 one would be focused on the occurrence in L.A. County.

13 We did hear some concerns regarding these special
14 studies, as I said, and we are looking into the extent to
15 which two of these, the L.I.D. effectiveness and
16 hydro-modification impact studies, might be addressed
17 through ongoing regional efforts.

18 So next, I want to briefly discuss our thinking
19 regarding the process for developing the specific monitoring
20 requirements for the permit.

21 Permittees have stated, and we definitely recognize
22 that it will take time for permittees to integrate and align
23 the existing TMDL requirements for the 32 TMDL's that will
24 be going into this permit, with the proposed outfall
25 monitoring requirements.

1 Therefore, what we intend to do is incorporate a
2 framework for the required monitoring program elements in
3 the MS-4 Permit, and then provide a certain amount of time
4 for permittees to either individually or ideally,
5 collectively, on a watershed basis, propose an integrated
6 monitoring program to fulfill the monitoring requirements of
7 the permit.

8 And the elements of the framework that we would
9 include in the permit would likely include for outfall
10 monitoring, the following pieces:

11 First of all, a clear statement of what the
12 monitoring program objectives are, what the outfall or site
13 selection criteria will be for the storm water outfall
14 monitoring program, and then what the screening and
15 selection process would be for the non-storm water outfall
16 monitoring program.

17 The timing and minimum frequency of sampling for
18 each of those programs, and then a process for adaptive
19 monitoring.

20 And what I mean by a "process for adaptive
21 monitoring," this might include mechanisms for rotating
22 among representative outfall locations.

23 It might include changing monitoring frequency or
24 locations based on analytical results. And for the
25 non-storm water outfall monitoring program, it may include a

1 tiered framework for screening outfalls, for significant
2 non-storm water flows, such as doing, for example,
3 25 percent of major outfalls each year, over the course of
4 the permit term, understanding that that screening process
5 may take significant resources to conduct.

6 The framework that we're talking about to include
7 in the MS-4 permit would also include TMDL monitoring
8 requirements that have been established through approved
9 C.M.P.'s, Coordinating Monitoring Programs, as well as
10 regional monitoring requirements, such as mass emissions or
11 receiving water monitoring and bio-assessment, as well as
12 some of the special studies that I discussed earlier,
13 depending on, ultimately, which of those we decide to
14 propose for inclusion.

15 Next, I want to talk about the timing of the new
16 monitoring requirements, because permittees have expressed
17 concerns regarding the timing of the monitoring requirements
18 in the new permit, relative to their cities' budgeting
19 processes, that are in many cases, starting up now or have
20 already started up.

21 And we're sensitive to the fact that this budgeting
22 process has already started, and that permittees need to
23 know as clearly as possible, what the monitoring
24 requirements will be in this first year of the permit, in
25 order to start planning for that now.

1 So what we're anticipating is that within the first
2 year, the permit would require the following monitoring
3 requirements: First of all, an update of inventories of
4 MS-4 outfalls.

5 Second, would be to actually do the work to develop
6 these integrated monitoring plans that I mentioned earlier,
7 that would align the TMDL and outfall-based monitoring
8 requirements.

9 It would also include continued TMDL monitoring,
10 which is already ongoing in many cases, through the approved
11 C.M.P.'s.

12 It would also include continuing some of the mass
13 emissions monitoring, and other ongoing regional monitoring
14 programs that permittees are participating in, as well as to
15 begin screening of outfalls for non-storm water discharges.

16 Once the integrated monitoring plans were approved,
17 then additional outfall-based monitoring may be required in
18 subsequent years of the permit term. And additionally, as I
19 mentioned, for the non-storm water outfall monitoring
20 requirements, recognizing the concerns about the potential
21 scope of this program in particular, we're currently
22 evaluating options for tiering the screening of non-storm
23 water discharges from MS-4 outfalls, and how the subsequent
24 monitoring of those significant non-storm water discharges
25 would occur.

1 And with that, I'm going to end my presentation and
2 turn it over to the speakers that have requested time.

3 MS. JAMES: Kirsten James, Water Quality Director with
4 Heal the Bay.

5 We're supportive of the basic structure of what
6 Regional Board is proposing; but obviously, the devil is in
7 the details. And I want to get into, a little, specifics of
8 what we think are the six key parts of any MS-4 Monitoring
9 Program.

10 The first is compliance monitoring; and this
11 consists of two elements, outfall and receiving water.

12 We believe that there is an opportunity to improve
13 the monitoring program, and to provide some clarity by
14 including both of these elements.

15 As Renee mentioned, outfall monitoring, we've seen
16 this in Ventura County in the last permit, and we believe
17 that the Regional Board's program should include end of pipe
18 monitoring; and specifically, each discharger in each
19 sub-watershed should provide regular end of pipe monitoring,
20 to coordinate with those mass emission stations which are in
21 the receiving water, so that they can look at together.

22 And we think that this will have two main benefits.

23 First, it will help provide additional clarity to
24 permittees on the sources of pollution; and then also, it
25 will provide permittees an additional tool to develop and

1 improve their B.M.P.'s, and other measures for specific
2 areas in watersheds to ensure compliance with water quality
3 standards and TMDL's.

4 And, of note, we think these outfall locations
5 should be selected to represent worst case conditions, so to
6 speak.

7 For example, a commercial area, industrial, or
8 high-use transportation, would represent some of those
9 worst-case scenarios.

10 So the second component would be the receiving
11 water. And we see this in the current permit; and again, in
12 the Ventura Permit.

13 And this would be retaining the current mass
14 emission stations that can then again be coordinated with
15 that outfall monitoring. And this is -- has been
16 successfully employed to determine compliance.

17 We saw that the Ninth Circuit Court decision found
18 that receiving water monitoring is sufficient to determine
19 compliance; so we believe that this should continue. And it
20 provides some clarity on sources of pollution to continue
21 that receiving water monitoring.

22 And as you've heard from other presenters today,
23 this has also been requested by dischargers. So this is a
24 point, I think, of shared comment from the N.G.O. community,
25 and some of the discharge community.

1 So the other elements that I think are really
2 important, and Renee touched on some of these, but one is
3 bio-assessment; and this can, of course, relate to the
4 receiving water monitoring.

5 So this is something that you -- the Regional Board
6 put in the Ventura Permit. This is really helpful to track
7 trends from year to year, to have this bio-assessment
8 monitoring.

9 At a minimum, we should see this on an annual basis
10 so we can capture some of the variability, and get to
11 understand the trends a bit better.

12 Also toxicity monitoring. This is really critical.
13 This is your safety net kind of monitoring, to capture those
14 chemicals that might not be in your routine monitoring
15 program. And This is really critical at both the outfall
16 and the receiving water level.

17 And we believe that a minimum two dry weather and
18 two wet weather samples per year are necessary in order to
19 capture some of that variability that we frequently see.

20 The fifth component is beaches, your beach water
21 quality monitoring.

22 As Renee said, we see this in the current MS-4. We
23 saw it in Ventura as well. This is really a critical type
24 of monitoring, to ensure that we're understanding what those
25 public health impacts might be at our beaches.

1 And this needs to happen on a weekly, year-round
2 basis. Because as you all know, here in Southern
3 California, we have beach goers that go to the beach on a
4 year-round basis because of our beautiful weather here.

5 And then lastly, the sixth component, we believe is
6 TMDL monitoring. This is monitoring that has been
7 stipulated in various TMDL's that the Board has adopted, and
8 also in the resulting monitoring plans that has been
9 approved by your Board.

10 So we believe that these six components are really
11 critical in moving forward with the monitoring plan, and
12 urge the Board to pursue these elements.

13 Thank you.

14 MR. DETTLE: I am John Dettle. I'm an Engineering
15 Manager with the City of Torrance. And first of all, I
16 would thank Renee and the Board Staff for making my
17 presentation the most non-confrontational or non -- non --
18 well, frankly, this will be pretty easy.

19 Do I have my presentation here? All right.

20 The TMDL monitoring, one of the points we've been
21 trying to make, is that the monitoring required for the 32
22 TMDL's in the 88 cities is an extreme program. It's a lot
23 of monitoring that is going to be required that we have to
24 do for the TMDL's.

25 And every city is going to have to do some TMDL

1 monitoring; so that's one thing all of the cities have in
2 common.

3 Currently, if we just go by the city-by-city TMDL
4 basis, the result would be that we would have to provide
5 over 250 monitoring plans that the permittees would have to
6 prepare, and the Board Staff would have to review; and as
7 said before, that would be excessive.

8 TMDL monitoring permit per city is redundant with
9 the adjacent cities.

10 For example, in Torrance, the City of Rolling Hills
11 Estates flows into Torrance; they would have to monitor
12 their flows, then we would monitor the flows across the
13 street, coming in, and then vice-versa, as it comes out.

14 We'd monitor the flows coming out, and then Lomita
15 would monitor those same flows. So there's a lot of
16 redundancy by going city by city.

17 Also, the monitoring city by city gives you limited
18 data that you could use for B.M.P. sizing and placement.
19 Additional monitoring would have to be done for that, if you
20 don't use a watershed-based approach.

21 We've estimated for the City of Torrance, with a
22 population of about \$150,000 dollars (sic) to do monitoring
23 separately for each TMDL, would be \$800,000 dollars a year,
24 and if we were looking at our fee, if the L.A. Permit fee
25 went through, we would be looking at \$875,000 per year for

1 Torrance, which would pretty much be eaten up by that
2 budget. So just to emphasize the point, for a different
3 approach.

4 As before, we talked, there is additional
5 monitoring proposed besides the TMDL monitoring. The
6 regional monitoring, the non-storm water monitoring, and the
7 storm water monitoring.

8 Our biggest issue still remaining is the regional
9 monitoring for hydro-modification, L.I.D. and Pyrethroids.

10 We do believe that this monitoring is redundant
11 with other existing studies, and that we should be looking
12 to the other studies instead of recreating ones here.

13 The storm water monitoring is duplicated with the
14 TMDL monitoring, and the non-storm monitoring is also
15 duplicated with the TMDL monitoring.

16 One point we'd like to make is if the purpose of
17 the non-storm water monitoring is to eliminate urban
18 run-off, dry weather flows, that that could have an impact
19 on wetlands, rivers, lakes, that are currently dependent on
20 those dry weather flows.

21 For example, we have Machado Lake, which is
22 dependent on dry weather flows, and we have the Madrona
23 Marsh, in the City of Torrance, which is dependent on those
24 flows.

25 So if the purpose is to eliminate those flows, you

1 have to think of the big picture and how that would affect
2 freshwater bodies.

3 Prescribed monitoring limits our ability to direct
4 monitoring efforts, and to prepare an integrated compliance
5 plan, and ultimately, that is the best approach towards
6 getting to TMDL compliance, is to integrative plans that
7 look at multiple pollutants.

8 And these studies before, or noted, would be
9 additional costs to that TMDL monitoring.

10 But there is a way to have cost-effective water
11 quality monitoring, and also to address those storm water
12 and non-storm water monitoring requests.

13 The L.A. Permit Group recognizes the benefits of
14 having integrated watershed monitoring plans. And each of
15 those plans would address all the TMDL's and all the permit
16 monitoring within a watershed. So it would be one plan per
17 watershed.

18 The cities would pool their resources to implement
19 a plan, based on targeted monitoring that would look at the
20 sub-watersheds that have highest concentration of
21 pollutants.

22 Integrated plans would eliminate the redundancies I
23 spoke of before. They would eliminate data gaps and would
24 give us the big picture for watershed health for each
25 watershed.

1 The best part is we would get one monitoring plan
2 and one annual report for each watershed, that would look at
3 all the TMDL's, and all the permit monitoring that was
4 required.

5 And as we've talked before, these monitoring plans
6 are proposed to be, like, swamp compatible, so that they
7 would also be used for the entire State of California.

8 The monitoring -- integrative monitoring plans
9 provide data that is needed to prepare, like I said before,
10 the integrated storm water quality management plans to
11 address multiple pollutants; and that is our goal.

12 The integrative plans provides data needed to
13 integrate B.M.P.'s where the multiple pollutant loads are
14 highest. We need to find out where those high priority
15 sub-watersheds are, and that's where we would target our
16 efforts.

17 Integrative plans provide for the development of
18 watershed storm drain maps, and we would be identifying
19 outfalls with significant dry weather flows, because again,
20 that's part of our TMDL compliance.

21 We need to track down the pollutant sources, so we
22 can eliminate them, wet weather and dry weather.

23 Integrative plans provide for the most cost-effective water
24 quality monitoring program.

25 We believe that with a integrated plan, we can

1 address water quality issues that have been brought up for
2 storm water and non-storm water flows by the Board, with a
3 very marginal additional cost for what we're already going
4 to have to do for the the TMDL's. We believe that this is a
5 win-win approach, and that we support the integrative
6 monitoring program.

7 And we also support integrative watershed planning.
8 And I look forward to those being a priority in the next
9 permit. Thank you.

10 MS. CLARK: Hi. My name is Margaret Clark. I'm on the
11 Rosemead City Council, and I've been on the Council for
12 20 years.

13 And I just want to share with you my feelings about
14 -- I really appreciate the integrated approach that you are
15 allowing, and I don't know how many of you are aware of how
16 devastating the State action of eliminating redevelopment
17 agencies has been on the cities of California.

18 I mean, we are really hurting. We have a
19 \$2 million dollar shortfall, just all of a sudden.

20 I can't believe that the legislators thought it
21 through, and realized how it would be even hurting the
22 environment when they did that. But be it, it is what it
23 is. And we have to cope with it.

24 And, for example, it's really going to hurt the
25 programs that we need to do, as far as the storm water

1 monitoring.

2 We will have to be cutting programs across the
3 board. And some cities are worse off than we are; but it's
4 really something to really think about.

5 And so we are very passionate about wanting to do
6 this right. And some of the statistics that the new
7 monitoring program would require, for example, just an
8 outfall costs would be about \$100,000. That's our entire
9 storm water budget right now.

10 And the early estimates for some of the compliance
11 on the bacteria and metals TMDL, would be \$3 to \$10 million.
12 I mean, it's just staggering. So my passion is, I've been
13 on environmental committees at the State level, the regional
14 level, and the National League of Cities level, for many,
15 many years.

16 And my passion is helping the environment; but
17 doing it right. And my biggest "I told you so" of my life
18 -- I just have to share this with you.

19 How just mandating something to be done, a cleanup
20 standard, for example, and not thinking it through, and I am
21 one of the founding members of the San Gabriel Basin Water
22 Quality Authority, which oversees the groundwater cleanup
23 for the San Gabriel Basin, the pollution that's down there.

24 And when, in the mid-90's, the California Air
25 Resources Board wanted to put MTBE in the gasoline to clean

1 up the air, and the water people knew that the
2 characteristics of methyl tertiary butyl ether were -- that
3 they would get into the groundwater.

4 And so we had a meeting, the California League of
5 Cities Environmental Quality Committee that I was on, met
6 with the CARB representative -- do I only have 21 seconds
7 left?

8 Oh, my goodness.

9 Long story short --

10 UNIDENTIFIED SPEAKER: (Inaudible).

11 MS. CLARK: Thank you so much. Thank you very much.

12 Where was I?

13 Okay. We met with him, and we said, the water
14 people said it's going to get in the groundwater, and the
15 air people just wanted to do this, and they really felt -- I
16 am sure they really felt they were doing the right thing,
17 but it did get into the groundwater, and the multi-million
18 dollar cleanup, I mean, Santa Monica's wells are just now
19 starting to be cleaned up. The multi-million dollars that
20 could have been used for other environmental programs.

21 So if we don't do it right, just throwing money at
22 it -- but it's got to be done right. So I really appreciate
23 your willingness to look at best management practices,
24 making sure it's done right, so that we don't waste the
25 precious resources that we don't even have that could be

1 used to help the environment. So I appreciate your taking
2 this approach. Thank you so much.

3 MS. GEORGE: Hello. My name is Angela George. I'm a
4 Principal Engineer with the Los Angeles County Department of
5 Public Works.

6 I'm here today speaking on behalf of the County of
7 Los Angeles and the Los Angeles County Flood Control
8 District.

9 In lieu of detailed comments, the County and the
10 Flood Control District really want to just express thanks to
11 the Executive Officer, and its Staff on all of your efforts
12 today.

13 We would like to thank you for meeting with us
14 several times over the last six months, to discuss the
15 District's and the County's issues or concerns regarding the
16 proposed new permit.

17 We think that the way we're going with the
18 workshops, the discussions, the open discussions, and just
19 the general communication, is going to provide for an
20 effective and implementable permit that should be, for all
21 intents and purposes, satisfactory to all the stakeholders
22 involved.

23 So we just want to, once again, say, "thank you."

24 MR. UNGER: That concludes the speaker cards. I don't
25 know if it's because it's a new month, or our Board Members

1 are here, but everyone has been especially polite, relative
2 to one of our previous workshops.

3 So I'll let you guys try to figure out which one it
4 is. I have my own thoughts. But I think we have some -- I
5 think we have some time for questions of Staff on anything
6 that was presented.

7 I mean, we're scheduled to 4:00 o'clock, so if you
8 want to let it go for another 10 or 15 minutes or so, I
9 think that would be fine.

10 So I don't know if anyone has any questions for
11 Renee or Ivar on this. You're more than welcome to come up
12 and engage in more of the dialogue that we've had at
13 previous workshops. Or if not, we can -- there's
14 excitement, here, with the idea of questions.

15 (Inaudible voices).

16 UNIDENTIFIED SPEAKER: Sam, I'd like to know the impact
17 of extending the permit out until September will have. What
18 are we looking for as far as additional workshops?

19 What topics are going to be discussed in the coming
20 future?

21 MR. UNGER: I would have to say I don't have specific
22 answers for that. One thing that we do want to do is we
23 want to have a workshop where, like we had last November,
24 where the Board can actually deliberate, and give direction
25 at some point.

1 Well, not deliberations. Excuse me. But be more
2 interactive. This one was a Staff workshop, so they could
3 see that. But we will be getting that information out to
4 you as soon as we possibly can.

5 UNIDENTIFIED SPEAKER: Specifically, is April still on?

6 UNIDENTIFIED SPEAKER: Yes.

7 MR. UNGER: Are you going to speak now?

8 Go ahead, Renee, please.

9 MS. PURDY: Well, for the April workshop, we were
10 planning on TMDL's and non-storm water as a topic for that
11 one, seeing as they're, you know, we're sort of taking, you
12 know, M.C.M.'s. We've had several workshops, and sort of a,
13 you know, a wrap-up of that today, and a little bit of
14 monitoring.

15 We want to branch out into TMDL's, and non-storm
16 water, are the next ones.

17 UNIDENTIFIED SPEAKER: Do you think it would be
18 possible to do an example of how water quality-based
19 effluent limitation translation would work, relative to
20 either the metals or L.A. River Metals TMDL, or the Bacteria
21 TMDL, how it would be determined, how monitoring would come
22 into play to evaluate meeting the waste load allocations
23 through a numeric WQ BEL?

24 How the adaptive management process would work?

25 It would be nice to see a full, working example and

1 to know how much the costs would be and what the potential
2 is for third party litigation exposure. Thank you.

3 UNIDENTIFIED SPEAKER: Before we finish, I just wanted
4 to, on behalf of the Board, thank the Staff and Sam Unger
5 for all the work you did to put together this workshop; and
6 everybody else that was here.

7 Please know that it was very important for us to
8 have this, in the light of the new Board Members, and in
9 light of this permit being so important. We wanted to make
10 sure that we take a route of hearing everybody, and making
11 sure that we do have consensus at the end of the day.

12 So thanks, everyone.

13 MR. UNGER: I hope this was a good workshop for you all
14 to at least know that your direct concerns and questions on
15 various topics are being heard by the Board. And I hope it
16 was also helpful for the Board to get a sense of where we
17 are, in terms (inaudible).

18 So if that is it, I think we'll close the workshop.

19 (Workshop adjourned)
20
21
22
23
24
25

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Theresa Rodgers - April 5, 2012 WORKSHOP ON LA COUNTY MS4 PERMIT

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Please see attached Agenda containing information on the Workshop on the issuance of a new Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit. Staff will make a presentation on provisions related to non-stormwater discharges through the MS4 and the incorporation of TMDL related requirements. Permittees and other interested persons will have the opportunity to make oral comments subject to time limits.

Please note that this workshop will not begin prior to 1:30 PM.

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7/6/2009 13:43	ocramer@santa-clarita.com	Oliver Cramer
10/28/2011 14:52	ogalang@brwncald.com	Oliver D. Galang PE
11/9/2010 15:30	ogalang@dpw.lacounty.gov	Oliver Galang
8/3/2009 12:35	olivia@malibutimes.com	Olivia Damavandi
7/6/2009 13:24	parevalo@weho.org	Paul Arevalo
8/9/2010 10:52	paul.ahn@sce.com	Paul ahn
7/17/2009 15:05	paul.singarella@lw.com	Paul Singarella
1/12/2010 8:06	pcmsusa@hotmail.com	Raymond Wells PhD
7/6/2009 13:41	pelkins@carson.ca.us	Patricia Elkins
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
11/16/2011 9:01	rbeste@torranceca.gov	Rob Beste
7/6/2009 13:17	rbow@ci.monrovia.ca.us	Ron Bow
2/17/2012 9:50	rchristmann@waterboards.ca.gov	Rebecca Christmann
7/6/2009 13:22	rdickey@sogate.org	Robert T. Dickey
12/28/2011 16:43	rdrayse@treepeople.org	Rebecca Drayse
8/15/2011 13:46	reddy.pakala@ventura.org	Reddy Pakala

9/16/2009 14:00 rehsiteworks@aol.com	Ray E. Hensley
7/6/2009 13:42 rfajardo@elsegundo.org	Ron Fajardo
8/24/2009 9:40 rfreeman@lawa.org	Robert Freeman
7/2/2010 12:04 rfwpetro@verizon.net	Darry White
7/6/2009 13:17 rhaley@lynwood.ca.us	Roger Haley
3/10/2011 9:37 rhs@malibufamilywines.com	Ronald H. Semler
2/16/2011 11:54 ricardo.moreno@sce.com	Ricardo E. Moreno
2/12/2010 15:00 ricardo.moreno@ventura.org	Ricardo Moreno
11/25/2011 12:08 richard@coloramanursery.com	Richard Wilson
11/16/2011 8:54 rick.valte@smgov.net	Rick Valte
7/6/2009 13:48 rkenny@soelmonte.org	Ron Kenny
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.
2/18/2010 11:09 rosemarie_Chora@ci.pomona.ca.us	Rosemarie Chora
2/1/2011 8:56 rpurdy@waterboards.ca.gov	Renee Purdy
7/6/2009 13:20 rruiz@sfcity.org	Ron Ruiz
7/6/2009 13:53 rsalas@lapuente.org	Rene Salas
10/28/2009 14:20 rsoto@ci.vernon.ca.us	Rafael Soto
7/6/2009 13:49 rtahir@tecsenv.com	Ray Tahir
3/4/2011 13:50 rtremblay@lacs.org	Raymond L Tremblay
7/6/2009 13:53 rvasquez@scsengineers.com	Ralph Vasquez
4/14/2010 11:46 rveiga@waterboards.ca.gov	Rebecca Veiga Nascimento
3/23/2011 11:22 rwang@dpw.lacounty.gov	Ruby Wang
4/8/2011 13:18 rwatson@rwaplanning.com	Richard A. Watson
8/6/2009 16:44 rwellington@willdan.com	Ray Wellington
7/6/2009 13:23 rwishner@ci.walnut.ca.us	Rob Wishner
2/15/2011 10:36 s.guldimann@gmail.com	Suzanne Guldimann
7/6/2009 13:49 sam.gutierrez@westcovina.org	Sam Gutierrez
7/6/2009 13:20 samw@ci.rolling-hills-estates.ca.us	Samuel R. Wise
7/6/2009 13:52 sarinamoraleschoate@santafesprings.org	Sarina Morales-Choate
8/3/2009 6:17 sbarankiewicz@ohslegal.com	Stan M. Barankiewicz II
7/6/2009 13:08 sburrell@hermosabch.org	Stephen R. Burrell
8/3/2009 10:47 scheng@sgch.org	Angela Cheng
12/13/2011 11:08 sean.j.dunn@damco.com	Sean Dunn
5/3/2010 17:44 selimeren@gmail.com	SELIM EREN
11/9/2010 15:56 seth.carr@lacity.org	seth carr
7/6/2009 13:43 sfurukawa@ci.south-pasadena.ca.us	Shin Furukawa
7/6/2009 13:25 sgrund@lacs.org	Shannon Grund
7/6/2009 13:11 shahram.Kharaghani@lacity.org	Shahram Kharaghani
2/21/2012 8:50 shawn.hagerty@bbklaw.com	Shawn Hagerty

11/16/2011 8:40 shenley@covina.gov	Steve Henley
11/4/2009 13:46 shikhac@lwa.com	Shikha Chetal
6/29/2011 14:00 showard@jackbilt.com	Scott Howard
7/6/2009 11:32 skelley@waterboards.ca.gov	Sandra Kelley
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
9/29/2009 16:23 sofranko.anna@epa.gov	Anna Sofranko
1/3/2012 12:22 solinger@waterboards.ca.gov	Sarah Olinger
1/21/2010 11:52 sphillip@dtsc.ca.gov	Stan Phillippe
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
5/31/2011 16:33 suhles@delanegroup.com	Scott Uhles
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
7/6/2009 13:04 tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57 tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33 tiffanyshedrick@santafesprings.org	Tiffany Shedrick
12/13/2011 10:32 tliddell@kirklandwa.gov	Tommy Liddell
5/31/2011 16:30 tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51 tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19 tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20 tony@csstudios.com	Tony Ignacio
2/20/2012 13:01 tracy@egoscuelaw.com	Tracy Egoscue
7/26/2010 10:25 tracyegoscue@paulhastings.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@covina.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

7/6/2009 13:53	vrollinger@carson.ca.us	Victor Rollinger
10/28/2010 12:38	vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03	vsinghal@baldwinpark.com	Vijay Singhal
2/18/2011 11:31	wade@grahamstudio.net	Wade Graham
3/9/2010 16:40	wblistserv@gmail.com	SWRCB Listserv
2/21/2012 4:06	wbotha@brownandwinters.com	Wentzelee Botha
6/29/2011 9:59	wcaffrey@vandermostconsulting.com	wade caffrey
12/29/2011 11:17	welchrc@pbworld.com	Robert Welch
11/14/2011 16:14	wgross@lacsds.org	bill gross
2/18/2011 10:21	willrolph@truxaw.com	William Rolph
7/6/2009 13:52	wrlindinc@aol.com	Wes Lind
8/17/2011 11:33	wynesta@earthlink.net	Wynesta Dale
11/10/2010 9:35	ychu@waterboards.ca.gov	yanjie chu
11/16/2011 8:58	ykwan@lcf.ca.gov	Ying Kwan
7/6/2009 13:35	ys@cityofrh.net	Yolanta Schwartz
12/6/2010 17:34	ysim@dpw.lacounty.gov	Youn Sim
9/17/2010 8:45	zora.baharians@lacity.org	Zora



LEONARD C. BROWN, JR.
MEMBER

MATTHEW RODRIGUEZ
SECRETARY

Los Angeles Regional Water Quality Control Board

Notice of Public Meeting

Thursday, April 5, 2012

9:00 a.m.

Meeting Location:

The Metropolitan Water District of Southern California

Board Room

700 North Alameda Street

Los Angeles, California

Agenda

The Regional Board strives to conduct an accessible, orderly, and fair meeting. During the meeting, the Chair will conduct the meeting and establish appropriate rules and time limitations for each 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 Regional Board meeting procedures is included after the last agenda item.

To ensure a fair hearing and that the Regional 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 March 26, 2012. Please consult the agenda description for specific items, 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. 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 March 1, 2012 Board meeting.
[Ronji Moffett, (213) 576-6612]
4. Board Member Communications.
 - 4.a. Ex Parte Disclosure. Board Members will identify any discussions they may have had requiring disclosure pursuant to Government Code section 11430.40.
 - 4.b. Board Member Reports. The Board Members may discuss communications, correspondence, or other items of general interest relating to matters within the Board's jurisdiction.

MARY MERRILLIAN, CHAIR | SAM UNGER, EXECUTIVE OFFICER

320 West 4th St. Suite 200 Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

Los Angeles Water Board Meeting Agenda

- 5.a. **Executive Officer's Report.**
[Sam Unger, (213) 576-6605]
6. **Update from State Board.** [Fran Spivy-Weber]
7. **Public Forum.** Any person may address the Board regarding any matter within the Board's jurisdiction provided the matter does not appear elsewhere on this agenda, has not been scheduled to appear on a future agenda, and is not expected to be imminently scheduled for the Board's consideration. Remarks will be limited to three (3) minutes, unless otherwise directed by the Chair. If a person intends to use a PowerPoint presentation or other visual aid, you must contact Ronji Moffett, (213) 576-6612, at the Regional Board at least 48 hours prior to the meeting to arrange for equipment use and be prepared to load any PowerPoint presentation on the computer prior to the meeting to assure the orderly conduct of the meeting.

UNCONTESTED 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. The Chair will determine the appropriate time to consider an item removed from the consent calendar.)

Waste Discharge Requirements that Serve as NPDES Permits Termination-

- *8. City of Santa Clarita, Santa Clarita (Drainage Benefit Assessment Areas No. 6 and No. 18); NPDES No. CA0061638 [Jau Ren Chen, (213) 576-6656]

Other Business-

- *9. Consideration of a tentative Resolution approving the Los Angeles County Sanitation Districts' proposed Special Study for the Joint Water Pollution Control Plant. (Comment submittal deadline was March 5, 2012) [Brandi Outwin-Beals, (213) 576-6664]
- *10. Consideration of a tentative Resolution approving the City of Los Angeles' proposed Special Study for the Hyperion Treatment Plant. (Comment submittal deadline was March 5, 2012.) [Brandi Outwin-Beals, (213) 576-6664]
- *11. Consideration of a tentative Resolution approving the City of Los Angeles' proposed Special Study for the Terminal Island Water Reclamation Plant. (Comment submittal deadline was March 5, 2012) [Brandi Outwin-Beals, (213) 576-6664]
- *12. Consideration of a tentative Resolution approving the City of Oxnard's proposed Special Study for the Oxnard Wastewater Treatment Plant. (Comment submittal deadline was March 5, 2012) [Brandi Outwin-Beals, (213) 576-6664]

Los Angeles Water Board Meeting Agenda

Non-NPDES State Discharge Requirements**Renewal-**

- *13. Ventura Regional Sanitation District (Malibu Bay Club Wastewater Treatment Plant), Waste Discharge Requirements Order No. 01-008, CI No. 5774, file No. 72-006; County of Ventura. (Comment submittal deadline was March 9, 2012) [Mercedes Merino, (213) 620-6156]

Termination-

- *14. PanAmerican Seed Company, Order No. 87-93, CI No. 4246, File No. 62-76, Santa Paula. (Comment submittal deadline was March 9, 2012) [Mercedes Merino, (213) 620-6156]
- *15. ConocoPhillips Company - 76 Station No. 6965, Order No. R4-2004-0110, CI No. 8773, Long Beach. (Comment submittal deadline was March 2, 2012) [David Koo, (213) 620-6155]

ACTION ITEMS**Other Business-**

16. Consideration of a tentative Resolution adopting the Petroleum Underground Storage Tank Fund. *Emergency, Abandoned, and Recalcitrant (EAR) Account* Fiscal Year 2012-2013, Annual Priority List for the Los Angeles Region. (The public will be provided the opportunity to comment on this matter.) [Dixon Oriola, (213) 576-6747]

Waste Discharge Requirements and Time Schedule Order-

17. Consideration of revised tentative Waste Discharge Requirements and Time Schedule Order for the California Department of Water Resources (William E. Warne Power Plant), Castaic; NPDES No. CA0059188. (Comment submittal deadline was March 5, 2012) [Jau Ren Chen, (213) 576-6656]

17.1 Waste Discharge Requirements

17.2 Time Schedule Order

Other Business

18. Consideration of tentative Cease and Desist Order requiring the City of Avalon to cease and desist alleged discharges of waste in violation of requirements in Regional Board Order No. R4-2008-0028 and State Water Board Order No. 2006-0003-WQ and to implement actions to achieve wasteload allocations assigned to the City's discharges of waste. (Comment submittal deadline was March 15, 2012) [Russ Colby, (213) 620-6373; L.B. Nye, (213) 576-6785]

INFORMATION (This matter is for informational purposes only. No voting will take place on this matter.)

19. Informational overview by the City of Signal Hill's on the City's illicit Connection/illicit Discharge program, sediment control procedures, and treatment control best management practices (BMPs) to comply with the existing Los Angeles County MS4 Permit.

WORKSHOP**NOTE: The Workshop will not begin before 1:30 p.m.**

20. Workshop on the issuance of a new Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit. Staff will make a presentation on provisions related to non-stormwater discharges through the MS4 and the incorporation of TMDL related requirements. Permittees and other interested persons will have the opportunity to make oral comments subject to time limits. *(The Board may provide general feedback to staff on development of the permit; however, no action or voting will take place at this workshop.)* [Renee Purdy, (213) 576-6622; Ivar Ridgeway, (213) 620-2150]

CLOSED SESSION

21. As authorized by the 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].
- 21.1 *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)
- 21.2 *In re Halaco Engineering Company*, United States Bankruptcy Court, Central District of California, Northern Division, No. ND-02-12255 RR [Regarding a CDO and CAO at the Oxnard Property]. (JF)
- 21.3 *In re: Los Angeles Region Water Permit- Ventura County*, Commission on State Mandate Test Claim No. 11-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)
- 21.4 *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)
- 21.5 *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)
- 21.6 *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)
- 21.7 *In re: Upper Santa Clara River Chloride Total Maximum Daily Load Requirements Imposed by the Los Angeles Regional Water Quality Control Board in Resolution R4-2008-0012*. 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)

Los Angeles Water Board Meeting Agenda

- 21.8 *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)
- 21.9 *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)
- 21.10 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;
 - (c) A matter which, based on existing facts and circumstances, the Regional Board is deciding whether to initiate litigation. (JF/FM)
- 21.11 Consideration of the appointment, employment, or evaluation of performance about a public employee. (JF/FM)
22. **Adjournment of Current Meeting.** The next meeting will be held on May 3, 2012 beginning at 9:00 a.m. at the City of Simi Valley Council Chambers, located at 2929 Tapo Canyon Road, 2929 Tapo Canyon Road, Simi Valley, California.

*

NOTICE

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

Los Angeles Water Board Meeting Agenda

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. If any other party demonstrates prejudice resulting 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.



Sent via email to: sunger@waterboards.ca.gov

March 20, 2012

Samuel Unger
Executive Officer
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Re: April 5 Board Workshop on non-stormwater discharges in MS4 General Permit

Dear Mr. Unger,

On April 5, 2012, the Los Angeles Regional Water Quality Control Board (RWQCB) is planning a Board Workshop to discuss the issue of how non-stormwater discharges could be regulated under the new Los Angeles County Municipal Separate Storm Sewer System (MS4) General Permit. This is an issue of great significance to community water systems (CWSs) of Los Angeles County, the entities that provide potable water to the people of this region. Not only is the ability of CWSs to discharge water an essential function for the protection of public health and physical security of water distribution systems, but these discharges are a condition under their permits through the Department of Public Health's Drinking Water Program.

The proposed MS4 General Permit could well create significant legal barriers that will hinder CWS's ability to carry out this critical function. There have already been situations where MS4 permittees have sought to prevent or limit discharges from CWSs because of concerns that these discharges would compromise their ability to comply with the MS4 permit. It is anticipated that as more Total Maximum Daily Load (TMDL) allocations are incorporated into the MS4 General Permit, these conflicts will only increase.

The Association of California Water Agencies (ACWA) is an organization of nearly 440 public agency members collectively responsible for 90% of the water delivered to cities, farms and businesses in California. The California-Nevada Section of the American Water Works Association is a membership organization comprising more than 6,000 drinking water professionals active in California and Nevada working together for the goal of safe and reliable drinking water. The California Water Association (CWA) represents the interests of approximately 130 investor-owned water utilities that are regulated by the California Public Utilities Commission, and strive to provide high quality water utility services to customers throughout California. Together, these three groups represent the vast majority of CWSs in the state and Los Angeles County.

ACWA, CA-NV AWWA, and CWA would like to request the opportunity to jointly address the Board at the April 5 Workshop on the issue of discharges from CWSs. Rather than having a large number of CWSs

ACWA/CA-NV-AWWA/CWA Letter

April 5 Workshop

Page 2

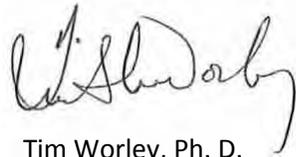
each address the Board separately, we feel it would be more efficient to have a single presentation representing the interests of community water systems. To that end, we are requesting a single block of time of approximately 15 minutes to present the issues associated with CWSs and also offer a possible solution for the Board's consideration. We believe this will provide the CWSs, MS4 permittees, and the RWQCB the best opportunity to move toward a mutually agreeable solution.

If you have questions or would like to discuss this matter further, please contact Danielle Blacet at 916-441-4545 or danielleb@acwa.com. Thank you for your consideration.

Sincerely,



Jack Hawks
Executive Director
California Water Association



Tim Worley, Ph. D.
Executive Director
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ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

TO: Los Angeles County MS4 Permittees and Other Interested Persons

FROM: Renee A. Purdy, Chief *Renee A. Purdy*
Regional Programs Section

DATE: March 21, 2012

SUBJECT: TRANSMITTAL OF STAFF WORKING PROPOSAL ON LA COUNTY MS4 PERMIT

As staff committed to in previous workshops on the renewal of the Los Angeles County MS4 Permit, attached is a working proposal of the permit provisions related to the **Minimum Control Measures (MCMs)**. Staff of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) is distributing to Los Angeles County MS4 Permittees and other interested persons the attached staff working proposal for preliminary review and discussion purposes only.

Please note the following: Staff will accept both written and oral comments on these working proposals. Please be advised, however, that these staff working proposals neither constitute a "draft permit" or a "proposed permit" as defined in Title 40 Code of Federal Regulations (40 CFR) sections 122.2 or 124.6. Further, distribution of these staff working proposals for review and discussion does not constitute a public comment period pursuant to 40 CFR sections 124.10 or 124.17. Accordingly, while staff will accept and consider written comments on these working proposals, staff does not intend to formally respond to written comments received that pertain to the working proposals. In addition to, or in lieu of, written comments, Permittees and interested persons are also encouraged to make oral comments to staff during telephone conversations and/or in-person meetings. Staff looks forward to input on this working proposal from Permittees and other interested persons.

For written and oral comments on this working proposal to be considered by staff in preparing the forthcoming draft Los Angeles County MS4 Permit, comments need to be made and/or submitted no later than **April 6, 2012**. Written comments should be submitted by e-mail to iridgeway@waterboards.ca.gov and rpurdy@waterboards.ca.gov.

Written comments received will be included in the administrative record for the renewal of the Los Angeles County MS4 Permit, but will not be provided to the individual Los Angeles Water Board members. When a draft permit is released, interest persons will be provided an opportunity to submit written comments in compliance with 40 CFR sections 124.10 or 124.17.

MARIA MEHRANIAN, CHAIR | SAM UNGER, EXECUTIVE OFFICER

LA County MS4 Permittees
and Interested Persons

- 2 -

March 21, 2012

Consistent with federal regulations, staff will prepare responses to significant comments received on the draft permit submitted in compliance with the public notice and will make comments and responses available to the Los Angeles Water Board members.

Staff looks forward to further discussions on this working proposal. Please do not hesitate to contact Mr. Ivar Ridgeway, Chief, Storm Water Permitting at (213) 620-2150 or myself at (213) 576-6622 if you wish to schedule a meeting with us or if you have any questions or comments.

Attachment

LYRIS MAILING

RB-AR1305

LIST NAME: LA-Co MS4
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7/6/2009 13:38	City_manager@ci.glendora.ca.us	Chris Jeffers
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VI. Provisions

A. Standard Provisions (TBD)

B. Monitoring and Reporting Program (MRP) Requirements (TBD)

C. Special Provisions

1. General Requirements

a. Each Permittee shall implement the requirements in Parts [TBD for each Minimum Control Measure (MCM)] below, or customized actions within each of these general categories of control measures to achieve equivalent pollutant control, considering the water quality conditions in the area under the Permittee’s jurisdiction or within the watershed, where approved by the Executive Officer. [Placeholder for language linking customized MCMs to TMDL provisions, including reasonable assurance provisions.] 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.C.6 or in Table [TBD] below, each Permittee shall ensure implementation of the requirements contained in Part VI.C.6. upon the Effective Date of the Order.
- ii. Each Permittee shall ensure implementation of the following requirements per the schedule specified in Table [TBD] below:

Table [TBD] -

Part	Provision	Due Date

c. Minimum Control Measure Definitions

- i. **BMP:** Best Management Practice; a practice or physical device or system designed to prevent or reduce pollutant loading from stormwater or non-stormwater discharges to receiving waters, or designed to reduce the volume of stormwater or non-stormwater discharged to the receiving water.
- ii. **Biofiltration:** A LID BMP that reduces stormwater pollutant discharges by intercepting rainfall on vegetative canopy, and through evapotranspiration, incidental infiltration, and filtration. As described in the *Ventura County Technical Guidance Manual*, studies have demonstrated that bioinfiltration of 1.5 times the stormwater quality design volume (SWQDv) provides approximately equivalent or greater reductions in pollutant loading when compared to bioretention or infiltration of the SWQDv.¹ 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. Biofiltration BMPs include bioretention systems with an underdrain and bioswales.
- iii. **Bioretention:** A LID BMP that reduces stormwater 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.
- iv. **Bioswale:** A LID BMP consisting of a shallow channel lined with grass or other dense, low-growing vegetation. Bioswales are designed to collect stormwater runoff and to achieve a uniform sheet flow through the dense vegetation for a period of several minutes.
- v. **Effective impervious area (EIA):** 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.
- vi. **Green roof:** A LID BMP using planter boxes and vegetation to intercept rainfall on the roof surface. Rainfall is intercepted by vegetation leaves and through evapotranspiration. Green roofs may be designed as either a bioretention BMP or as a planter box flow-through treatment BMP. To receive credit as a bioretention BMP, the

¹ 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.

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.

- vii. Improved drainage system:** 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.
- viii. Infiltration:** A LID BMP that reduces stormwater 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.²
- ix. LID:** Low Impact Development; building and landscape features designed to retain or filter stormwater runoff.
- x. Natural drainage system:** 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.
- xi. Planter boxes and other flow-through treatment BMPs:** modular, vault type planter boxes or “high flow biotreatment” devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain. Planter boxes do not allow for incidental infiltration and therefore do not meet the requirements for biofiltration as defined in this Order. However, planter boxes may be used to meet the Water Quality Mitigation Criteria as specified in Part [TBD] of this Order.
- xii. Rainfall harvest and use:** an LID BMP system designed to capture runoff from a roof 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.

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:

² 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.

- i.** Control the contribution of pollutants to its MS4 from stormwater discharges associated with industrial and construction activity and control the quality of stormwater discharged from industrial and construction sites. This requirement applies both to industrial and construction sites with coverage under an NPDES permit, as well as to those sites that do not have coverage under an NPDES permit. Grading ordinances must be updated and enforced as necessary to comply with this Order;
- ii.** Prohibit all non-stormwater discharges not otherwise conditionally allowed pursuant to Part [TBD];
- 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 stormwater 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-stormwater 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;
- xi.** Require that structural BMPs are properly operated and maintained; and

5. Responsibilities of the Permittees (TBD)

6. Public Information and Participation Program

a. General

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

b. PIPP Implementation

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

c. Public Participation

- i. Each Permittee, whether participating in a County 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 stormwater management 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 stormwater 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 or Watershed Group sponsored PIPP or individually, each Permittee shall implement the following activities:
- (1) Conduct stormwater 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 stormwater 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
 - (c) Landscaping / gardening centers
 - (d) Pharmacies
 - (e) Pet shops / feed stores
- (4) Maintain stormwater websites or provide links to stormwater websites via the Permittee's website, which shall include educational material and opportunities for the public to participate in stormwater pollution prevention and clean-up activities listed in Part [TBD – this part].
- (5) Provide independent, parochial, and public schools within in each Permittee's jurisdiction with materials to educate school children (K-12) on stormwater 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 (1)-(4), Permittees shall use effective strategies to educate and involve ethnic communities in stormwater pollution prevention through culturally effective methods.

7. Industrial/Commercial Facilities Program

a. General

- i. Each Permittee shall implement an Industrial / Commercial Facilities Program that meets the requirements of this Part, prevents illicit discharges into the MS4 and receiving waters, reduces industrial / commercial discharges of stormwater to the maximum extent practicable, and prevents industrial / commercial discharges from the MS4 from causing or contributing to a violation of water quality standards. At a minimum, the Industrial / Commercial Facilities Control Program shall be implemented in accordance with the requirements listed in this part, or an equivalent Industrial / Commercial Facilities Control Program as approved in a Permittee's individual or watershed based Reasonable Assurance Program (RAP) per Part 7.

- (1) Track
 - (2) Educate
 - (3) Inspect
 - (4) Ensure compliance with municipal ordinances at industrial and commercial facilities that are critical sources of pollutants in stormwater
- ii. The BMPs listed in Parts [TBD – TBD] below refer to the January 2003 version of the California Stormwater BMP Handbook, Industrial and Commercial. Permittees are authorized to substitute the listed BMPs with the equivalent BMP contained in the most current version of the California Stormwater BMP Handbook, Industrial and Commercial, throughout the term of this Order.

b. Track Critical 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 stormwater 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, and specified in Attachment [TBD]:
- (1) Commercial Facilities
 - (a) Restaurants
 - (b) Automotive service facilities (including those located at automotive dealerships)
 - (c) RGOs
 - (d) Nurseries and Nursery Centers (Merchant Wholesalers, Nondurable Goods, and Retail Trade)
 - (2) U.S. EPA “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 tributary to a waterbody segment addressed by TMDL Provisions in Part 7, where the facility generates pollutants addressed by the TMDL for that waterbody.
 - (5) 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 that describes the economic activities performed and principal products used at each facility
 - (7) Status of exposure of materials to stormwater
 - (8) Name of receiving water
 - (9) Identification of whether the facility is tributary to a CWA § 303(d) listed waterbody segment or waterbody segment subject to a TMDL, where the facility generates pollutants for which the waterbody segment is impaired.
 - (10) Coverage under the 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 stormwater discharges.
- 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 [TBD] 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 stormwater. 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 stormwater 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 Sources**i. Commercial Facilities**

- (1) Mandatory Compliance Inspections:

Each Permittee shall inspect all commercial facilities identified in Parts [TBD, TBD, TBD] twice during the 5-year term of the Order, provided that the first mandatory compliance inspection occurs no later than 2 years after Order adoption date. 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. At each facility, inspectors shall verify that the operator is implementing the source control BMPs listed in Tables [TBD] and [TBD] for the corresponding facility type as specified in Parts [TBD], [TBD], and [TBD]. Each Permittee shall require implementation of additional BMPs where stormwater from the MS4 discharges to an environmentally sensitive area (ESA, see Part [TBD] for definition), a waterbody subject to TMDL provisions in Part 7, or a CWA § 303(d) listed waterbody (see Part [TBD] below).

- (a) Restaurants

(i) Scope of Inspection

Each Permittee shall inspect all restaurants within its jurisdiction to confirm that stormwater BMPs are being effectively implemented in compliance with state law, and county and municipal ordinances. The BMPs listed in Table [TBD] shall be implemented, unless the pollutant generating activity does not occur:

Table [TBD] - BMPs at Restaurants

Pollutant-Generating Activity	BMP Narrative Description	California Stormwater BMP Handbook Industrial and Commercial BMP Identification #
Waste/ Hazardous Materials Storage, Handling and Disposal	Implementation of effective storage, handling and disposal procedures for hazardous materials	NA
Unauthorized Non-Stormwater Discharges	Effective elimination of non-stormwater discharges	SC-10
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures	SC-11
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	SC-33
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/ handling practices and appropriate control measures	SC-34
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices	SC-43
Stormwater Conveyance System Maintenance	Implementation of proper conveyance system operation and maintenance protocols	SC-44
Pollutant-Generating Activity	BMP Narrative Description from Regional Water Board Resolution No. 98-08	
Sidewalk Washing	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.

(b) Automotive Service Facilities

(i) Scope of Inspection

Each Permittee shall inspect all automotive service facilities within its jurisdiction to confirm that stormwater BMPs are being effectively implemented in compliance with state law, and county and municipal ordinances. The BMPs listed in Table [TBD] shall be implemented, unless the pollutant generating activity does not occur:

Table [TBD] - BMPs at Automotive Service Facilities

Pollutant-Generating Activity	BMP Narrative Description	California Stormwater BMP Handbook Industrial and Commercial BMP Identification #
Unauthorized Non-Stormwater Discharges	Effective elimination of non-stormwater discharges	SC-10
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures	SC-11
Vehicle/ Equipment Fueling	Implementation of effective fueling source control devices and practices	SC-20
Vehicle/ Equipment Cleaning	Implementation of effective equipment/ vehicle cleaning practices and appropriate wash water management practices	SC-21
Vehicle/ Equipment Repair	Implementation of effective vehicle/ equipment repair practices and source control devices	SC-22
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices	SC-31
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	SC-33

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Storage and Handling of Solid Waste	Implementation of effective solid waste storage/ handling practices and appropriate control measures	SC-34
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices	SC-43
Stormwater Conveyance System Maintenance Practices	Implementation of proper conveyance system operation and maintenance protocols	SC-44
Pollutant-Generating Activity	BMP Narrative Description from Regional Water Board Resolution No. 98-08	
Sidewalk Washing	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.	

(c) Retail Gasoline Outlets

(i) Scope of Inspection

Each Permittee shall inspect all RGOs within its jurisdiction to confirm that stormwater BMPs are being effectively implemented in compliance with state law, and county and municipal ordinances. The BMPs listed in Table [TBD] shall be implemented, unless the pollutant generating activity does not occur:

Table [TBD] - BMPs at Retail Gasoline Outlets

Pollutant-Generating Activity	BMP Narrative Description	California Stormwater BMP Handbook Industrial and Commercial BMP Identification #
Unauthorized Non-Stormwater Discharges	Effective elimination of non-stormwater discharges	SC-10
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures	SC-11
Vehicle/ Equipment Fueling	Implementation of effective fueling source control devices and practices	SC-20

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Vehicle/ Equipment Cleaning	Implementation of effective wash water control devices	SC-21
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	SC-33
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/ handling practices and appropriate control measures	SC-34
Building and Grounds Maintenance	Implementation of effective facility maintenance practices	SC-41
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices	SC-43
Pollutant-Generating Activity	BMP Narrative Description from Regional Water Board Resolution No. 98-08	
Sidewalk Washing	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.	

(d) Commercial Nurseries and Nursery Centers (Merchant Wholesalers, Nondurable Goods, and Retail Trade)

(i) Scope of Inspection

Each Permittee shall inspect all commercial nurseries and nursery centers within its jurisdiction to confirm that stormwater BMPs are being effectively implemented in compliance with state law, and county and municipal ordinances. The BMPs listed in Table [TBD] shall be implemented, unless the pollutant generating activity does not occur.

Table [TBD] - BMPs at Nurseries

Pollutant-Generating Activity	BMP Narrative Description	California Stormwater BMP Handbook Industrial and Commercial BMP Identification #
Unauthorized Non-Stormwater Discharges	Effective elimination of non-stormwater discharges	SC-10
Outdoor Loading/ Unloading	Implementation of effective outdoor loading/ unloading practices	SC-30
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices	SC-31
Outdoor Equipment Operations	Implementation of effective outdoor equipment source control devices and practices	SC-32
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	SC-33
Building and Grounds Maintenance	Implementation of effective facility maintenance practices	SC-41

ii. Industrial Facilities

Each Permittee shall conduct compliance inspections as specified below or as approved in a Permittee's individual or watershed based Reasonable Assurance Program (RAP) per Part 7.

(1) Frequency of Inspections

(a) Mandatory Compliance Inspections

Each Permittee shall perform an initial mandatory compliance inspection at all industrial facilities identified in Parts [TBD] no later than 2 years after Order adoption date. After the initial inspection, all facilities determined as having exposure of industrial activities to stormwater 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 [TBD] below.

(b) No Exposure Verification

Following the first mandatory compliance inspection, each Permittee shall also perform a second mandatory

compliance inspection yearly at a minimum of 20% of the facilities determined not to have exposure of industrial activities to stormwater at the time of the first mandatory compliance inspection. The purpose of this inspection is to verify the continuity of the no exposure status. Facilities determined as having exposure will be notified that they must obtain coverage under the Industrial General Permit. A minimum interval of 6 months between the first and the second mandatory compliance inspection is required.

(c) Applicable to All Facilities

Each Permittee need not inspect facilities that have been inspected by the Regional Water Board within the previous 24 month interval. However, if the Regional Water Board performed only one inspection, the Permittee shall conduct the second required mandatory compliance inspection.

(2) Scope of Inspection

(a) Each Permittee shall confirm that each operator:

- (i) Has a current Waste Discharge Identification (WDID) number for facilities discharging stormwater associated with industrial activity, and that a Stormwater Pollution Prevention Plan (SWPPP) is available on-site; or
- (ii) Has applied and has a current No Exposure Certification (and WDID number) for facilities subject to this requirement;
- (iii) Is effectively implementing BMPs in compliance with state law, and county and municipal ordinances. Facilities must implement the source control BMPs identified in the *California Stormwater BMP Handbook, Industrial and Commercial*, unless the pollutant generating activity does not occur. The Permittees shall require implementation of additional BMPs where stormwater from the MS4 discharges to an environmentally sensitive area (ESA, see Part [TBD] for definition), a waterbody subject to TMDL Provisions in Part 7, or a CWA § 303(d) listed waterbody (see Part [TBD] below).

e. Ensure Compliance of Critical Sources

i. BMP Implementation

Facilities must implement the source control BMPs identified in the *California Stormwater BMP Handbook, Industrial and Commercial*, unless the pollutant generating activity does not occur. In the event that a Permittee determines that a BMP is infeasible at any site, the

Permittee shall require implementation of similar BMPs that will achieve the equivalent reduction of pollutants in the stormwater discharges. Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls.

ii. Environmentally Sensitive Areas (ESAs)

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

iii. Progressive Enforcement

Each Permittee shall develop and implement a Progressive Enforcement Policy to ensure that facilities are brought into compliance with all stormwater requirements within a reasonable time period as specified below.

(1) Follow-up inspections

In the event that a Permittee determines, based on an inspection conducted, that an 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 2 weeks from the date of the initial inspection.

(2) Enforcement action

In the event that a Permittee determines that an 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 or through the judicial system.

(3) Each Permittee shall maintain records 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.

f. Interagency Coordination

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

A Permittee may refer a violation(s) of its municipal stormwater ordinances and California Water Code § 13260 by Industrial and Commercial facilities to the Regional Water Board provided that the Permittee has made a good faith effort of progressive enforcement 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
- (2) Two warning letters or notices of violation

ii. Referral of Violations of the Industrial General Permit, including Requirements to File a Notice of Intent or No Exposure Certification

For those facilities in violation of municipal stormwater ordinances and subject to the Industrial General Permit, 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 operator regarding the violation. In making such referrals, Permittees shall include, at a minimum, the following documentation:

- (1) Name of the facility
- (2) Operator of the facility
- (3) Owner of the facility
- (4) WDID Number (if applicable)
- (5) Industrial activity being conducted at the facility that is subject to the Industrial General Permit
- (6) Records of communication with the facility operator regarding the violation, which shall include at least one inspection report
- (7) The written notice of violation copied to the Regional Water Board

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

Each Permittee shall initiate, within one business day,³ investigation of complaints (other than non-stormwater discharges to the MS4) 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 stormwater ordinances and, if necessary, to oversee corrective action.

iv. 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:

³ 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.

- (1) Assisting in identification of current owners, operators, and lessees of properties and sites.
 - (2) Providing staff, when available, for joint inspections with Regional Water Board inspectors.
 - (3) Appearing to testify as witnesses in Regional Water Board enforcement hearings.
 - (4) Providing copies of inspection reports and other progressive enforcement documentation.
- v. Participation in a Task Force

The Permittees may participate with the Regional Water Board, and other public agencies on an enforcement task force to communicate concerns regarding special cases of stormwater violations by industrial and commercial facilities, and to develop a coordinated approach to enforcement action.

8. Planning and Land Development Program

a. Purpose

- i. Each Permittee shall implement a Planning and Land Development Program pursuant to Part [TBD] 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 stormwater runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of waterbodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21100).
 - (3) Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing Low Impact Development (LID) design principles to mimic predevelopment water balance 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 vectors⁴.
- (7) Prioritize the selection of BMPs to remove stormwater pollutants, reduce stormwater runoff volume, and beneficially use stormwater to support an integrated approach to protecting water quality and managing water resources in the following order of preference:
 - (a) Infiltration, bioretention and/or rainfall harvest and use.
 - (b) Biofiltration.

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 stormwater 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 strip malls 10,000 square feet or more surface area
 - (d) Retail gasoline outlets 5,000 square feet or more of surface area
 - (e) Restaurants (SIC 5812) 5,000 square feet or more of surface area
 - (f) Parking lots 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces
 - (g) Streets, roads, highways, and freeway construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets⁵ to the maximum extent practicable

⁴ Treatment BMPs when designed to drain within 72 hours of the end of rainfall minimize the potential for the breeding of vectors.

⁵ <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>

- (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 [TBD] (Redevelopment Projects) below
- (j) Projects located in or directly adjacent to, or discharging directly to an Environmentally Sensitive Area (ESA), where the development will:
 - (i) Discharge stormwater 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 stormwater pollution, prior to completion of the project(s), are:
 - (a) Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on development categories identified in Part [TBD] (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 stormwater 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 stormwater 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.
- iii. Existing Development or Redevelopment projects shall mean projects that have been constructed or for which grading or land disturbance permits have been submitted and are deemed complete prior to the adoption date of this Order, except as otherwise specified in this Order.
- iv. 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. X). 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 [TBD] 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 [TBD] (Technical Infeasibility or Opportunity for Regional Groundwater Replenishment), Part [TBD] (Local Ordinance Equivalence), or Part [TBD] (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) 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 0.15 inch per hour.
 - (4) 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. Bioretention systems shall meet the design specifications provided in Attachment X to this Order unless otherwise approved by the Regional Water Board Executive Officer.
 - (5) If rainwater harvested for use in irrigation is to be credited toward the total volume of stormwater 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.
 - (6) 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 72 hours.
 - (7) 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.

- (8) Project requirements shall address at a minimum the use of harvested rainwater for non-potable uses including toilet flushing, laundry, and cooling water makeup water. If the municipal or county plumbing code does not specifically address requirements for 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.

ii. Alternative Compliance for Technical Infeasibility or Opportunity for Regional Groundwater Replenishment

- (1) In instances of technical infeasibility or where a project has been determined to provide an opportunity to replenish regional groundwater supplies at an offsite location, each Permittee may allow projects to comply with this Order through the alternative compliance measures process depicted in Table [TBD] and as described in Part [TBD] below.

Table [TBD]. New Development and Redevelopment Projects – Options for Stormwater Management Design (listed in order of preference)

Most Preferred Stormwater Management Options:		
<p>On-site retention of the SWQDv. New Development and Re-development Projects to be designed to minimize the impervious area footprint and to retain stormwater runoff using Low Impact Development designs which may include infiltration, bioretention, and/or rainfall harvest and use.</p> <p>Note: Biofiltration does not provide 100 % retention of the design volume and is not credited under this preferred option.</p>	<p>OR</p>	<p>Offsite regional groundwater replenishment if the following conditions apply:</p> <ul style="list-style-type: none"> • The volume of stormwater runoff used to replenish groundwater must be equal to or greater than the SWQDv. • Must demonstrate that equal benefits to groundwater recharge could not be met on the project site. • Must provide equal or greater benefits to surface water quality in the same

		<p>subwatershed as the proposed project.</p> <p>Note: Must also provide pollutant reduction through treatment of the SWQDv at the project site.</p>
<p align="center">Medium Preferred Options:</p> <p>If it is technically infeasible to retain 100 percent of the SWQDv by one of the preferred options described above, then offsite mitigation may be provided via one of the following Alternative Compliance Measures in conjunction with pollutant reduction through treatment of the SWQDv at the project site.</p>		
<p>Offsite infiltration or bioretention. The following conditions apply:</p> <ul style="list-style-type: none"> • The volume of stormwater runoff retained at the mitigation site must be equal to or greater than the Mv. • Must provide equal or greater benefits to surface water quality in the same subwatershed as the proposed project. 	<p>Offsite groundwater replenishment. The following conditions apply:</p> <ul style="list-style-type: none"> • The volume of stormwater runoff used to replenish groundwater must be equal to or greater than the Mv. • Must demonstrate that equal benefits to groundwater recharge could not be met on the project site. • Must provide equal or greater benefits to surface water quality in the same subwatershed as the proposed project. 	<p>Retrofit an existing developed site to increase the volume of stormwater runoff addressed on-site. The following conditions apply:</p> <ul style="list-style-type: none"> • The increase in the volume of stormwater runoff addressed as a result of the retrofitting of the existing developed site must be equal to or greater than the Mv. • Must provide equal or greater benefits to surface water quality in the same subwatershed as the proposed project. <p>Note: Biofiltration allowed under retrofit provisions.</p>
<p align="center">Least Preferred Option:</p> <p>If it is infeasible to retain 100 percent of the SWQDv using a combination of the above described options, then on-site biofiltration systems, sized to treat 1.5 times the remaining design stormwater runoff volume, may be used.</p>		

- (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 0.15 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 groundwater is within 5 to 10 feet of the surface,
 - (c) Locations within 100 feet of a groundwater well used for drinking water,
 - (d) Brownfield development sites or other locations where pollutant mobilization is a documented concern,
 - (e) Locations with potential geotechnical hazards, or
 - (f) 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 groundwater at an offsite location, the project applicant shall demonstrate why it is not advantageous to replenish groundwater at the project site, and that the alternative measures shall also provide equal or greater water quality benefits to the receiving surface water than the Water Quality/Flow Reduction/Resource Management Criteria in this Part.

iii. Alternative Compliance Measures

When a Permittee determines a project applicant has demonstrated technical infeasibility or is proposing an alternative offsite project to replenish regional groundwater supplies, each Permittee shall require one of the following mitigation options:

- (1) Offsite Projects – Infiltration/bioretention or Groundwater Replenishment
 - (a) Use of infiltration or bioretention BMPs to intercept a volume of stormwater runoff equal to the SWQDv, less the volume of stormwater runoff reliably retained on-site, at an approved offsite project, and
 - (b) Provide pollutant reduction (treatment) of the stormwater runoff discharged from the project site in accordance with the Water Quality Mitigation Criteria provided in Part [TBD].

(c) The required offsite mitigation volume shall be equal to:

Equation No [TBD]:

$$Mv = 1.0 * [SWQDv - Rv]$$

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 stormwater runoff reliably retained on-site

Or

(2) Offsite Project - Retrofit Existing Development

(a) 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 stormwater 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 intercept a volume of stormwater runoff equal to the mitigation volume (Mv) as described above in Equation [TBD], and

(b) Provide pollutant reduction (treatment) of the stormwater runoff from the project site as described in the Water Quality Mitigation Criteria provided in Part [TBD].

(3) 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 groundwater replenishment can be achieved at a location within the expanded HUC-10 subwatershed. The use of a mitigation, groundwater 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 groundwater recharge cannot be met on the project site.
 - (d) Each Permittee shall develop a prioritized list of offsite mitigation, groundwater 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 Executive Officer of the Regional Water Board, the HUC-10 drainage area, as the new development project.
 - (e) Infiltration/bioretention shall be the preferred LID BMP for offsite mitigation or groundwater 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 Executive Officer of the Regional Water Board, if a third-party petitions the Executive Officer to review the project.
 - (h) The project applicant must perform the offsite projects as approved by either the Permittee or the Executive Officer of the Regional Water Board or provide sufficient funding for public or private offsite projects to achieve the equivalent mitigation stormwater volume.

(4) On-site Biofiltration

If offsite mitigation (including groundwater replenishment projects) and retrofit opportunities are not available, then the new project must biofiltrate 1.5 times the portion of the SWQD_v that is not reliably retained on-site, as calculated by Equation No. [TBD].

Equation No [TBD]:

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

(a) Where:

B_v = biofiltration volume

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

R_v = volume reliably retained on-site

(5) Conditions for On-Site Biofiltration

(a) Biofiltration systems shall meet the design specifications provided in Attachment [TBD] to this Order unless otherwise approved by the Regional Water Board Executive Officer.

(b) Biofiltration 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 biofiltration volume (B_v).

(c) Biofiltration systems discharging to a receiving water that is included on the Clean Water Act section 303(d) list of 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 [TBD] for design criteria for underdrain placement to achieve enhanced nitrogen removal.

iv. Water Quality Mitigation Criteria

(1) Each Permittee shall require all New Development and Redevelopment projects that have been approved for offsite mitigation or groundwater replenishment projects as defined in Part [TBD] to also provide treatment of stormwater runoff from the project site. Each Permittee shall require these projects to implement post-construction stormwater BMPs and control measures to reduce pollutant loading as necessary to:

- (a) Meet the pollutant specific benchmarks listed in Table [TBD] at the treatment systems outlet or prior to the discharge to the MS4, or
 - (b) Ensure that the discharge does not cause or contribute to an exceedance of water quality standards at the Permittee's downstream MS4 outfall.
- (2) The benchmarks shall be applied at the outlet from the treatment devices, treatment train or at the project property line and prior to the discharge to the MS4.
- (a) Each Permittee may monitor or shall require the project proponent to monitor the effluent from three qualifying storm events during the first year. If any of the three samples exceed the applicable benchmarks, the Permittee shall require the project proponent to upgrade the treatment system and repeat the monitoring until all three consecutive samples are below the applicable benchmarks, or
 - (b) Each Permittee may determine, based on data from its MS4 outfall monitoring program, that the discharge is not causing an exceedance of water quality standards. In this scenario, the Permittee shall require at a minimum, the project proponent to monitor the treatment system discharge during the first storm during the first two years after project completion and report the data to the Permittee for inclusion in its Annual Report.
 - (c) Each Permittee may allow the project proponent to install flow-through modular treatment systems including sand filters, or other proprietary BMP treatment systems including planter boxes, with a demonstrated efficiency at least equivalent to a sand filter. The sizing of the flow through treatment device shall be based on a rainfall intensity of:
 - (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 [TBD] Benchmarks Applicable to New Development Treatment BMPs

Parameter	Units	Benchmark Levels
Total Suspended Solids (TSS)	mg/L	100
Trash	Pounds	0

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Parameter	Units	Benchmark Levels
E. coli bacteria	counts per 100 mL	235
Total coliform bacteria	counts per 100 mL	10,000
Enterococcus bacteria	counts per 100 mL	104
Pyrethroid Pesticides Permethrin ^{1,6}	µg/L (freely dissolved)	Non-storm water: 0.002 (chronic) Storm water: 0.01 (acute)
Pyrethroid Pesticides Cypermethrin ^{2,6}	µg/L (freely dissolved)	Non-storm water: 0.0002 (chronic) Storm water: 0.001 (acute)
Pyrethroid Pesticides Cyfluthrin ^{3,6}	µg/L (freely dissolved)	Non-storm water: 0.00005 (chronic) Storm water: 0.0003 (acute)
Pyrethroid Pesticides Lambda-cyhalothrin ^{4,6}	µg/L (freely dissolved)	Non-storm water: 0.0005 (chronic) Storm water: 0.001 (acute)
Pyrethroid Pesticides Bifenthrin ^{5,6}	µg/L (freely dissolved)	Non-storm water: 0.0006 (chronic) Storm water: 0.004 (acute)
Total nitrate/nitrite nitrogen	mg/L	10
Lead (total recoverable)	mg/L	Hardness Dependent
Zinc (total recoverable)	mg/L	Hardness Dependent
Copper (total recoverable)	mg/L	Hardness Dependent

¹ Fojut, Ph.D, Tessa L., Caitlin Rering and Ronald S. Tjeerdema, Ph.D., University of California, Davis, Department of Environmental Toxicity. 2011. *Water Quality Criteria Report for Permethrin, Phase III: Application of the pesticide water quality criteria methodology*. Prepared for the Central Valley Water Quality Control Board. September 2011.

² Fojut, Ph.D, Tessa L., Rebecca Mulligan and Ronald S. Tjeerdema, Ph.D., University of California, Davis, Department of Environmental Toxicity. 2011. *Water Quality Criteria Report for Cypermethrin, Phase III: Application of the pesticide water quality criteria methodology*. Prepared for the Central Valley Water Quality Control Board. September 2011.

³ Fojut, Ph.D, Tessa L., Sandra Chang and Ronald S. Tjeerdema, Ph.D., University of California, Davis, Department of Environmental Toxicity. 2010. *Water Quality Criteria Report for Cyfluthrin, Phase III: Application of the pesticide water quality criteria methodology*. Prepared for the Central Valley Water Quality Control Board. March 2010.

⁴ Fojut, Ph.D, Tessa L. and Ronald S. Tjeerdema, Ph.D., University of California, Davis, Department of Environmental Toxicity. 2010. *Water Quality Criteria Report for LambdaCyhalothrin, Phase III: Application of the pesticide water quality criteria methodology*. Prepared for the Central Valley Water Quality Control Board. March 2010.

⁵ Palumbo, Ph.D., Amanda, J., Tessa L. Fojut, Ph.D., Susanne M. Brander and Ronald S. Tjeerdema, Ph.D., University of California, Davis, Department of Environmental Toxicity. 2010.

Water Quality Criteria Report for Bifenthrin, Phase III: Application of the pesticide water quality criteria methodology. Prepared for the Central Valley Water Quality Control Board. March 2010.

6. References cited in Footnotes 1-5 above, were accessed on March 1, 2012
<http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/central_valley_pesticides/criteria_method/>

Table [TBD]. Hardness Dependent Benchmarks Applicable to New Development Treatment BMPs

Hardness (mg/L)	Lead (mg/L)	Copper (mg/L)	Zinc (mg/L)
0-25	0.014	0.0038	0.04
25-50	0.023	0.0056	0.05
50-75	0.045	0.0090	0.08
75-100	0.069	0.0123	0.11
100-125	0.095	0.0156	0.13
125-150	0.122	0.0189	0.16
150-175	0.151	0.0221	0.18
175-200	0.182	0.0253	0.20
200-225	0.213	0.0285	0.23
225-250	0.246	0.0316	0.25
250+	0.262	0.0332	0.26

- (3) In addition to the requirements for controlling pollutant discharges as described in Part [TBD] and the treatment requirements described above, each Permittee shall ensure that the new development or redevelopment will not cause or contribute to an exceedance of applicable Water Quality Based Effluent Limitations established in Part [TBD] pursuant to Total Maximum Daily Loads (TMDLs).

v. Hydromodification (Flow/ Volume/ Duration) Control Criteria

- (1) Each Permittee shall require all New Development and Redevelopment projects identified in Part [TBD] 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 stormwater runoff discharge rates, velocities, and duration. This shall be achieved by maintaining the project's pre-project stormwater runoff flow rates and durations.

(a) Description

- (i) Hydromodification control in natural drainage systems shall be achieved by maintaining the Erosion Potential (E_p) 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 [TBD] - 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.
 - (i) 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 [TBD-- Exemptions to Hydromodification Controls, see below]. The clearing or dredging of a natural drainage system does not constitute an "improvement."
 - (iii) Until the State Water Resources Control Board or the Regional Water Board adopts a final Hydromodification Policy or criteria, Permittees shall implement the Interim Hydromodification Control Criteria, described in Part [TBD] to control the potential adverse impacts of changes in hydrology that may result from new development and redevelopment projects identified in Part [TBD].
- (b) Exemptions to Hydromodification Controls. Permittees may exempt the following New Development and Redevelopment projects from implementation of hydromodification controls where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse hydromodification effects to present and future beneficial uses of Natural Drainage Systems are unlikely:
- (ii) Projects that are replacement, maintenance or repair of a Permittee's existing flood control facility, storm drain, or transportation network.
 - (iii) 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.
- (iv) 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.
 - (v) 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 Part [TBD] above).
- (c) Interim Hydromodification Control Criteria. The Interim Hydromodification Control Criteria to protect natural drainage systems until the State or Regional Water Board adopts a final Hydromodification Policy or criteria are as follows:
- (i) Except as provided for in Part [TBD], 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 stormwater volume from the runoff of the 95th percentile storm, or
 2. The runoff flow rate, volume, velocity, and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour rainfall event. This condition may be substantiated by simple screening models, including those described in *Hydromodification Effects on Flow Peaks and Durations in Southern California Urbanizing Watersheds* (Hawley et al., 2011) or other models acceptable to the Executive Officer of the Regional Water Board, or
 3. The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study and the equation presented in Attachment [TBD].

- (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 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 [TBD].

(d) Final Criteria

- (i) Each Permittee shall develop and implement watershed specific HCPs no later than (TBD) after the State Water Board issues final a Hydromodification Policy or criteria.
- (ii) The HCP shall identify:
 1. Stream classifications
 2. Flow rate and duration control methods
 3. Sub-watershed mitigation strategies
 4. Stream and/or riparian buffer restoration measures, which will maintain the stream and tributary Erosion Potential at 1 unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and prevent damage to stream habitat in natural drainage system tributaries.
- (iii) 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.

vi. 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 [TBD] (Integrated Water Quality/Flow Reduction/Resource Management Criteria).

vii. Annual Report

Each Permittee shall provide in their annual report to the Regional Water Board a list of mitigation project descriptions and pollutant and flow reduction analyses (compiled from design specifications submitted by project applicants and approved by the Permittee(s)) comparing the expected aggregate results of alternative compliance projects to the results that would otherwise have been achieved by retaining on site the SWQDv.

d. Implementation

i. Local Ordinance Equivalence

A local LID ordinance that does not fully incorporate the applicable requirements of this Order, shall be submitted to the Executive Officer of the Regional Water Board for approval, within X months after the Order effective date. The Executive Officer shall assess whether the Permittee has provided reasonable assurance 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 [TBD] (Integrated Water Quality/Flow Reduction Resources Management Criteria) or Part [TBD] (Alternative Compliance Measures for Technical Infeasibility or Opportunity for Regional Groundwater Replenishment) of this Order and, if applicable, Part [TBD] (Hydromodification (Flow/Volume Duration) Control Criteria). Local ordinances that do not strictly conform to the provisions of this Order must be approved by the Executive Officer of the Regional Water Board as being "equivalent" in effect to the applicable provisions of this Order.

ii. Project Coordination

- (1) Each Permittee shall facilitate a process for effective approval of post-construction stormwater 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 (MOU) 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 provide an operation and maintenance plan 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.

- (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 (HOA); or
 - (iv) Any other legally enforceable agreement or mechanism that assigns responsibility for the maintenance of BMPs.
- (2) 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 stormwater BMPs as set forth in Part [TBD] no later than X year 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) 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 annual reports by the other parties demonstrating proper maintenance and operations.
- (e) Undertake enforcement action per progressive enforcement procedures (Part TBD) as appropriate based on the results of the inspection.

9. 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.

- (5) Current construction phase.
- (6) The required inspection frequency.
- (7) The project start date and anticipated completion date.
- (8) Whether the project has coverage under the Construction General Permit.
- (9) The date the Permittee approved the erosion and sediment control plan.
- (10) Post-Construction Structural BMPs subject to Operation and Maintenance Requirements.

f. 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 Erosion and Sediment Control Plan (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 erosion and sediment control plan 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 Stormwater Pollution Prevention Plan (SWPPP). SWPPPs prepared in accordance with the requirements of the Construction General Permit can be accepted as ESCPs for construction sites larger than 1 acre.
 - (3) At a minimum, the ESCP/SWPPP 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-stormwater 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) Rain Event Action Plan (REAP) when soil disturbance activities will be conducted during the wet-weather season.
- (4) The ESCP/SWPPP 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 for projects disturbing 1 acre or more, the ESCP/SWPPP is developed and certified by a *Qualified SWPPP Developer (QSD)*.
 - (6) Each Permittee shall require that all structural BMPs be designed by a California licensed engineer.
 - (7) Each Permittee shall require that for all projects, the landowner or the landowner's agent sign a statement on the Local ESCP/SWPPP to the effect:
 - (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 Local SWPPP to reflect current conditions, or failing to properly and/ or adequately implement the ESCP/ SWPPP 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 Construction General Permit, State Water Board 401 Water Quality Certification, U.S. Army Corp 404 permit, and California Department of Fish and Game 1600 Agreement.
 - (9) Each Permittee shall develop and implement a checklist to be used to conduct and document review of each ESCP/SWPPP.

g. BMP Implementation Level

- i. BMPs must be consistent with the applicable California Stormwater Quality Association (CASQA) Best Management Practices

Handbooks (or the Caltrans Handbook for public transportation related construction projects) tailored to the risks posed by the project. Projects are ranked from Low Risk (Risk 1) to High Risk (Risk 3). Project risks are calculated based on the potential for erosion from the site and the sensitivity of the receiving waterbody. Receiving waterbodies that are listed on the Clean Water Act (CWA) Section 303(d) list for sediment or siltation are considered high risk. Likewise, waterbodies with designated beneficial uses of SPWN, COLD, and MIGR are also considered to be high risk. The combined (sediment/receiving water) site risk may be calculated using the methods provided in Attachment 1 of the Construction General Permit.

- ii. Applicable BMP controls for projects of different sizes are referenced in Tables [TBD] of this Order. Applicable BMPs for enhanced requirements for high-risk sites are referenced in Table [TBD] of this Order. Applicable BMPs for paving projects are described in Tables [TBD] of this Order.
- iii. For construction sites less than one acre, each Permittee shall require the implementation of an effective combination of erosion and sediment control BMPs from Table [TBD] to prevent erosion and sediment loss, and the discharge of construction wastes.
- iv. The applicable BMPs listed in Tables [TBD – TBD] refer to the January 2003 version of the California Stormwater BMP Handbook, Industrial and Commercial. Permittees are authorized to substitute the listed BMPs with the equivalent BMP contained in the most current version of the California Stormwater BMP Handbook, Industrial and Commercial, throughout the term of this Order.

Table [TBD]. Minimum Set of BMPs for All Construction Sites

Minimum Set of BMPs for All Construction Sites	CASQA Handbook	Caltrans Handbook¹
Erosion Controls		
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
Sediment Controls		
Silt Fence	SE-1	SC-1
Sand Bag Barrier	SE-8	SC-8
Stabilized Construction Site Entrance/Exit	TC-1	TC-1
Non-Stormwater Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations	NS-2	NS-2
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-2
Spill Prevention and Control	WM-4	WM-4

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Minimum Set of BMPs for All Construction Sites	CASQA Handbook	Caltrans Handbook¹
Erosion Controls		
Solid Waste Management	WM-5	WM-5
Concrete Waste Management	WM-8	WM-8
Sanitary/Septic Waste Management	WM-9	WM-9

¹ Applies to public roadway projects.

Table [TBD]. Additional BMPs Applicable to Construction Sites Disturbing 1 Acre or More but Less Than 5 Acres

BMPs	CASQA Handbook	Caltrans Handbook¹
Erosion Controls		
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
Sediment Controls		
Fiber Rolls	SE-5	SC-5
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/ or Vacuum	SE-7	SC-7
Storm Drain Inlet Protection	SE-10	SC-10
Additional Controls		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Entrance/ Exit	TC-1	TC-1
Stabilized Construction Roadway	TC-2	TC-2
Entrance/ Exit Tire Wash	TC-3	TC-3
Non-Stormwater Management		
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9

¹ Applies to public roadway projects.

Table [TBD]. Additional BMPs Applicable to Construction Sites Disturbing 5 Acres or More

BMPs	CASQA Handbook	Caltrans Handbook¹
Sediment Controls		
Scheduling	EC-1	SS-1
Check Dam	SE-4	SC-4
Tracking Control BMPs		
Stabilized Construction Entrance/ Exit	TR-1	TC-1
Non-Stormwater Management		

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BMPs	CASQA Handbook	Caltrans Handbook¹
Vehicle and Equipment Maintenance	NS-10	NS-10
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Spill Prevention and Control	WM-4	WM-4

¹ Applies to public roadway projects.

Table [TBD]. Additional Enhanced BMPs for High Risk Projects

BMPs	CASQA Handbook	Caltrans Handbook¹
Erosion Controls		
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
Slope Drains	EC-11	SS-11
Sediment Controls		
Silt Fence	SE-1	SC-1
Fiber Rolls	SE-5	SC-5
Sediment Basin	SE-2	SC-2
Check Dam	SE-4	SC-4
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/or Vacuum	SE-7	SC-7
Sand Bag Barrier	SE-8	SC-8
Storm Drain Inlet Protection	SE-10	SC-10
Additional Controls		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Entrance/Exit	TC-1	TC-1
Stabilized Construction Roadway	TC-2	TC-2
Entrance/Exit Tire Wash	TC-3	TC-3
Advanced Treatment Systems ¹		
Non-Stormwater Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering only under NPDES Permit No. CAG994004)	NS-2	NS-2
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9
Vehicle and Equipment Maintenance	NS-10	NS-10
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-2

BMPs	CASQA Handbook	Caltrans Handbook ¹
Spill Prevention and Control	WM-4	WM-4
Solid Waste Management	WM-5	WM-5

¹ Applies to public roadway projects.

**Table [TBD] 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 stormwater drainage system or receiving waters.
4.	Minimize non stormwater 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 stormwater drainage system or receiving waters.
12.	Protect stockpiles with a cover or sediment barriers during a rain.

h. Construction Site Inspection and Enforcement

- i. Each Permittee shall use its legal authority to implement procedures for inspecting public and private construction projects and conducting enforcement if necessary.
- ii. The inspection procedures shall be implemented as follows:
 - (1) Inspect the public and private construction projects as specified in Table [TBD] below:

Table [TBD]: Inspection Frequencies

Site	Inspection Frequency Shall Occur
a. All sites one (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 ⁶ , (2) within 48 hours of a ½-inch rain event and at (3) least once every two weeks
b. Other sites one (1) acre or more determined to be a significant threat to water quality*	
c. All other construction sites with one (1) acre or more of soil disturbance not meeting the criteria above	At least monthly
d. Construction sites less than one (1) acre in size	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 waterbodies; proximity to receiving waterbodies; non-stormwater discharges; past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular MS4.	

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

(a) Prior to Land Disturbance

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

(b) Grading and Land Development⁷

During grading and land development activities, conduct inspections in accordance with the frequencies specified in Part [TBD] Table [TBD] of this Order.

(c) Streets and Utilities⁸

⁶ www.srh.noaa.gov/forecast

⁷ Activities include cuts and fills, rough and finished grading; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; and stockpiling of select material for capping operations.

⁸ Activities include 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.

During street and utilities activities, conduct inspections in accordance with the frequencies specified in Table [TBD] of this Order.

(d) Vertical Construction⁹

During vertical construction activities, conduct inspections in accordance with the frequencies specified in Table [TBD] of this Order.

(e) Final Landscaping and Site Stabilization¹⁰

At the conclusion of the project, each Permittee shall inspect 10% of all projects 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) Each Permittee shall develop and implement a Progressive Enforcement Policy to ensure that facilities are brought into compliance with all stormwater requirements within a reasonable time period as specified below.

(a) Follow-up inspections

In the event that a Permittee determines, based on an inspection conducted, that an 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 2 weeks from the date of the initial inspection.

(b) Enforcement action

In the event that a Permittee determines that an 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 or through the judicial system.

(c) Each Permittee shall maintain records 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.

(4) Certificate of Occupancy

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

⁹ The build out of structures from foundations to roofing, including rough landscaping.

¹⁰ All soil disturbing activities at each individual parcel within the site have been completed.

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.

(5) Inspection and Enforcement Standard Operating Procedures

Each Permittee shall develop, implement, and revise as necessary, standard operating procedures that identify the inspection and enforcement 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 projects disturbing 1 acre or more, or that are part of a planned development that will disturb 1 acre or more.
- (b) Review of the applicable ESCP/SWPPP and inspection of the construction site to determine whether all BMPs have been selected, installed, implemented, and maintained according to the approved plan.
- (c) Assessment of compliance with each Permittee's legal authority related to stormwater runoff, including the implementation and maintenance of minimum BMPs designated in each Permittee's legal authority.
- (d) Assessment of the appropriateness of the planned BMPs and their effectiveness.
- (e) Visual observation and record keeping of non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.
- (f) Development of a written or electronic inspection report generated from an inspection checklist used in the field.
- (g) 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 [TBD] of this Order.

i. Permittee Staff Training

- i. Each Permittee shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program is 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 plans and the key objectives of the State Water Board Qualified SWPPP Developer (QSD) program. Permittees may provide internal training to staff or require staff to obtain QSD certification.

(2) Erosion Sediment Control/Stormwater 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.

(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.

j. Education Outreach to Development Community

i. Each Permittee shall develop and distribute educational materials to construction site operators.

ii. Each Permittee shall do the following:

(1) Each year, provide information on training opportunities for construction operators on BMP selection, installation, implementation, and maintenance as well as overall program compliance.

(2) Develop or utilize existing outreach tools (i.e. brochures, posters, etc.) aimed at educating construction operators on appropriate selection, installation, implementation, and maintenance of stormwater BMPs, as well as overall program compliance.

(3) Distribute appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. Each Permittee's contact information and website shall be included in these materials.

(4) Update the existing website to include information on appropriate selection, installation, implementation, and maintenance of BMPs, as well as overall program compliance.

10. Public Agency Activities Program

- a. Each Permittee shall implement a Public Agency Activities Program to minimize stormwater pollution impacts from Permittee-owned or operated facilities and activities and to identify opportunities to reduce stormwater 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 [TBD] 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 [TBD] of this Order.
- ii. Each Permittee shall implement and comply with the appropriate Development Construction Program requirements in Part [TBD] 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 the development and implementation of an ESCP. The ESCP shall include an effective combination of erosion and sediment control BMPs from Table [TBD] (see Construction Development Program).
- 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 watershed-based inventory and map of all Permittee-owned or operated (i.e., public) facilities within its jurisdiction that are potential sources of stormwater 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) Public buildings, including schools, libraries, police stations, fire stations, Permittee (municipal) buildings, restrooms, and similar buildings
 - (13) Public parking lots
 - (14) Public golf courses
 - (15) Public swimming pools
 - (16) Public parks
 - (17) Public works yards
 - (18) Public marinas
 - (19) Recycling facilities
 - (20) Solid waste handling and transfer facilities
 - (21) Vehicle storage and maintenance yards
 - (22) Flood control facilities (e.g., debris basins, sediment placement sites)
 - (23) All other Permittee-owned or operated facilities tributary to a waterbody segment subject to a TMDL, where the facility

generates pollutants for which the waterbody segment is impaired.

(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 watershed-based inventory and map.
 - (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 principal products used at each facility and status of exposure to stormwater.
 - (5) MS4 outfalls that receive, or potentially receive discharges from the facility, and corresponding receiving water(s).
 - (6) Identification of whether the facility is tributary to a waterbody segment subject to a TMDL, where the facility generates pollutants for which the waterbody segment is impaired.
 - (7) 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 stormwater discharges.
- iii. Each Permittee shall update its inventory and map 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., property management, land-use approvals, 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. The goals of the existing development retrofitting inventory are to address the impacts of existing development through retrofit projects that reduce the discharges of stormwater pollutants into the MS4 and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards.
- ii. Each Permittee shall identify and inventory existing areas of development (i.e. municipal, industrial, commercial, residential) as candidates for retrofitting. Potential retrofitting candidates shall include but are not limited to:

- (1) Areas of existing development that generate pollutants subject to a TMDL for the receiving water;
 - (2) Areas of existing development tributary to receiving waters that are significantly eroded; and
 - (3) Areas of development tributary to an ASBS or SWQPA.
- iii.** Each Permittee shall evaluate and rank the inventoried areas of existing developments to prioritize retrofitting. Criteria for evaluation may include but are not limited to:
- (1) Feasibility;
 - (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 reasonable assurance program (RAP): 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 RAP.
 - (2) Off-site mitigation for New and Significant Re-development: Each Permittee shall consider high priority retrofit projects as candidates for off-site mitigation projects per Part [TBD].
 - (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 [TBD].

- 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 flood management projects:
 - (1) Develop procedures to assess the impacts of flood management projects on the water quality of receiving waterbodies;
 - (2) Evaluate existing structural flood control facilities to determine if retrofitting the facility to provide additional pollutant removal from stormwater is feasible; and
 - (3) For the Los Angeles County Flood Control District, ensure that that maintenance of earth-bottom flood control channels is conducted in accordance with Regional Water Board Order No. R4-2010-0021.
- iii. Each Permittee shall implement and maintain the general and activity specific BMPs listed in Table [TBD] (BMPs for Public Agency Facilities and Activities) when such activities occur at Permittee-owned or operated facilities and field activities (e.g., project sites) including but not limited to the facility types listed in Part [TBD]

above, and at any area that includes the activities described in Table [TBD], or that have the potential to discharge pollutants in stormwater.

- iv. Any contractors hired by the Permittee to conduct Public Agency Activities (e.g., municipal maintenance) shall be contractually required to implement and maintain the general and activity specific BMPs listed in Table [TBD]. Each Permittee shall conduct oversight of contractor activities to ensure these BMPs are implemented and maintained.

**Table [TBD] - BMPs for Public Agency Facilities and Activities
(from the Caltrans Stormwater Quality Handbook Maintenance Staff Guide
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f. Vehicle and Equipment Washing

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table [TBD] (BMPs for Public Agency Facilities and Activities) for all 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 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 [TBD] (BMPs for Public Agency Facilities and Activities) for all public right-of-ways, flood control facilities and open channels, lakes and reservoirs, and landscape, park, and recreational facilities and activities.
- ii. Integrated Pest Management (IPM) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of

resistant varieties. Each Permittee shall implement an IPM program that includes the following:

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

iii. Each Permittee shall implement the following requirements:

- (1) Comply with the provisions and the monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2011-003-DWQ) (**Aquatic Animal Invasive Species Control**), WQ Order No. 2011-0002-DWQ (**Vector Control**), and WQ Order No. 2004-0009-DWQ (**Weed Control**).
- (2) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
- (3) 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 NOAA¹¹, (2) within 48 hours

¹¹ www.srh.noaa.gov/forecast

of a 1/2-inch rain event, or (3) when water is flowing off the area where the application is to occur. This requirement does not apply to the application of aquatic pesticides described in Part [TBD] above.

- (4) Ensure that no banned or unregistered pesticides are stored or applied.
- (5) 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.
- (6) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
- (7) Store pesticides and fertilizers indoors or under cover on paved surfaces, or use secondary containment.
 - (a) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (b) Regularly inspect storage areas.

h. Storm Drain Operation and Maintenance

- i. Each Permittee shall implement and maintain the activity specific BMPs listed in Table [TBD] 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) 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 7.

iv. Trash Management at Public Events

- (1) Each Permittee shall require the following measures for any event in the public right of way or wherever it is foreseeable that substantial quantities of trash and litter may be generated, including events located in areas that are subject to a trash TMDL:
- (a) Proper management of trash and litter generated; and
 - (b) Arrangement for temporary screens to be placed on catch basins; or
 - (c) Provide clean out of catch basins, trash receptacles, and grounds in the event area within 24 hours 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 15 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 waterbodies.

vii. Additional Trash Management Practices

- (1) In areas that are not subject to a trash TMDL, each Permittee shall install trash excluders, or equivalent devices, on or in catch basins or outfalls to prevent the discharge of trash to the MS4 or receiving water no later than two years after Order adoption date in areas defined as Priority A and Priority B (Part [TBD]) 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 [TBD] may be proposed by the Permittee for approval by the Executive Officer.

viii. Storm Drain Maintenance

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

- (1) Visual monitoring of Permittee-owned open channels and other drainage structures, including debris basins, for debris at least annually.
- (2) Remove trash and debris from open channels and debris basins a minimum of once per year before the wet season.

- (3) Eliminate the discharge of contaminants during MS4 maintenance and clean outs.
- (4) Quantify the amount of materials removed using techniques appropriate for quantifying solid waste and ensure the materials are properly disposed of.

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.
- (3) Each Permittee shall implement controls to limit infiltration of seepage from sanitary sewers to the MS4 where necessary. Such controls must include:
 - i. Adequate plan checking for construction and new development;
 - ii. Incident response training for its municipal 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 municipal staff and contractors conducting field operations on the MS4 or its municipal sanitary sewer (if applicable).
- (4) Each Permittee which owns and /or operates a sanitary sewer system that requires coverage under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ), shall comply with the provisions and the monitoring requirements associated with this Order.

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 water 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 TBD (Discharge Limitations for Dewatering Treatment BMPs), prior to discharge to the MS4.

Table TBD - Discharge Limitations for Dewatering Treatment BMPs¹²

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.

¹² Technology based effluent limits.

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

iii. Road Reconstruction

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

- (1) Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall¹³ 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-stormwater 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.

¹³ A probability of precipitation (POP) of 50% is required.

iv. Parking Facilities Maintenance

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

j. Emergency Procedures

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:

- i. The Permittee shall abide by all other regulatory requirements, including notification to other agencies as appropriate.
- ii. 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.
- iii. Minor repairs of essential public service systems and infrastructure in emergency situations (that can be completed in less than one day) 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 X 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 stormwater quality) on the requirements of the overall stormwater management program to:
 - (1) Promote a clear understanding of the potential for activities to pollute stormwater.
 - (2) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.
- ii. Each Permittee shall, no later than X 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.

11. Illicit Connection and Illicit Discharge 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 [TBD] 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) An up-to-date municipal separate storm sewer system (MS4) map
 - (2) Procedures for conducting a non-stormwater outfall-based monitoring program to detect IC/IDs
 - (3) Procedures for conducting source investigations for IC/IDs
 - (4) Procedures for eliminating the source of IC/IDs
 - (5) Procedures for public reporting of illicit discharges
 - (6) Spill response plan
 - (7) IC/IDs education and training for Permittee staff

b. MS4 Mapping

- i. Each Permittee shall maintain an up-to-date and accurate electronic MS4 map. If possible, the map should be maintained within a GIS. The MS4 map must show the following, at a minimum:
 - (1) The location of all MS4 outfalls within the Permittee's jurisdictional boundary. The contributing drainage area for each outfall should be clearly discernible. Each MS4 outfall shall be given an alphanumeric identifier, which must be noted on the map. If an outfall is owned by another public entity, the name of the entity shall be recorded on the map. Each mapped MS4 outfall shall be located using a geographic positioning system (GPS) and photographs of the outfall shall be taken to provide baseline information to track operation and maintenance needs over time. Per Part [TBD] (non-stormwater monitoring),

additional attribute data are required for those outfalls determined to have persistent dry weather flows.

- (2) The location and length of all open channels and underground MS4 pipes 18 inches in diameter or greater.
- (3) The location and name of all waterbodies receiving discharges from those MS4 outfalls identified in (1).
- (4) All 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.
- (5) Priority areas identified under [Part TBD], below.

- ii. The MS4 map shall be updated annually to reflect current conditions within the MS4.

c. Implementation of Non-Stormwater Outfall-Based Monitoring Program to Detect IC/IDs

- i. Each Permittee shall develop and implement a non-stormwater outfall-based monitoring program consistent with Part [TBD] (non-stormwater outfall-based monitoring program) to detect and eliminate illicit connections and illicit discharges to the MS4. The non-stormwater outfall-based monitoring program shall consist of (1) identification of outfalls with persistent dry weather flows, (2) determination of significant dry weather flows through characterization and field screening, (3) identification of sources of significant dry weather flows, (4) monitoring of unknown or authorized non-stormwater discharges, and (5) annual re-assessment and reporting.
- ii. The non-stormwater outfall-based monitoring program shall be documented with written procedures that provide an explanation of how the program is to be implemented and the procedures must be updated as needed to reflect the Permittee's program.
- iii. Observations and data collected during the implementation of the non-stormwater outfall-based monitoring program shall be maintained in a database or electronic format. The use of a GIS to record observations and data is preferred but not required.
- iv. Each Permittee shall conduct an annual re-assessment of its non-stormwater outfall-based monitoring program to determine whether changes or updates are needed. Where changes are needed, the Permittee shall make the changes in its written program documents and implement these changes in practice.

d. Illicit Discharge Source Investigation and Elimination

- i. Each Permittee shall develop written procedures for conducting investigations to identify the source of all illicit discharges, including procedures to eliminate the discharge once the source is located.
- ii. At a minimum, each Permittee shall conduct an investigation(s) to identify and locate the source within 48 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.
 - (4) If the source of the illicit discharge is found to be a discharge authorized under an NPDES permit the Permittee shall document the source and report to the Regional Water Board within 30 days of determination. No further action is required.
- 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 of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 48 hours of notification. 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. 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 field screening, monitoring and investigations. Resulting enforcement actions shall follow the program's Progressive Enforcement Policy.
 - (2) If the source of the illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall inform in writing both the upstream jurisdiction and the Regional Water Board within 30 days of such determination and provide all characterization and field screening data collected as a

component of the field survey and efforts taken to identify its source.

- 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, the Permittee shall work with the Regional Water Board to 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.

e. Identification and Response to Illicit Connections

i. Investigation

Each Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall complete 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 eliminated within 90 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.

f. Public Reporting of Non-Stormwater 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 sponsored PIPP
 - (2) By participating in one or more Watershed Group sponsored PIPPs
 - (3) Or individually within its own jurisdiction.
- iii. Each Permittee shall include information regarding public reporting of illicit discharges or improper disposal on the signage adjacent to open channels as required in Part [TBD].
- 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 annually 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 annual 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.

g. Illicit Discharge and Spill Response Plan

- i. Each Permittee shall implement an ID and spill response plan for all sewage and other spills that may discharge into the MS4 from any source (including private laterals and failing on-site wastewater treatment systems). The ID and spill response plan shall clearly identify agencies responsible for ID and 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) Investigation of all public and employee ID and spill complaints within 24 hours of receiving the complaint to assess validity.
 - (3) Response to ID and spills for containment within 2 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.
 - (4) 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).

h. 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 and contractors, 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 storm sewer system. Contact information, including the procedure for reporting an illicit discharge, must be included in the Permittee's fleet vehicles that are used by field staff. Training program documents must be available for review by the permitting authority.
- ii.** Each Permittee's training program should address, at a minimum, the following:
 - (1) IC/ID identification, including definitions and numerous examples,
 - (2) investigation,
 - (3) elimination,
 - (4) cleanup,
 - (5) reporting, and
 - (6) documentation.
- iii.** Each Permittee must create a list of applicable staff 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.
- iv.** New Permittee staff members must be provided with IC/ID training within six months of starting employment.

ATTACHMENT TBD

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.

1. Geometry

- a. Bioretention/biofiltration areas shall be sized to capture and treat the design with an 18-inch maximum ponding depth. *The intention is that the ponding depth be limited to a depth that will allow for a healthy vegetation layer.*
- b. Minimum planting soil depth should be 2 feet, although 3 feet is preferred. *The intention is that the minimum planting soil depth should provide a beneficial root zone for the chosen plant palette and adequate water storage for the SWQDv.*
- c. A gravel storage layer below the bioretention/biofiltration soil media is required as necessary to provide adequate temporary storage to retain the SWQDv and to promote infiltration.

2. Drainage

- a. Bioretention and biofiltration BMPs should be designed to drain below the planting soil in less than 48 hours and completely drain in less than 96 hours. *The intention is that soils must be allowed to dry out periodically in order to restore hydraulic capacity needed to receive flows from subsequent storms, maintain infiltration rates, maintain adequate soil oxygen levels for healthy soil biota and vegetation, and to provide proper soil conditions for biodegradation and retention of pollutants.*
- b. *Biofiltration BMPs are designed and constructed with an underdrain. The underdrain is preferably placed near the top of the gravel storage area to promote incidental infiltration and enhanced nitrogen removal. However, if in-situ, underlying soils do not provide sufficient drainage, the underdrain may need to be placed lower in the gravel storage area (within 6 inches of the bottom) to prevent the unit from holding stagnant water for extended periods of time. At many sites, clay soils will drain sufficiently fast, particularly if they are not compacted. Observing soil moisture and surface conditions in the days following a wet period may provide sufficient information for making this decision and may be more directly applicable than in situ or laboratory testing of soil characteristics.*

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¹⁴¹⁴ Dan Cloak, Dan Cloak Environmental Consulting to Tom Dalziel, Contra Costa County, February 22, 2011.

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.
- 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. 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. Waterproof barriers may not be placed on the bottom of the biofiltration unit, as this would prevent incidental infiltration which is critical to meeting the required pollutant load reduction.

5. 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 TBD-1):

Table [TBD] – Sand Texture Specifications

Sieve Size ASTM D422	Percent Passing by Weight	
	Minimum	Maximum
3 /8 inch	100	100
No. 4	90	100

Sieve Size ASTM D422	Percent Passing by Weight	
	Minimum	Maximum
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:
 - $\text{NH}_4:\text{NH}_3 < 3$
 - 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 No. TBD-2:

Table [TBD] – 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 TBD-3).

Table [TBD] – 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.

6. 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

7. 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 TBD

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 species¹⁵.
- 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

¹⁵ Endangered Species Act, 16 U.S.C. §§ 1531–1544: <http://water.epa.gov/lawsregs/guidance/wetlands/eo11990.cfm>

- v. Guidance on the relationship among LID strategies, Source Control BMPs, Treatment Control BMPs, and Hydromodification Control requirements

Staff Working Proposal

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

Los Angeles Regional Water Quality Control Board

TO: Community Water System Operators and Local Fire Departments

FROM: Samuel Unger, P.E. *SU*
Executive Officer

DATE: March 22, 2012

SUBJECT: REISSUANCE OF LOS ANGELES COUNTY MS4 PERMIT – NOTICE OF BOARD WORKSHOP ON PROVISIONS REGARDING AUTHORIZED NON-STORM WATER DISCHARGES, INCLUDING POTABLE WATER SUPPLY AND DISTRIBUTION SYSTEM RELEASES AND FIRE FIGHTING FLOWS

During the on-going development of the new Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit, staff of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) has received a number of requests from community water supply operators and local fire departments for a Board workshop on the topic of authorized non-storm water discharges to the MS4. Board staff has had several conversations with representatives of community water supply systems and fire departments during this time, including a recent meeting on February 23, 2012.

We wish to inform you of an upcoming Board workshop on April 5, 2012. At this workshop, staff will be discussing with the Board the topic of non-storm water discharges into the MS4 and from the MS4 to receiving waters, and present a working proposal for regulating these discharges under the Los Angeles County MS4 Permit. The topic of authorized non-storm water discharges, on which community water suppliers and fire departments have requested a Board workshop, is nested within the topic of non-storm water discharges. As such, staff will be discussing how it intends to address different categories of authorized non-storm water discharges, including the conditions under which they are authorized. We anticipate distributing a staff working proposal on the non-storm water provisions to interested persons prior to the workshop for discussion purposes.

We encourage you to attend the April 5, 2012 Board workshop and provide your input on this topic and on staff's working proposal. Details of the Board workshop are as follows:

**Thursday, April 5, 2012
1:30 PM
The Metropolitan Water District of Southern California
Board Room
700 North Alameda Street
Los Angeles, California**

If you have questions regarding the upcoming workshop or would like to request time to speak, please contact Mr. Ivar Ridgeway, Chief, Storm Water Permitting, at (213) 620-2150. Please share this notice with others who may be interested in this topic.

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

Los Angeles Regional Water Quality Control Board**TO:** LA County MS4 Permittees and Interested Persons
FROM: Deborah Smith,
Chief Deputy Executive Officer**DATE:** March 26, 2012**RE:** CHANGE OF APRIL 5, 2012 BOARD WORKSHOP TOPICS ON REISSUANCE OF LA COUNTY
MS4 PERMIT

Staff of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) previously noticed two topics for the April 5, 2012 Board Workshop on the reissuance of the LA County MS4 Permit. The two topics previously noticed were (1) permit provisions addressing non-storm water discharges through the MS4 and (2) permit provisions to implement total maximum daily loads (TMDLs).

Since that time, Los Angeles Water Board staff released a staff working proposal of permit provisions for the minimum control measures (MCMs) that comprise a Permittee's baseline Storm Water Quality Management Program (SQMP). This staff working proposal was distributed electronically via the Los Angeles Water Board's e-mail notification service on March 21, 2012. In order to provide Permittees and other interested persons an opportunity to comment on this staff working proposal before the Los Angeles Water Board, staff is postponing a workshop on permit provisions to implement TMDLs, and will instead discuss the staff working proposal on the MCMs along with permit provisions related to non-storm water discharges through the MS4 during the April 5, 2012 Board Workshop. The Los Angeles Water Board may provide feedback to staff on these topics; however, no action or voting will take place at this workshop.

A revised agenda for the April 5, 2012 Los Angeles Water Board meeting, reflecting this change of topics, is attached.

As with previous board workshops, Permittees and other interested persons will have the opportunity to make oral comments subject to time limits. Oral comments may be limited to 3 minutes each, at the discretion of the Chair, depending on the number of commenters wishing to be heard. Permittees and interested persons with similar comments or concerns are encouraged to choose one representative to speak on their behalf. Permittees and other interested persons may request additional time to make

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

oral comments prior to the workshop. Requests for additional time must be sent to Ms. Ronji Moffett via e-mail at rmoffett@waterboards.ca.gov no later than **Friday, March 30, 2012 by 4:00 PM** to be considered by the Chair. Please indicate in the subject line "Request for Additional Time – April 5, 2012 Workshop on Reissuance of LA County MS4 Permit."

Staff anticipates scheduling a workshop on permit provisions to implement TMDLs, once a staff working proposal for these provisions has been developed.

If you have any questions about the upcoming April 5, 2012 Board Workshop, please feel free to contact Mr. Ivar Ridgeway, Chief, Storm Water Permitting Unit at (213) 620-2150 or iridgeway@waterboards.ca.gov or Renee Purdy at (213) 576-6622 or rpurdy@waterboards.ca.gov.

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

Los Angeles Regional Water Quality Control Board

REVISED
Notice of Public Meeting
Thursday, April 5, 2012
9:00 a.m.

Meeting Location:

The Metropolitan Water District of Southern California
Board Room
700 North Alameda Street
Los Angeles, California

Agenda

The Regional Board strives to conduct an accessible, orderly, and fair meeting. During the meeting, the Chair will conduct the meeting and establish appropriate rules and time limitations for each 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 Regional Board meeting procedures is included after the last agenda item.

To ensure a fair hearing and that the Regional 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 March 26, 2012. Please consult the agenda description for specific items, 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.** 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 March 1, 2012 Board meeting.**
[Ronji Moffett, (213) 576-6612]
4. **Board Member Communications.**
 - 4.a. Ex Parte Disclosure. Board Members will identify any discussions they may have had requiring disclosure pursuant to Government Code section 11430.40.

MARIA MEHRANIAN, CHAIR | SAM UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

Los Angeles Water Board Meeting Agenda

- 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.a. **Executive Officer's Report.**
[Sam Unger, (213) 576-6605]
6. **Update from State Board.** [Fran Spivy-Weber, (916) 341-5607]
7. **Public Forum.** Any person may address the Board regarding any matter within the Board's jurisdiction provided the matter does not appear elsewhere on this agenda, has not been scheduled to appear on a future agenda, and is not expected to be imminently scheduled for the Board's consideration. Remarks will be limited to three (3) minutes, unless otherwise directed by the Chair. If a person intends to use a PowerPoint presentation or other visual aid, you must contact Ronji Moffett, (213) 576-6612, at the Regional Board at least 48 hours prior to the meeting to arrange for equipment use and be prepared to load any PowerPoint presentation on the computer prior to the meeting to assure the orderly conduct of the meeting.

UNCONTESTED 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. The Chair will determine the appropriate time to consider an item removed from the consent calendar.)

Waste Discharge Requirements that Serve as NPDES Permits**Termination-**

- *8. City of Santa Clarita, Santa Clarita (Drainage Benefit Assessment Areas No. 6 and No. 18); NPDES No. CA0061638 [Jau Ren Chen, (213) 576-6656]

Other Business-

- *9. Consideration of a tentative Resolution approving the Los Angeles County Sanitation Districts' proposed Special Study for the Joint Water Pollution Control Plant. (Comment submittal deadline was March 5, 2012) [Brandi Outwin-Beals, (213) 576-6664]
- *10. Consideration of a tentative Resolution approving the City of Los Angeles' proposed Special Study for the Hyperion Treatment Plant. (Comment submittal deadline was March 5, 2012.) [Brandi Outwin-Beals, (213) 576-6664]
- *11. Consideration of a tentative Resolution approving the City of Los Angeles' proposed Special Study for the Terminal Island Water Reclamation Plant. (Comment submittal deadline was March 5, 2012) [Brandi Outwin-Beals, (213) 576-6664]
- *12. Consideration of a tentative Resolution approving the City of Oxnard's proposed Special Study for the Oxnard Wastewater Treatment Plant. (Comment submittal deadline was March 5, 2012) [Brandi Outwin-Beals, (213) 576-6664]

Los Angeles Water Board Meeting Agenda

Non-NPDES State Discharge Requirements**Renewal-**

- *13. Ventura Regional Sanitation District (Malibu Bay Club Wastewater Treatment Plant), Waste Discharge Requirements Order No. 01-008, CI No. 5774, file No. 72-006; County of Ventura. (Comment submittal deadline was March 9, 2012) [Mercedes Merino, (213) 620-6156]

Termination-

- *14. PanAmerican Seed Company, Order No. 87-93, CI No. 4246, File No. 62-76, Santa Paula. (Comment submittal deadline was March 9, 2012) [Mercedes Merino, (213) 620-6156]
- *15. ConocoPhillips Company - 76 Station No. 6965, Order No. R4-2004-0110, CI No. 8773, Long Beach. (Comment submittal deadline was March 2, 2012) [David Koo, (213) 620-6155]

ACTION ITEMS**Other Business-**

16. Consideration of a tentative Resolution adopting the Petroleum Underground Storage Tank Fund. *Emergency, Abandoned, and Recalcitrant (EAR) Account* Fiscal Year 2012-2013, Annual Priority List for the Los Angeles Region. (The public will be provided the opportunity to comment on this matter.) [Dixon Oriola, (213) 576-6747]

Waste Discharge Requirements and Time Schedule Order-

17. Consideration of revised tentative Waste Discharge Requirements and Time Schedule Order for the California Department of Water Resources (William E. Warne Power Plant), Castaic; NPDES No. CA0059188. (Comment submittal deadline was March 5, 2012) [Jau Ren Chen, (213) 576-6656]

17.1 Waste Discharge Requirements

17.2 Time Schedule Order

Other Business

18. Consideration of tentative Cease and Desist Order requiring the City of Avalon to cease and desist alleged discharges of waste in violation of requirements in Regional Board Order No. R4-2008-0028 and State Water Board Order No. 2006-0003-WQ and to implement actions to achieve wasteload allocations assigned to the City's discharges of waste. (Comment submittal deadline was March 15, 2012) [Russ Colby, (213) 620-6373; L.B. Nye, (213) 576-6785]

INFORMATION *(This matter is for informational purposes only. No voting will take place on this matter.)*

19. Informational overview by the City of Signal Hill's on the City's illicit Connection/illicit Discharge program, sediment control procedures, and treatment control best management practices (BMPs) to comply with the existing Los Angeles County MS4 Permit.

WORKSHOP**NOTE: The Workshop will not begin before 1:30 p.m.**

20. Workshop on the issuance of a new Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit. Staff will make a presentation on provisions related to non-stormwater discharges through the MS4 and ~~the incorporation of TMDL related requirements~~ minimum control measures as outlined in the staff working proposal. Permittees and other interested persons will have the opportunity to make oral comments subject to time limits. *(The Board may provide general feedback to staff on development of the permit; however, no action or voting will take place at this workshop.)* [Renee Purdy, (213) 576-6622; Ivar Ridgeway, (213) 620-2150]

CLOSED SESSION

21. As authorized by the 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]

- 21.1 *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)
- 21.2 *In re Halaco Engineering Company*, United States Bankruptcy Court, Central District of California, Northern Division, No. ND-02-12255 RR [Regarding a CDO and CAO at the Oxnard Property]. (JF)
- 21.3 *In re: Los Angeles Region Water Permit- Ventura County*, Commission on State Mandate Test Claim No. 11-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)
- 21.4 *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)
- 21.5 *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)
- 21.6 *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)
- 21.7 *In re: Upper Santa Clara River Chloride Total Maximum Daily Load Requirements Imposed by the Los Angeles Regional Water Quality Control Board in Resolution R4-2008-0012*. 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)

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- 21.8 *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)
- 21.9 *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)
- 21.10 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;
 - (c) A matter which, based on existing facts and circumstances, the Regional Board is deciding whether to initiate litigation. (JF/FM)
- 21.11 Consideration of the appointment, employment, or evaluation of performance about a public employee. (JF/FM)
22. **Adjournment of Current Meeting.** The next meeting will be held on May 3, 2012 beginning at 9:00 a.m. at the City of Simi Valley Council Chambers, located at 2929 Tapo Canyon Road, 2929 Tapo Canyon Road, Simi Valley, California.

*

NOTICE

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

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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. If any other party demonstrates prejudice resulting from admission of the written testimony, the Chair may refuse to admit it.

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

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

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

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

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

LYRIS MAILING

MSL

RB-AR1414

LIST NAME: Stormwater LA County
 DATE MAILED: 3-26-12

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 11/10/2011 10:16 epi@rioussa.com
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 Danielle K. Morone
 David Nahai
 Donald K. Jensen
 Douglas Prichard
 Daniel Pankau
 David Parkinson
 David Pelser
 Drew Beck
 Daniel Rix
 Daniel Rynn
 Daniel Tupa
 Dustin Bambic
 Deering Volkmann
 Daniel Wall
 Debran Reed

 Elaine Aguilar
 Camie Pickett
 Chris Rowe
 Edward Rogan
 Eddie Isaacs
 Edward Hitti
 Emiko Innes
 Elaine Jeng
 Ernie Mansfield
 Ernesto Marquez
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2/2/2011 11:30	gamah@waterboards.ca.gov	Ginachi Amah
8/22/2009 16:00	gamenu@dpw.lacounty.gov	Geremew Amenu
11/7/2011 11:35	gary@parkwater.com	Gary R. Lynch
7/6/2009 13:37	gcaton@downeyca.org	Gerald Caton
11/21/2011 7:50	gderas@pico-rivera.org	Gladis Deras
11/16/2011 8:45	gderas@sogate.org	Gladis Deras
7/6/2009 13:07	georged@accessduarte.com	Darrell George
11/16/2011 7:55	gfarber@dpw.lacounty.gov	Gail Farber
8/19/2009 14:20	ggearheart@waterboards.ca.gov	Greg Gearheart
11/14/2011 10:30	ggreene@cbwm.org	Gerald Greene
11/7/2011 8:33	ghildeb@dpw.lacounty.gov	Gary Hildebrand
11/4/2011 13:29	gilbert_ogaz@dot.ca.gov	Gilbert Ogaz
5/18/2010 17:06	ginan@ci.commerce.ca.us	Gina Nila
10/18/2011 13:53	gjaquez@dpw.lacounty.gov	Greg Jaquez
7/6/2009 13:09	gkau@cityofinglewood.org	Glen Kau
7/6/2009 13:09	gkorduner@huntingtonpark.org	Gregory Korduner
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3/24/2011 10:59	greg.pawloski@bodycote.com	Greg Pawloski
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11/5/2009 6:46	metalkittiekat@aol.com	Nicole Bullum
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3/16/2012 0:41	miguel@urbansemillas.com	Miguel Luna
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 Los Angeles Regional Water Quality Control Board

TO: Los Angeles County MS4 Permittees and Other Interested Persons

FROM: Renee A. Purdy, Chief *Renee A. Purdy*
Regional Programs Section

DATE: March 28, 2012

SUBJECT: TRANSMITTAL OF STAFF WORKING PROPOSAL ON LA COUNTY MS4 PERMIT -
NON-STORM WATER DISCHARGE PROVISIONS

As staff committed to in previous workshops on the renewal of the Los Angeles County MS4 Permit, attached is a working proposal of the permit provisions related to the **Non-Storm Water Discharge Prohibitions**. Staff of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) is distributing to Los Angeles County MS4 Permittees and other interested persons the attached staff working proposal for preliminary review and discussion purposes only.

Please note the following: Staff will accept both written and oral comments on these working proposals. Please be advised, however, that these staff working proposals neither constitute a "draft permit" or a "proposed permit" as defined in Title 40 Code of Federal Regulations (40 CFR) sections 122.2 or 124.6. Further, distribution of these staff working proposals for review and discussion does not constitute a public comment period pursuant to 40 CFR sections 124.10 or 124.17. Accordingly, while staff will accept and consider written comments on these working proposals, staff does not intend to formally respond to written comments received that pertain to the working proposals. In addition to, or in lieu of, written comments, Permittees and interested persons are also encouraged to make oral comments to staff during telephone conversations, in-person meetings, and/or at the upcoming board workshop on April 5, 2012. Staff looks forward to input on this working proposal from Permittees and other interested persons.

For written and oral comments on this working proposal regarding the Non-Storm Water Discharge provisions to be considered by staff in preparing the forthcoming draft Los Angeles County MS4 Permit, comments need to be made and/or submitted no later than **April 18, 2012**. Written comments should be submitted by e-mail to iridgeway@waterboards.ca.gov and rpurdy@waterboards.ca.gov.

Staff previously released a working proposal regarding the permit provisions for "**Minimum Control Measures**" on March 21, 2012 with a comment deadline of April 6, 2012. In order to provide Permittees and interested persons time following the April 5, 2012 board workshop to finalize comments on the permit provisions for "Minimum Control Measures", staff is **extending the deadline for comments to April 13, 2012.**

Written comments received will be included in the administrative record for the renewal of the Los Angeles County MS4 Permit, but will not be provided to the individual Los Angeles Water Board members. When a draft permit is released, interest persons will be provided an opportunity to submit written comments in compliance with 40 CFR sections 124.10 or 124.17. Consistent with federal regulations, staff will prepare responses to significant comments received on the draft permit submitted in compliance with the public notice and will make comments and responses available to the Los Angeles Water Board members.

Staff looks forward to further discussions on this working proposal. Please do not hesitate to contact Mr. Ivar Ridgeway, Chief, Storm Water Permitting at (213) 620-2150 or myself at (213) 576-6622 if you wish to schedule a meeting with us or if you have any questions or comments.

Attachment

LYRIS MAILING

RB-AR1428

LIST NAME: LA Co MSA
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2/20/2012 13:01 tracy@egoscuelaw.com	Tracy Egoscue
7/6/2009 13:10 trobinson@cityoflamirada.org	Tom E. Robinson
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
4/16/2013 13:32 veronica.seyde@parsons.com	Veronica Seyde
1/24/2011 11:30 vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/27/2012 13:08 vickere.murphy@sen.ca.gov	Vickere Murphy
11/7/2011 11:10 victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39 vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03 vsinghal@baldwinpark.com	Vijay Singhal
2/18/2011 11:31 wade@grahamstudio.net	Wade Graham
6/29/2011 9:59 wcaffrey@vandermostconsulting.com	wade caffrey
12/29/2011 11:17 welchrc@pbworld.com	Robert Welch
11/14/2011 16:14 wgross@lacsdc.org	bill gross
8/6/2012 10:00 wjohnson@dpw.lacounty.gov	William Johnson
7/6/2009 13:52 wrlindinc@aol.com	Wes Lind
8/17/2011 11:33 wynesta@earthlink.net	Wynesta Dale
11/16/2011 8:58 ykwan@lcf.ca.gov	Ying Kwan
7/6/2009 13:35 ys@cityofrh.net	Yolanta Schwartz
12/6/2010 17:34 ysim@dpw.lacounty.gov	Youn Sim
1/30/2013 17:53 zack@waterqualityconsultinggroup.com	Zack Moran
9/17/2010 8:45 zora.baharians@lacity.org	Zora

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Part III. DISCHARGE PROHIBITIONS

A. Non-Storm Water Discharges

1. General Definitions

- a. **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.
- b. **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 (16 November 1990)).
- c. **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 those non-storm water discharges regulated by a separate NPDES permit; the non-storm water discharges specifically identified in Part III.A.3 of this Order; and non-storm water discharges resulting from emergency fire fighting activities (pursuant to 40 CFR § 122.26(b)(2)).
- d. **Authorized Non-Storm Water Discharge:** Authorized non-storm water discharges are certain categories of discharges that are not composed entirely of storm water but contain only minimal amounts of pollutants and therefore do not result in significant environmental effects. (See 55 *Fed. Reg.* 47990, 47995 (16 November 1990)).
- e. **Receiving Water:** A “water of the United States” into which waste and/or pollutants are or may be discharged.

2. Effective Prohibition of Non-Storm Water Discharges. Each Permittee shall, within its respective jurisdiction, effectively prohibit non-storm water discharges into the MS4 and from the MS4 to receiving waters except where such discharges are either specifically authorized by a separate individual or general National Pollutant Discharge Elimination System (NPDES) permit or conditionally authorized in accordance with sections A.3 through A.6 below.

3. Exemptions from Effective Prohibition. The following categories of non-storm water discharges are conditionally authorized as specified below in all areas regulated by this Order with the exception of direct discharges to Areas of Special Biological Significance (ASBS) within Los Angeles County. Exemptions from the effective prohibition on non-storm water discharges into

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the MS4 and from the MS4 directly to an ASBS are identified in section A.4 below.

- a. Those that are regulated by a separate individual or general NPDES permit for non-storm water discharges, including, but not limited to:
 - i. Discharges of non-process waste water regulated by NPDES Permit No. CAG994003, including, but not limited to:
 - (a) Air conditioning condensate;
 - (b) Swimming pool filter backwash water;
 - (c) Swimming pool drainage, where the discharge is not authorized below or is otherwise prohibited by a Permittee; and
 - (d) Groundwater seepage.
 - ii. Discharges of low threat hydrostatic test water¹ regulated by NPDES Permit No. CAG674001;
 - iii. Discharges of ground water from construction and project dewatering² regulated by NPDES Permit No. CAG994004;
 - iv. Discharges of ground water from potable water supply wells³ regulated by NPDES Permit No. CAG994005;
 - v. Discharges of treated ground water from investigation and/or cleanup of volatile organic compound (VOC) contaminated sites regulated by NPDES Permit No. CAG914001;

¹ 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.

² Discharges of ground water from construction and project dewatering include treated or untreated waste water 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 waste water discharges that meet the eligibility criteria and could not be covered under another specific general NPDES permit.

³ Discharges covered by this permit include ground water from potable water supply wells generated during the following activities: ground water generated during well purging for data collection purposes; ground water extracted from major well rehabilitation and redevelopment activities; and ground water generated from well drilling, construction, and development.

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- x. Gravity flow from foundation drains, footing drains, and crawl space pumps, where ground water seepage is not otherwise regulated by a separate NPDES permit;
- xi. Air conditioning condensate, where not otherwise regulated by a separate NPDES permit;
- xii. Dechlorinated/debrominated swimming pool/spa discharges,⁸ where not otherwise regulated by a separate NPDES permit;
- xiii. Dewatering of decorative fountains;
- xiv. Non-commercial car washing by residents or by non-profit organizations;
- xv. Street/sidewalk wash water⁹; and
- xvi. Flows from emergency fire fighting activities (i.e., flows necessary for the protection of life or property).¹⁰

4. Exemptions from Effective Prohibition within an ASBS. The following non-storm water discharges to the MS4 and from the MS4 directly to an ASBS are conditionally authorized pursuant to the California Ocean Plan as specified below, provided that:

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) where not otherwise regulated by NPDES Permit No. CAG674001 or NPDES Permit No. CAG994005. Releases from potable water supplies or distribution systems not otherwise regulated by an existing NPDES permit shall be allowed with the implementation of appropriate and effective BMPs (as specified in Table X and consistent with American Water Works Association guidelines, and/or as required by the Regional Water Board Executive Officer) until such time as a general NPDES permit is adopted that addresses those types of releases.

⁸ Authorized dechlorinated/debrominated swimming pool/spa discharges do not include swimming pool/spa filter backwash or swimming pool/spa water containing bacteria, detergents, wastes, algaecides, or cyanuric acid in excess of 50 parts per million, or any other chemicals including salts from pools commonly referred to as “salt water pools” in excess of applicable water quality objectives.

⁹ Authorized 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. Authorized 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.

¹⁰ Discharges from vehicle washing, building fire suppression system maintenance (e.g., sprinkler line flushing), and other routine maintenance activities are not authorized to be discharged to the MS4.

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- 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)¹¹;
 - ii. Foundation and footing drains;
 - iii. Water from crawl space or basement pumps;
 - iv. Hillside dewatering;
 - v. Naturally occurring groundwater seepage via a storm drain; and
 - vi. Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.
 - b. The discharges fall within one of the categories in sub-part A.3 and are specifically authorized by the Los Angeles Water Board.
 - c. Authorized non-storm water discharges shall not cause or contribute to a violation 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.
- 5. Permittee Requirements.** Each Permittee shall develop and implement procedures to ensure all conditionally authorized non-storm water discharges into the MS4 and from the MS4 into receiving waters identified in sections A.3 and A.4 above comply with the applicable conditions specified in Table X. These procedures shall include, at a minimum, the following:
- a. Procedures for ensuring that all necessary permits and water quality certifications are obtained by a discharger prior to discharge to the MS4 as specified in Table X.
 - b. Procedures for ensuring a discharger has explored and considered alternatives to discharge to the MS4, including for example, water conservation, reuse of water and ground water recharge, and has determined no feasible or economical alternative to discharge to the MS4 exists.

¹¹ *Ibid.*

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- c. Procedures to minimize the discharge of landscape irrigation water into the MS4. For landscape irrigation water to be discharged, each Permittee shall, within its respective jurisdiction:
 - i. Enact a municipal ordinance that specifies landscape irrigation standards to minimize irrigation runoff and eliminate irrigation overspray. The Permittee shall have legal authority to enforce the ordinance and levy fines. In addition, the Permittee may coordinate with the local water purveyor(s), where applicable, to enforce landscape water use efficiency requirements for existing landscaping.
 - ii. Coordinate with the water purveyor(s) within its jurisdiction to develop and implement a work plan that results in a coordinated outreach and education program to minimize the discharge of irrigation water and pollutants associated with irrigation water consistent with Part VI.C. of this Order (Public Information and Participation Program).
6. If the discharger¹² of the non-storm water discharge is not a named Permittee in this Order, the Permittee shall require the discharger to provide advanced notification to the Permittee of the discharge, obtain local permits, conduct appropriate monitoring, and/or implement additional BMPs and/or control measures as a condition of the approval to discharge into the Permittee's MS4, according to its local authorities.
7. Each Permittee shall evaluate the monitoring data collected pursuant to Attachment X (Monitoring and Reporting Program - Non-Storm Water Outfall Based Monitoring), and any other relevant information, and determine whether any of the categories of non-storm water discharges identified in sections A.3 and A.4 above is a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations in Part V. and/or Water Quality Based Effluent Limitations in Part VI.D.

If the Permittee determines that any one of the categories of non-storm water discharges identified in sections A.3 and A.4 above is a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations, the Permittee shall report its findings to the Regional Water Board in its annual report. Based on this determination, the Permittee shall also either:

¹² Dischargers not named a Permittee in this Order may include, but are not limited to, potable water supply and distribution agencies, wastewater treatment agencies/sanitation districts, and other Federal, State, and local governmental entities.

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- a. Prohibit the non-storm water discharge category from entering the MS4 or receiving waters; or
 - b. Impose conditions in addition to those in Table X, subject to approval by the Regional Water Board Executive Officer, on the non-storm water discharge category such that the discharge category will not be a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations; or
 - c. Require the discharger to obtain coverage under a separate State or Regional Water Board permit prior to discharge to the MS4.
8. If a Permittee demonstrates that a specific non-storm water discharge from a potable water supply or distribution system not otherwise regulated by a separate NPDES permit, but required by state or federal statute and/or regulation, caused *[further definition to be provided]* a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, the Permittee shall not be found in violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations for that specific sampling event. Such demonstration must be based on monitoring data from the specific non-storm water discharge, other relevant information regarding the specific non-storm water discharge as identified in Table X, and documentation of the state or federal statute and/or regulation requiring such non-storm water discharge, including the conditions under which the specific discharge was required.
 - a. Upon a demonstration that such a discharge has caused a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, the Permittee shall immediately take actions to:
 - i. Evaluate the potential long-term effects of such continued discharges on the receiving water;
 - ii. Identify alternative discharge pathways to less sensitive receiving waters in coordination with the discharger;
 - iii. Impose conditions in addition to those identified in Table X, subject to approval by the Regional Water Board Executive Officer, on the discharge such that it will not be a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations; and/or

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Table X. Required Conditions for Authorized Non-Storm Water Discharges

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
All Discharge Categories	See discharge specific conditions below.	--	Evaluate alternative means of disposal (e.g., sanitary sewer, land disposal) or opportunities for capture, reclamation, and reuse. Segregate authorized non-storm water discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.
Natural Springs	N/A	N/A	Segregate authorized non-stormwater discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.
Flows from riparian habitats and wetlands	Discharge allowed only if all necessary permits/water quality certifications for water diversions are obtained prior to discharge.	N/A	All necessary permits and water quality certifications must be obtained prior to diverting flows to the MS4. Discharges shall comply with all conditions specified in permits and water quality certifications.
Diverted stream flows	Discharge allowed only if authorized by the State or Regional Water Board.	N/A	Discharges shall comply with all conditions specified by the State or Regional Water Board.

¹³ The general orders/NPDES permits identified are those currently available to dischargers under which authorization to discharge could be provided. Alternatively, a discharger could seek authorization for the non-storm water discharge under an individual NPDES permit.

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Dewatering of lakes	Discharge allowed only if all necessary permit/water quality certifications for dredge and fill activities, including water diversions, are obtained prior to discharge.	N/A	<p>All necessary permits and water quality certifications must be obtained prior to dewatering.</p> <p>Ensure procedures for advanced notification by the lake owner / operator to the Permittee(s) within 72 hours of 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 MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p> <p>Discharges shall be volumetrically and velocity controlled to prevent resuspension of sediments.</p> <p>Measures shall be taken to stabilize lake bottom sediments.</p> <p>Ensure procedures for water quality monitoring of pollutants of concern¹⁴ that may be mobilized by the lake dewatering through the MS4 to a receiving water.</p> <p>Ensure record-keeping of lake dewatering by the lake owner / operator.¹⁵</p>

¹⁴ 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. for the lake and/or receiving water.

¹⁵ Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date of notification, method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Rising ground waters	Discharge from ground water seepage allowed only if authorized under a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	Discharges shall comply with all NPDES permit conditions for the discharge.
Uncontaminated ground water infiltration	N/A	N/A	None
Uncontaminated pumped ground water	Discharge is allowed only if authorized under a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG990002 – Discharges from Utility Vaults and Underground Structures to Surface Waters	Discharges shall comply with all NPDES permit conditions for the discharge. Pursuant to NPDES Permit No. CAG990002, whenever there is a discharge of 50,000 gallons or more from utility vaults and underground structures to the MS4, the discharger (i.e., utility company) shall 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 of the discharge.

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 monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Landscape irrigation using potable water	Discharge allowed if potable landscape irrigation due to runoff 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.	N/A	<p>Implement BMPs, including Integrated Pest Management (IPM), 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>Utilize water delivery rates that do not exceed the infiltration rate of the soil.</p> <p>Promote erosion repair (i.e., cover or repair areas of exposed soils in yards/landscaping).</p>
Landscape irrigation using reclaimed or recycled water	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.	N/A	Discharges must comply with applicable O&M Plans, and all relevant portions thereof, including the Irrigation Management Plan.

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Potable drinking water supply and distribution system releases	<p>Discharge of ground water from potable water supply wells is allowed only if authorized under a separate NPDES permit (see below).</p> <p>Discharge of other potable drinking water supply and distribution releases allowed after implementation of specified BMPs.</p>	N/A	<p>Implement BMPs to prevent introduction of pollutants to potable water supply or distribution system release prior to discharge to the MS4 and receiving water. BMPs shall be consistent with CA-NV American Water Works Association BMP Manual for Drinking Water System Releases and other applicable guidelines.¹⁶</p> <p>Ensure procedures for advanced notification by the water supplier to the Permittee(s) within 72 hours of planned discharge and as soon as possible after an unplanned discharge.</p> <p>Ensure procedures for monitoring of pollutants of concern¹⁷ that may be mobilized by the potable water supply release through the MS4 to a receiving water.</p> <p>Ensure record-keeping by water supplier(s) for all discharges greater than [<i>volume to be determined</i>].¹⁸</p>

¹⁶ See, for example, Awwa Research Foundation and US EPA. Environmental Impacts of Non-Treatment Discharges from Drinking Water Utilities. Prepared by Narasimham Consulting, Inc. (2007); Golden State Water Company Water Pollution Control Program – Potable Water Distribution System Releases for Unincorporated Areas of Los Angeles County (last updated June 2007) and City of Los Angeles Department of Water and Power Pollution Prevention Plan for Water System Discharges (last updated April 2008).

¹⁷ 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. for the receiving water.

¹⁸ Permittees shall require that the following information is maintained by the water supplier(s) for all discharges (planned and unplanned) greater than [*volume to be determined*]: name of discharger, date of notification (for planned discharges), method of notification, alternatives to discharge considered and justification for finding of infeasibility of capture and reuse or ground water infiltration, 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, total number of gallons captured for reuse or infiltrated to ground water, type of dechlorination equipment used, type of

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			<p>To be discharged, this type of water shall be dechlorinated using aeration and/or sodium thiosulfate and/or other appropriate means. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Discharges from water lines and potable water sources shall be pH adjusted if necessary and be within the range of 6.5 and 8.5.</p> <p>Discharges from water lines and potable water sources shall be volumetrically and velocity controlled to prevent resuspension of sediments.</p> <p>BMPs such as sand bags or gravel bags, or other appropriate means, shall be utilized to prevent sediment transport.</p> <p>Immediately prior to discharge, the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p> <p>All debris and sediments in the flow path that are trapped by the BMPs shall be collected and disposed of in a legal and appropriate manner.</p>
	<p>Discharge of potable water used in hydrostatic testing allowed only if: 1) the discharger documents in its record-keeping that</p>	<p>NPDES No. CAG674001 - Discharges From Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</p>

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 monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
	<p>potential uses of the hydrostatic test water and potable water were considered to ensure use to the fullest extent possible and in compliance with Article 10, Section 2 of the California Constitution, and 2) authorized by a separate NPDES permit.</p>	<p>Angeles and Ventura Counties</p>	
	<p>Discharges from activities that occur at wellheads, such as well construction, well development (e.g., aquifer pumping tests, well purging), or major well maintenance are allowed only if authorized by a separate NPDES permit.</p>	<p>NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994005 – Discharges of Ground Water from Potable Water Supply Wells to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</p>

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Gravity flow from foundation drains, footing drains, and crawl space pumps	Discharge is allowed only if authorized by a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG990002 – Discharges from Utility Vaults and Underground Structures to Surface Waters	Discharges shall comply with all NPDES permit conditions for the discharge.
Air conditioning condensate	Discharge is allowed only if authorized by a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	Discharges shall comply with all NPDES permit conditions for the discharge.
Dechlorinated/debrominated swimming pool/spa discharges	Discharges allowed after implementation of specified BMPs. Pool or spa water containing copper-based algaecides is not allowed to be discharged to the MS4.	N/A	Implement BMPs and controls to prevent introduction of pollutants prior to discharge to the MS4 and receiving water. 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. Swimming pool water shall not contain any

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			<p>detergents, wastes, algaecides, or cyanuric acid in excess of 50 parts per million, 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 and prevent resuspension of sediments.</p> <p>Ensure procedures for advanced notification by the pool owner to the Permittee(s) within 72 hours of planned discharge.</p> <p>Immediately prior to discharge, the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p>
	<p>Discharges of cleaning waste water and filter backwash allowed only if authorized by a separate NPDES permit.</p>	<p>NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</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.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Dewatering of decorative fountains	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Fountain water containing copper-based algaecides is not allowed to be discharged to the MS4.</p> <p>Fountain water containing dyes is not allowed to be discharged to the MS4.</p>	N/A	<p>Implement BMPs 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 prevent resuspension of sediments.</p> <p>Immediately prior to discharge, the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p>
Non-commercial car washing by residents or by non-profit organizations	Discharges allowed after implementation of specified BMPs.	N/A	<p>Implement BMPs to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Minimize the amount of water used by turning off nozzles or kinking the hose when not spraying a car, and by using a low volume pressure washer.</p> <p>Use biodegradable, phosphate free detergents and non-toxic cleaning products.</p> <p>Where possible, wash cars on a permeable surface where wash water can percolate into the ground (e.g. gravel or grassy areas).</p> <p>Create temporary berms or block off the storm</p>

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			<p>drains. Use pumps or vacuums to direct water to pervious areas.</p> <p>Empty buckets of soapy or rinse water into the sanitary sewer system (e.g., sinks or toilets).</p>
Street/sidewalk wash water	Discharges allowed after implementation of specified BMPs.	N/A	<p>Implement BMPs to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Sweeping should be used as an alternate BMP whenever possible and sweepings should be disposed of in the trash.</p> <p>BMPs shall be in accordance with Regional Water Board Resolution No. 98-08 that requires: 1) removal of trash, debris, and free standing oil/grease spills/leaks (use absorbent material if necessary) from the area before washing, 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, and 3) in areas of unsanitary conditions, collection and diversion of street and alley wash water to the sanitary sewer. Each Permittee is required to implement (3) in areas where the congregation of transient populations can reasonably be expected to result in a significant threat to water quality.</p>

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹³	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Flows from fire fighting activities	Discharge allowed only when necessary for the protection of life or property.	N/A	Flows resulting from emergency fire fighting necessary for the protection of life or property do not require implementation of specific BMPs.
	Discharges resulting from training activities, which simulate emergency responses, are allowed after implementation of specified BMPs.	N/A	<p>Live and simulated fire training should be conducted, where feasible, in facilities where runoff controls protecting the MS4 have been engineered and built into the facility.</p> <p>Direct water flows to landscaped, greenway or green belt areas whenever possible.</p> <p>Survey the area prior to the training exercise to ensure that debris will not enter the MS4 and receiving water as a result of the flows generated during the drill.</p> <p>When practicable, divert flows to the sanitary sewer with the permission of the local sewer agency.</p> <p>Use fog streams or straight streams for short durations when practicable.</p> <p>Use low volume nozzle settings.</p> <p>If training activities involve the use of foam, block off all potentially affected MS4 inlets with plastic sheeting and sandbags or temporary berms to prevent discharge of foam or other additives to the MS4 and receiving water.</p>

N/A – Not Applicable



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

SIGN-IN SHEET

Board Meeting
 April 5, 2012

RB-AR1461

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
KATHLEEN MCGOWAN	KATHLEEN. ENUSE@VERIZON.NET CONSULTANT	310-373-0330	
MATT CARPENTER	NEWMAN LAND	mcarpenter@newhall.com	
Holly Schroeder	BLT	hschroeder@bigken.org	X
Shannon Bishop	sbishop@lacsqa.org	Jlivesey@wpw.lacounty.gov	✓
Yandy Livesey	LACDOW		
Fresly Bonilla	CITY OF CERRITOS fbonilla@cerritos.us	(562) 916-1229	✓
James Carra	El Segundo F.O	jcarra@elsegundo.org	✓
TONY LEWIS	LOS ANGELES COUNTY FIRE	(323) 890-4135	✓



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

SIGN-IN SHEET

Board Meeting
 April 5, 2012

RB-AR1462

Name	Mail Address	E-Mail Address or Telephone Number	Add Name to Mail List
Mike Slag	415 Diamond St Richmond, CA <small>City of Richmond Blvd</small>	(310) 319-0611 MikeSlag@verizon.net	
Janna Masi	5823 Rickenbacker Rd. Commerce, CA 90040	323 890 4242	
Jim Ciampa	301 N. Lake Ave., 10th Floor Pasadena, CA 91101	jciampa@lagelab.com	✓
Cody Howins	RHA Consulting Group 398 Lemon Creek Blvd. Walnut, CA 91789	chowing@rhaconsulting.com	
Melvin Mathews	Kinnelon Friggation Distrac P.O. Box 5578, Pasadena 91117	melmathews@earthlink.net	✓
JIM FRANEY	2000 HUNTINGTON BLVD, SAN MARINO SAN MARINO FIVE 91108	JFRANEY@SMFD.US	
Heather McCard	27300 Ulenworth 91733	hmccard@earthlink.net	
Stephen Mejia	Member of the Public	55mejia.ca@live.com (323) 810-5651	✓



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

SIGN-IN SHEET

Board Meeting
 April 5, 2012

RB-AR1463

Name	Mail Address	E-Mail Address or Telephone Number	Add Name to Mail List
Richard Watson	Richard Watson & Associates 21422 Vista Lane Mission Viejo, CA 92691	r.watson@rwaplaning.com 949.855.6272	
Pennis Luppens	City of Santa Clarita	sluppens@SantaClarita.com	
Donna Yamini	DSY Eastern Properties, LLC for 5810 Cecilia Ave.	dyamini@yamini-law.com 310-650-6364	
Tha Yin	2990 Pacific Ave. Long Beach, CA 90806	tha.yin@netscope.net (562) 453-9182	
LEE HUANG	CITY OF LA	LEE.HUANG@CLACITY.ORG	
Harold Williams	HCW	haroldwms@gmail.com	
Tashana Gaur	Santa Monica Baykeeper 100 Broadway Ste 105 Santa Monica 90401	tgaur@smbaykeeper.org	
Baylor Gibson	Environmental Engineering	bgibson@ucla.edu	



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

SIGN-IN SHEET

Board Meeting
 April 5, 2012

RB-AR1464

Name	Mail Address	E-Mail Address or Telephone Number	Add Name to Mail List
Steve Zacks	Lehigh Hanson, 601 Aspen Circle, Oakland 94612	Steve.Zacks@hanson.com	yes
Mark Parnford	City of Orland		
NEILL BROWER	JMISM 1900 AVE. OF STARS, 7TH FLOOR LOS ANGELES 90067	nbte@jimb.com	yes
Ann Heil Joe Gully Alex Steele	1955 Workman Mill Rd Whittier CA 90601		NO
Tony Goff	Calleguas, near Thousand Oaks CA 2100 Olson Road	tgooff@callguss.com	no.
Rene Juarez	900 W. Rosecrans Ave. Compton, CA 90222	1012900@sbcglobal.net	yes
Hannah Koo Bruce Hamamoto	LA County Public Works 900 S. Fremont Ave Alhambra		No.
Ashli Desai	720 Wilshire Blvd., Suite 204 Santa Monica, CA 90401	Ashli@lusa.com	no



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

SIGN-IN SHEET

Board Meeting
 April 5, 2012

RB-AR1465

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail/List
VALICO Aubrey	Connect	allen@connect-spi.com 310-850-1736	✓
Heather Maloney	City of Monrovia & LA Permit Group	hmaloney@climaticwa.ca.us 626 9325577	✓
John Dettie	Torrance & LA Permit Group	jdettie@torranceca.gov 310 618 3059	✓
Jez Bellomo	Cities of Azusa Hills & Westlake Village	bellomo@willdun.com 805 279 6856	✓
Julie Carver	City of Pomona		
Meg McWade	City of Pomona		
Vivian Castro	city of CORVU	vcastro@covmca.org	✓
Nicole Solano	City of Covina		

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

SPEAKER REQUEST CARD

Date: 4-5-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 20
- 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 LA
 Representing Self
 Representing: City of LA - Sanitation

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: 4/5/2012

Non SW

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 20
- 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 Parsegian
 Representing Self
 Representing: Office of the State Fire Marshal

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: 4-5-12

Non, SW

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 20
- 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: KEVIN SMITH, FIRE CHIEF EL SEGUNDO FIRE DEPT.
 Representing Self
 Representing: LOS ANGELES AREA FIRE CHIEFS ASSOC.
THE FIRE CHIEFS OF THE 31 FIRE DEPTS. IN LA COUNTY

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: 4/5/12

Non - SW

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 20
- 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. 20
- I oppose Agenda Item No. _____

Name: ANDY BILL
 Representing Self
 Representing: 24/7 FIRE PROTECTION

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: 4-5-12

I wish to speak during Public Forum on a non-agenda item.

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20 *Non*

In Support In Opposition

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: Ray Tahir

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

SPEAKER REQUEST CARD

Date: 4/5/12

Non - Stormwater

I wish to speak during Public Forum on a non-agenda item.

I wish to speak during the Board Meeting: MS4 workshop

I wish to speak on Agenda Item No. 20

In support In Opposition

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: Bart Koch

Representing Self

Representing: metropolitan water district

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

SPEAKER REQUEST CARD

Date: 4/5/12

Non SW

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20 (MS4 workshop)
 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: Marty Adams

Representing Self
 Representing: Los Angeles Dept. of Water & Power

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: 4/5/11

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20
 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 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

RB-AR1470
1 minutes

SPEAKER REQUEST CARD

Date: 4-5-12

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20 MS4 Permit Workshop
 I wish to speak during Public Forum on a non-agenda item. (non stormwater discharges)

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: Gary Hildebrand, Los Angeles County Flood Control District
 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

SPEAKER REQUEST CARD

Date: 4/5/12

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20 Non Storm Water
 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 Kimbrough
 Representing Self
 Representing: ACWA / AWWA / CWA 12 min.

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: 4/5/2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. ~~18~~ and 20 (Non-Stormwater)
- 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: Tatiana Gaur
 Representing Self
 Representing: Santa Monica Baykeeper

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: April 5, 2012

MCM

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. MSU Public Workshop
- 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: Holly Schroeder
 Representing Self
 Representing: Building Industry Association

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

★ 16 minutes granted

Date: 4/5/12

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20 (MS4) - Minimum Control Measures
 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 and Noah Garrison

Representing Self
 Representing: Heal the Bay and NRDC and Santa Monica Bay keepers

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: 05 April 2012

M C M

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: 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: April 15, 2012

MCM

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 1154 Public workshop
- 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 Grey

- Representing Self
- Representing: 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
Los Angeles Regional Water Quality Control Board

1 minute

SPEAKER REQUEST CARD

Date: 4-5-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 20 MCM'S
- 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: RAY TAHIR

- 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

RB-AR1474
7 minutes

SPEAKER REQUEST CARD

Date: 4/5/12

I wish to speak during Public Forum on a non-agenda item.

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20

MS4
(Permit Workshop)
minimum control
measures only

In support In Opposition

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: Frank Wu

Representing Self

Representing: County of LA

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

15 minutes

SPEAKER REQUEST CARD

Date: 4-5-12

I wish to speak during Public Forum on a non-agenda item.

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20

MCM'S

In Support In Opposition

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: LA Permit Group (Aeather Mahoney, Joe Bellomo, John Petthe)

Representing Self

Representing: LA Permit Group

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

SPEAKER REQUEST CARD

Date: 09/05/12

I wish to speak during Public Forum on a non-agenda item.

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20 (MS4)

In Support In Opposition

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: MICHAEL BLUM

Representing Self

Representing: MALIBU SURFING ASSOCIATION

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: 4/5/12

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 20 (MS4 workshop)
 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: Katherine Rubin

Representing Self

Representing: Los Angeles Dept. of Water & Power

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 min

SPEAKER REQUEST CARD

Date: 4/5/2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 20 (MS4 Workshop)
- 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: Tatiana Gaur

- Representing Self
- Representing: Santa Monica Baykeeper

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: 4-5-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 20 Minimum Control Measures
MS4 Workshop
- 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: Stephen Mejia

- Representing Self
- Representing: _____

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

Los Angeles MS4 Permit: Board Workshop

Metropolitan Water District

April 5, 2012

Storm Water Management Program: Minimum Control Measures

- Outlined in 40 CFR 122.26(d)(2)(iv)
 - Industrial / Commercial Program
 - Development Construction Program
 - Illicit Connections/Illicit Discharges Elimination Program
 - Public Agency Activities Program
 - New Development/Redevelopment Program
 - Public Information and Participation Program

Minimum Control Measures Customization

- Staff working proposal represents baseline, or default requirements
- Permittees may propose *customized actions* to achieve equivalent pollutant control
 - Based on water quality conditions in the area under the Permittee's jurisdiction or within the watershed management area
 - Executive Officer approval required

Minimum Control Measure - Public Information and Participation Program

- Increase public awareness and knowledge about the adverse impacts of storm water pollution, and change the behavior of target audiences to reduce pollution.
- Flexibility to customize based on water quality issues in implementation area
- Implementation scale
 - Individual jurisdiction
 - Watershed
 - County wide

Public Information and Participation Program – Key Elements

- Public Participation
 - Mechanisms for public reporting
 - Events to involve the public in pollution prevention and clean-up
- Residential Outreach
 - PSAs/advertising campaigns addressing targeted issues
 - Distribute activity specific educational materials at retail locations
 - Provide schools with educational materials on stormwater pollution (*"Erase the Waste" or CEEIN materials may be used*)
 - Maintain website with educational materials / links

Minimum Control Measure – Industrial/Commercial Sources

- Ensure implementation of BMP and eliminate illicit connections/discharges from industrial/commercial facilities to control the discharge of pollutants to the MS4

- Flexibility to customize based on
 - Inspection history
 - Industrial sectors
 - Subwatershed areas

Industrial/Commercial Facilities Control Program – Key Elements

- Watershed-based database of all industrial and commercial facilities
- Outreach & business assistance program
- Two inspections of all designated industrial/commercial facilities within 5 years
 - Ensure BMP implementation (CASQA BMP manual)
 - Verify permit coverage and No Exposure Condition (if Necessary)
- Progressive enforcement, where necessary
- Significant Difference from 2001
 - No corporate outreach
 - Prescriptive BMP implementation (CASQA manual)

Minimum Control Measure - New Development and Redevelopment

- Minimize the impacts of development and significant redevelopment projects on water quality and hydrology
- Flexibility to customize through incentives for replenishing groundwater and retrofitting existing development
- Key Requirements
 - On-site retention of the storm water runoff volume resulting from the 85th percentile, 24-hour storm or the 0.75 inch 24-hour storm, whichever is greater
 - Off-site mitigation required where on-site retention is technically infeasible

Minimum Control Measure- New Development and Redevelopment

■ Storm Water Management Options

- Most Preferred: On-site retention or Off-site regional groundwater replenishment
- Medium Preferred: Off-site infiltration/bioretention or Retrofit of existing development (e.g. green streets)
- Least Preferred: On-site biofiltration systems, sized to treat 1.5 times the water quality design volume that could not be addressed by any of the other management options

Minimum Control Measure- New Development and Redevelopment

- Significant Differences from 2001
 - Prioritization of on-site retention
 - The allowance for groundwater replenishment projects and retrofit projects in lieu of on-site retention
 - Prioritization of off-site retention over on-site biofiltration
 - Greater specificity of biofiltration BMP design
 - Requirement to monitor effectiveness of treatment BMPs

Minimum Control Measure- New Development and Redevelopment

Hydromodification

- Applies to “Natural Drainage Areas”
- Requirements
 - On-site retention of 95th percentile, 24-hour storm, or
 - BMP implementation to ensure the runoff flow rate, volume, velocity, and duration do not exceed pre-development condition for 2-year, 24-hour rainfall event
 - The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study
- Significant Difference
 - The inclusion of very specific and detailed hydromodification requirements

Minimum Control Measure – Development Construction Program

- Ensure implementation of BMPs to reduce the contribution of pollutants from construction activities to the MS4

- Key Requirements
 - Inventory of grading permits, encroachment permits, demolition permits, building permits, or construction permits
 - Development, review and written approval of a Erosion and Sediment Control Plan (ESCP)
 - BMP implementation (per CASQA or Caltrans manual)
 - Education outreach for construction site operators

Minimum Control Measure – Development Construction Program

- Significant Difference(s)
 - Electronic Inventory
 - Elimination of Local SWPPP Requirement
 - Prescriptive BMP implementation (e.g. CASQA manual and Caltrans Manual)
 - Tiered BMP Approach
 - e.g. Non-storm water management listed for larger sites
 - Risk Level BMP Implementation
 - e.g. Sites discharging to sediment/siltation require enhanced BMPs
 - Inspection frequency related to risk level

Minimum Control Measure –Illicit Connections and Illicit Discharges Elimination

- Effectively prohibit non-storm water discharges to the MS4
- Key Requirements
 - MS4 mapping
 - Implementation of Non-Stormwater Outfall-Based Monitoring Program to Detect IC/IDs
 - Development procedures for conducting source investigations for IC/IDs
 - Development of procedures for eliminating for IC/IDs
 - Mechanism for public reporting of illicit discharges
 - Spill response plan

Minimum Control Measure –Illicit Connections and Illicit Discharges Elimination

- Significant Difference(s)
 - Elimination of illicit connection screening for all MS4 pipes of a given size
 - Use of field sampling/monitoring to identify potential ICs/IDs
 - Development of a protocol to eliminate ICs/IDs

Minimum Control Measure – Public Agency Activities Program

- Minimize storm water pollution impacts from permittee owned or operated facilities and activities

- Key Requirements
 - Maintain an inventory and map of all Permittee-owned or operated facilities

 - Implement activity specific BMPs (such as catch basin cleaning, open channel maintenance, street sweeping, and appropriate pesticide application)

 - Conduct inventory of retrofitting opportunities

 - Training of employees and contractors

Minimum Control Measure – Public Agency Activities Program

- Significant Difference(s)
 - Implementation of prescriptive BMPs (e.g Caltrans Manual)
 - Implementation of an Integrated Pesticide Management Program
 - Inventory of retrofitting opportunities



LA County MS4 Permit Reissuance Board Workshop

Non-Storm Water Discharges
April 5, 2012

LA County MS4 Permit Outline

Discharge Prohibitions

Part 1

- **Non-Storm Water Discharge Prohibition**✓

Effluent Limitations

Part 7

- TMDL Water Quality Based Effluent Limitations (see “TMDL Provisions” below)

Receiving Water Limitations

Part 2

- Applicable numeric and narrative water quality objectives/criteria for the receiving water

Special Provisions

Part 4

- Watershed Management Programs
- **Minimum Control Measures**✓
- TMDL Provisions

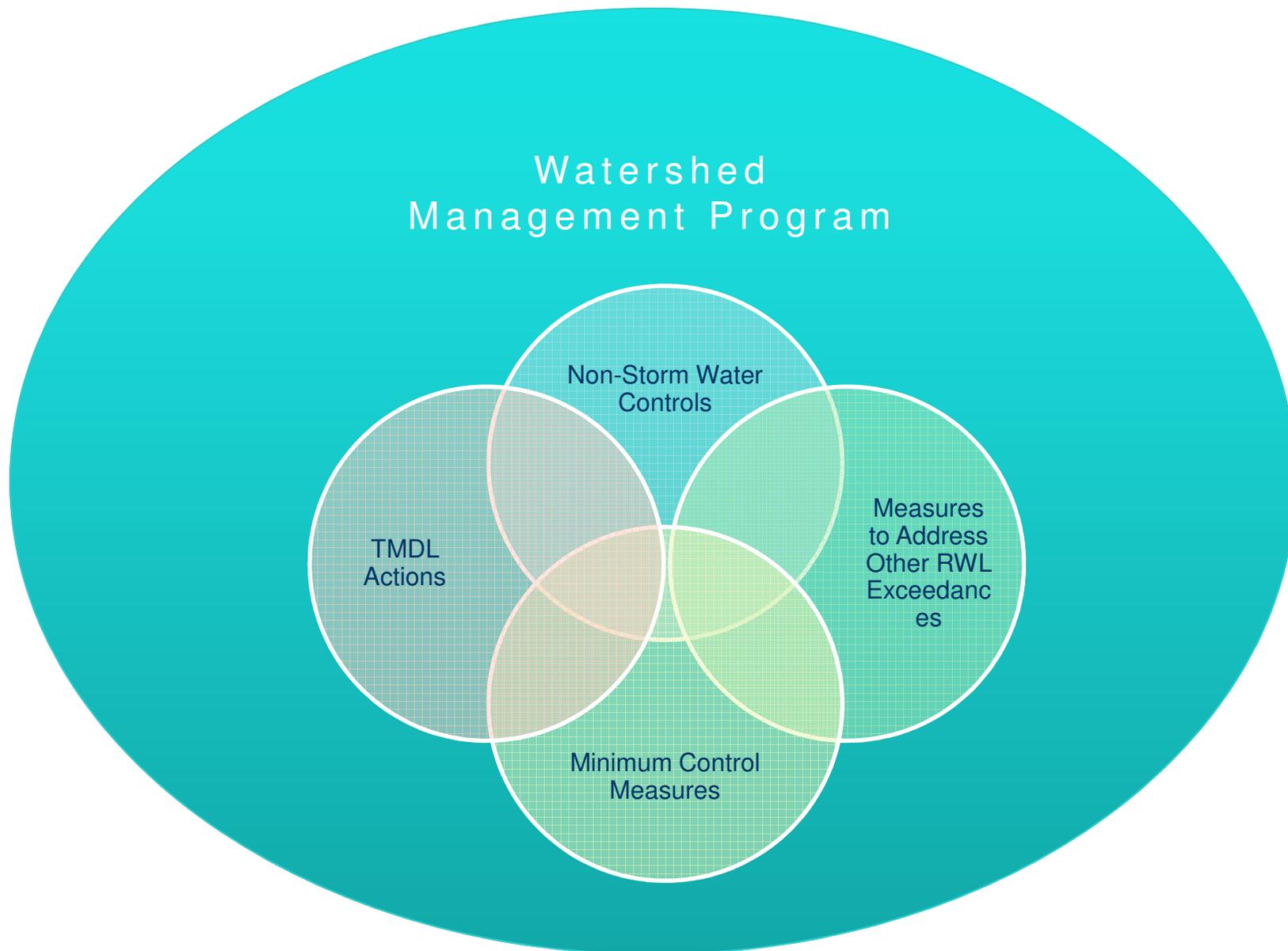
Standard Provisions

Part 6

Monitoring and Reporting Provisions

Attachment

PERMIT STRUCTURE



Background

- Non-storm water discharges = discharges not composed entirely of storm water
- MS4 permits must effectively prohibit non-storm water discharges into MS4s
- How?
 - Regulate non-storm water discharges to the MS4 under separate NPDES permit
 - Implement management program to eliminate illicit discharges into MS4

Background

- What about non-storm water discharges that commonly occur in urban environments?
- Some exemptions allowed
 - Discharges covered under an NPDES permit
 - Categorical exemptions
 - Municipalities may need to impose controls/BMPs
 - Discharge only allowed if not a source of pollutants

Background (cont.)

- Order No. 01-182
 - Non-storm water discharge prohibition
 - IDDE program requirements
 - List of exempted non-storm water discharges
 - Categorical exemptions (e.g., natural flows, emergency fire fighting , urban)
 - Discharges covered under an NPDES permit

Evaluation of Current Approaches

- IDDE program effectiveness
 - Review of annual reports
 - Inspections
- Results of dry-weather monitoring data from mass emission stations
 - Based on annual reports from 2005 to 2011
 - Provides 15 dry-weather data sets for each station

Results of IDDE Program Evaluation

- Widespread presence of persistent non-storm water discharges
 - Poor understanding of the source(s) and characteristics
 - Limited actions to address these persistent discharges
- Widespread exceedances of WQS during dry weather

Summary of Evaluation

- More detailed provisions needed to:
 - Implement effective controls on exempted categories of non-storm water discharges
 - Evaluate potential impacts from exempted categories
 - Take action if a non-storm water discharge is identified as a source of pollutants

Working Proposal - 1

- All exempted categories still included, e.g.
 - Potable water supply discharges
 - Fire fighting flows
- Table of conditions/BMPs that must be met for discharge to be allowed
- Requirements to support Permittees' authority to require discharger to provide notification, conduct monitoring, and implement BMPs

Working Proposal - 2

- Provision for Permittees to evaluate monitoring data to assess whether any exempted discharge is a source of pollutants
- Provisions requiring Permittees to take action if an exempted discharge is a source of pollutants
 - Prohibit the discharge
 - Impose additional controls
 - Require discharger to obtain coverage under a separate NPDES permit

Working Proposal – 3

Potable Water Supply Discharges

- Often required by state or federal regulations
- If a potable water supply discharge caused an exceedance of a water quality standard, the MS4 Permittee would not be found in violation of the receiving water limitation
 - Demonstration required – based on monitoring data from the discharge and other information

Working Proposal - 3 (cont.) Potable Water Supply Discharges

- Follow-up action by MS4 Permittee
 - Evaluate potential long-term effects of continued discharges
 - Identify alternative discharge pathways in coordination with discharger
 - Impose additional controls
 - Require discharger to obtain coverage under a NPDES permit

Conclusion

- Addition of more specific conditions/BMPs for exempted non-storm water discharges similar to Ventura County MS4 Permit
- More explicit procedures for evaluating exempted discharges and taking action if they are a source of pollutants
- Provisions to address concerns regarding potable water supply discharges and fire fighting flows



Comments on the Working Proposals for Minimum Control Measures and Non- Stormwater Discharges

Shahram Kharaghani, PhD, PE, BCEE

City of Los Angeles

Watershed Protection Division

April 5, 2012

City of LA Supports a Watershed Approach for the Permit

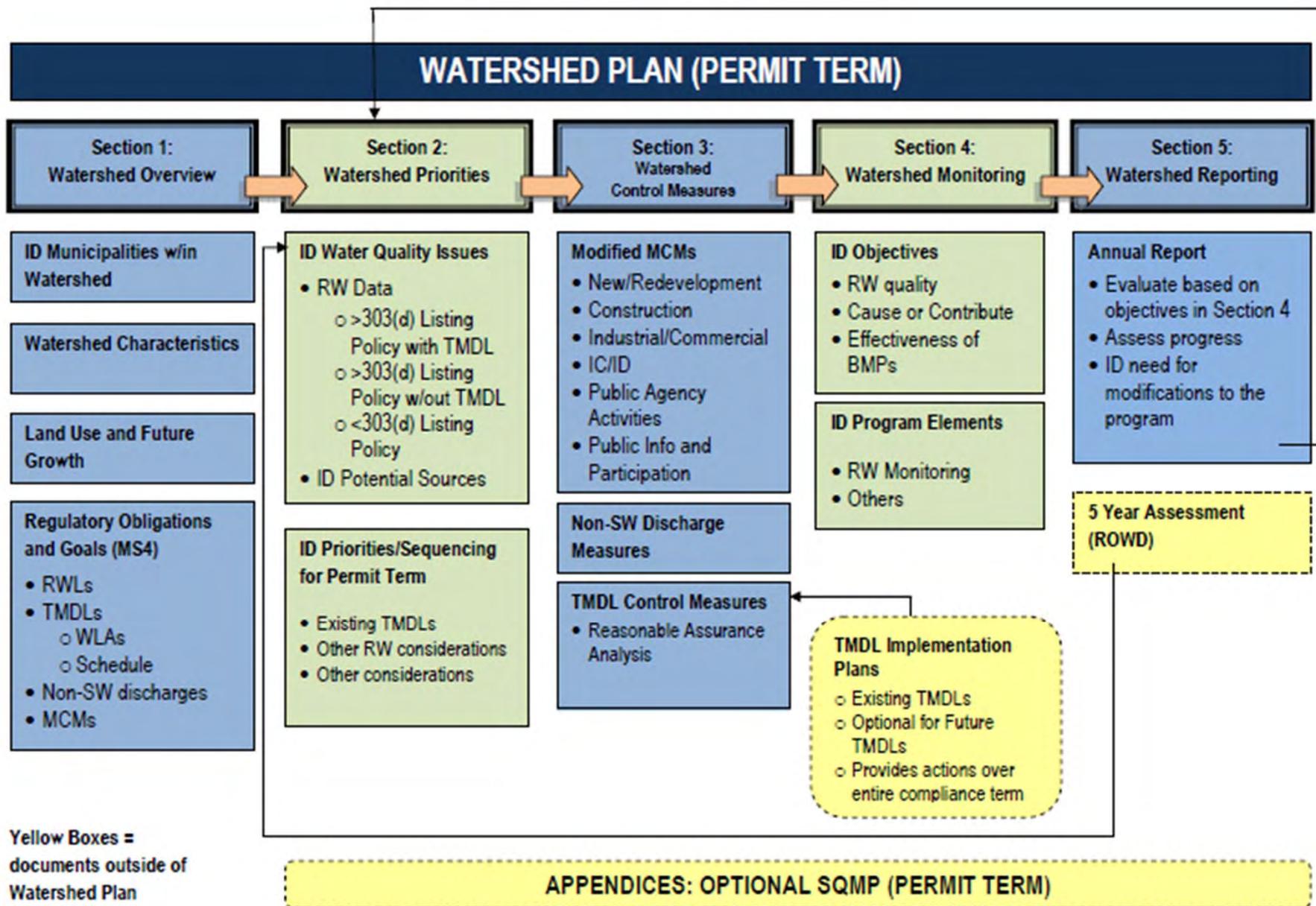
- Benefits of Watershed Approach
 - Focuses resources on highest priorities in watershed, consistent with recent guidance from USEPA
 - Provides for efficient and effective approach to addressing water quality issues
 - Encourages collaboration
 - Customizes program elements to make the focus protection of beneficial uses in receiving waters

City of LA Supports a Watershed Approach for the Permit

- Benefits of a Watershed Approach (con't)
 - TMDLs
 - Implementation plans address water quality issues at watershed scale
 - TMDLs will drive a significant portion of implementation actions in Permit term

How to Achieve a Watershed Approach in the Permit

- Provide for a Watershed Plan that integrates all requirements of the Permit
- Within Watershed Plan, allow for customization
- Structure Permit to include a new section (Section 8) that details the requirements and contents of a Watershed Plan
- Executive Officer approval



Non-Stormwater Discharges

Ray Tahir

Cities of Azusa, Baldwin Park, Carson, Claremont, Compton, Duarte, El Monte, Gardena, Glendora, Irwindale, Lawndale, Lomita, Pico Rivera, San Fernando, San Dimas, San Gabriel, South El Monte, and West Covina



NSW Discharges

- Proposed Non-stormwater Discharge Requirements are:
 - excessive given that there is no outfall data from permittee MS4s to characterize non-stormwater-related issues
 - Regional Board does not have federal legal authority to comply with proposed new NSW discharge requirements

NWS Discharges

- Working NSW proposal does not include other pieces that are needed to evaluate their content and impact including
 - Definition of WQBEL (staff incorrectly uses it interchangeably with water quality standard)
 - Receiving water limitation language (is it the same as it is in the current permit or will it change?)
 - Outfall monitoring requirements for non-stormwater and how it will be used to determine if a NSW discharge is a pollutant source requiring prohibition (as an illicit discharge) or coverage under a separate NPDES permit)

NSW Discharges

➤ Issue: RB Staff Proposes to:

- Require currently exempted non-stormwater discharges to comply with receiving water limitations (RWLs) and WQBELs
 - If a single outfall monitoring sample reveals an exceedance of non-stormwater discharges detected through outfall monitoring permittees would have to (1) prohibit the discharge; or (2) or require the discharge to be covered under an NPDES permit

- Problem #1:
 - One round of outfall monitoring is NOT enough to determine whether an exempted non-stormwater discharge requires prohibition or coverage under a separate MS4 permit
 - There is an inherent difficulty in distinguishing non-stormwater discharges from an outfall or other sampling point within the MS4 to locate its origin or source from the time the exceedance is detected
 - Non-stormwater discharges generally do not contain pollutants that are likely to exceed water quality standards in a receiving water – with the possible exception of chlorine and excessive sediment
 - Monitoring of such discharges over the 5 year term of the permit is needed to have more data points to conclude if such discharges are in fact sources of pollutants (landscape irrigation, residential car washing, etc.)
 - Monitoring on a “pilot” basis should be done for specific NSW sources (e.g., residential sources (for landscape overspray and residential car washing)
 - Regional Board should also be aware that non-stormwater discharges from cities located upstream of a spreading ground are likely not to cause an impairment to a downstream beneficial use

NSW Discharges Rio Hondo Spreading Grounds



NWS Discharges

➤ NWS Discharge Issues

- Problem #2:
 - RB staff proposes to impose additional “conditions” on already exempt or conditionally exempt discharges
 - For example: All NSW discharge categories are to
 - Evaluate alternative means of disposal (e.g., sanitary reclamation, and reuse)
 - Segregate authorized (unsure of what this really means) of non-storm water discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.
 - But RB staff has no data to base these increased requirements on – non-stormwater outfall monitoring needs to be done to justify adding conditions (need to do NSW outfall monitoring over the 5 year term of the permit to see if these conditions are justified)
 - Staff is being arbitrary

Concerns

➤ NWS Discharge Issues

▪ Problem #3:

- RB staff proposes to make a non-stormwater discharge exceedance of a water quality standard (includes TMDLs) a receiving water violation – for example:
 - *If a Permittee demonstrates that a specific non-storm water discharge from a potable water supply or distribution system not otherwise regulated by a separate NPDES permit, but required by state or federal statute and/or regulation, caused [further definition to be provided] a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, **the Permittee shall not be found in violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations for that specific sampling event.***
- But a permittee would be in violation if these requirements are not complied with

NWS Discharges

- NWS Discharge Issues
 - Problem #3 (continued)
 - Permittees **cannot** be held responsible if a NSW discharge exceedance occurs because the Regional Board does not have the authority under federal stormwater regulations to compel compliance
 - Problem #4
 - RB staff proposes to mandate that *an authorized non-storm water discharges shall not cause or contribute to a violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations in this Order or the water quality objectives*
 - RB does not have the legal authority under federal regulations to impose this requirement on permittees which in effect would make a municipality responsible for assuring that NSW discharges do not exceed water quality standards
 - RB staff confuses WQBELs with Water Quality Standards

NSW Discharges

- Why RB Staff Cannot Impose Stringent NSW Discharge Requirements on Permittees
 - Congress, under Section 402 (p) of the Clean Water Act, created two sets of standards: one for stormwater and another for stormwater
 - Stormwater pollution is to be reduced (NOT ELIMINATED) **FROM THE MS4** to the maximum extent practicable (MEP) through control measures (BMPs) [see 402(p)(3)(B)(iii)]
 - Non-stormwater discharges are only to be prohibited **TO THE MS4** [see 402(p)(3)(B)(ii)]
 - The two standards are very different in terms of compliance expectations
 - California MS4 permits (except Ventura and L.A.) and federal regulations use “from the MS4” to mean stormwater while “to the MS4” applies only to non-stormwater (must be emphasized that the MS4 permit is stormwater permit)
 - Staff has not made this important distinction

NSW Discharges

➤ NWS Discharge Issues

- Non-stormwater Discharges Require a Different Compliance Standard than Stormwater Discharges
 - Congress intended non-stormwater only to be prohibited to the MS4 -- with the exception of 18 exempted categories (e.g., potable water, landscape irrigation, residential car washing, etc.)
 - Prohibited non-stormwater discharges are known as ‘illicit discharges’
 - Certain exempted discharges have been conditioned on BMPs (e.g., charitable car washes should prevent wash water from entering catch basins)

Non-Storm Water Discharges

- RB Does Have Not Legal Authority to require permittees to prevent or prohibit non-stormwater discharges from exceeding water quality standards in the receiving water or outfall
 - Congress intended the elimination of non-exempted non-stormwater discharges to be achieved through the illicit discharge and connection detection and elimination (ICID/DE) program by requiring permittees to:
 - Encourage public reporting of discharges through a hotline
 - Respond to reports of illicit discharges
 - Take enforcement action against those who cause illicit discharges
 - Force the removal of illicit connections (a connection through which an illicit discharge passes)
 - Establish legal authority to compel sources of illicit discharges and connections to eliminate them
 - Require exempted discharges to be conditioned on BMPs if a municipality determines that they are source of pollutants or that these and other NSW discharges be permitted by the permitting agency (State Board/Regional Board)

NSW Discharges

- RB Staff is proposing to override Congress' mandate by revising permit language to require
 - Each Permittee, within its respective jurisdiction, effectively prohibit non-storm water discharges into the **MS4 and from the MS4 to receiving waters** except where such discharges are either specifically authorized by a separate individual or general National Pollutant Discharge Elimination System (NPDES) permit or conditionally authorized
 - Federal regulations only require a prohibition on non-stormwater discharges **to the MS4** (not from it to the MS4 and not to a receiving water)
 - Other Regional Boards in the State abide by this requirement
 - Includes MS4 permits issued by the Santa Ana Regional Board to the counties of Orange (North) Riverside, and San Bernadino
 - Also includes MS4 permits issued by San Diego Regional Board to South Orange County and San Diego County

NSW Discharges

<p>NWS Language Proposed by Los Angeles Regional Board Staff</p>	<ul style="list-style-type: none"> • <i>Each Permittee shall, within its respective jurisdiction, effectively prohibit non-storm water discharges into the MS4 and from the MS4 to receiving waters except where such discharges are either specifically authorized by a separate individual or general National Pollutant Discharge Elimination System (NPDES) permit</i>
<p>NWS Language in Santa Ana Regional Board-Issued MS4 Permits</p>	<ul style="list-style-type: none"> • <i>In accordance with the requirements of 40 CFR 122.26(d)(2)(i)(B) and 40 CFR 122.26(d)(2)(i)(F), the permittees shall prohibit illicit/illegal discharges (non-storm water) from entering into the MS4 unless such discharges are either authorized by a NPDES permit, or not prohibited in accordance with Section III.3, below. (See current North Orange County MS4 Permit, Part III.1)</i> • <i>In accordance with the requirements of 40 CFR 122.26(d)(2)(i)(B) and 40 CFR 122.26(d)(2)(i)(F), the Permittees shall continue to prohibit illicit connections and illegal discharges (non-storm water) from entering their respective MS4s. (See current Riverside County MS4 Permit, II.A)</i> • <i>In accordance with the requirements of 40 CFR 122.26(d)(2)(i)(B) and 40 CFR 122.26(d)(2)(i)(F), the Permittees shall prohibit illegal connections and illicit discharges (non-storm water) from entering the MS4 unless such discharges are either authorized by a NPDES permit (See current San Bernadino County MS4 Permit, IV.A)</i>
<p>NWS Language in San Diego Regional Board-Issued MS4 Permits</p>	<ul style="list-style-type: none"> • <i>Each Co-permittee must effectively prohibit all types of non-storm water discharges into its MS4 unless such discharges are either authorized by a separate National Pollutant Discharge Elimination System (NPDES) permit; or not prohibited in accordance with sections B.2 and B.3 below. (See current South Orange County MS4 Permit, B.III)</i> • <i>Each Co-permittee shall effectively prohibit all types of non-storm water discharges into its MS4 unless such discharges are either authorized by a separate National Pollutant Discharge Elimination System (NPDES) permit; or not prohibited in accordance with sections B.2 and B.3 below. (See current San Diego County MS4 Permit, B.I)</i>

NSW Discharges

- NSW Limitation to MS4 Confirmed by Office of Chief Counsel
 - Senior Staff Counsel (Catherine Hagan, Office of Chief Counsel) wrote to the Chairman of the San Diego Regional Board in 2009 the following:
 - MS4 permits *shall include a requirement to effectively prohibit non-stormwater discharges **into the storm sewers*** (note: it does not say *from the storm sewer and to the receiving water*); and shall require controls to reduce the discharge of pollutants to the maximum extent practicable
 - These are the two separate standards required for MS4 permits: one to prohibit non-stormwater discharges **TO THE MS4**; the other to use controls (BMPs) reduce pollutants in stormwater discharges **FROM THE MS4**
 - Federal regulations require *MS4 programs to include an element to detect and remove illicit discharges and improper disposal **into the storm sewer*** (Note: again not from it and to a receiving water)

NSW Discharges

- Prohibiting a NSW discharge that causes or contributes to a receiving water exceedance is extra-legal because NSW discharges are only prohibited to the MS4, not from it to a receiving water and **therefore should be removed**
- Prohibiting a NSW discharge that exceeds a water quality based effluent limitation (WQBEL) is not possible **because a WQBEL only applies to stormwater (non non-stormwater)**
- A WQBEL is a BMP (see or surrogate parameter (if numeric per USEPA's 2010 guidance memorandum) – **it is not a water quality standard** – and see *Divers' and Environmental Conservation Organization v. State Water Resources Control Board* and TMDL Waste Load Allocations in California MS4 Permits in your folder

NSW Discharges

- Bottom Line: RB Staff should:
 - eliminate the proposed NSW revisions that extend the prohibition to “from the MS4” and require nothing else other than prohibiting illicit discharges
- However, it is recommended that NWS discharge prohibition language be revised to read as follows:
 - *The Permittees shall effectively prohibit non-storm water discharges into the MS4 and directly into a receiving water.*
 - This language is proposed because permittees need the legal authority to prohibit NSW discharges from private property that do not enter the MS4 but do enter a receiving water directly through an on-site connection (catch basin or other drain)

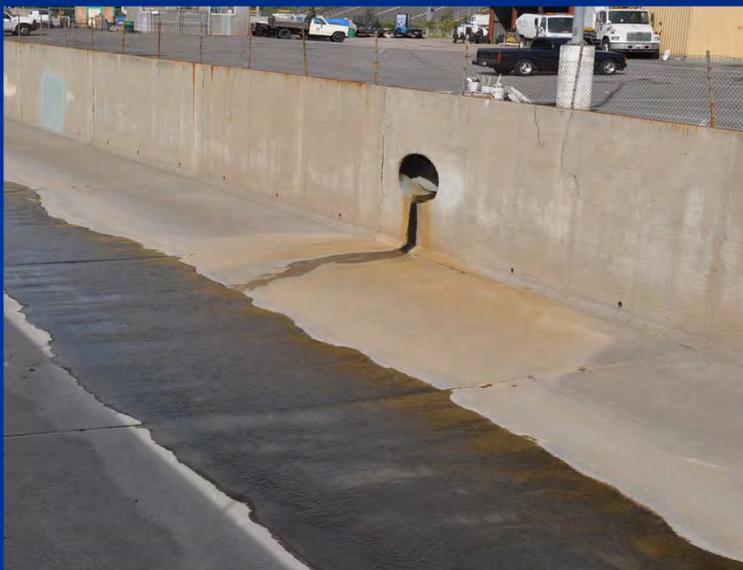
NSW Discharges

- Bottom Line (continued)
 - RB Staff should:
 - not further condition already exempted discharges until NSW outfall monitoring is performed over the term of the next MS4 permit and
 - delete any reference to NSW discharge compliance with receiving water limitations and WQBELs – they are not applicable to NSW prohibitions

NSW Discharges

- However, it is recommended that NWS discharge prohibition language be revised to read as follows:
 - *The Permittees shall effectively prohibit non-storm water discharges into the MS4 and directly into a receiving water.*
 - This language is proposed because permittees need the legal authority to prohibit NSW discharges from private property that do not enter the MS4 but do enter a receiving water through an on-site connection (catch basin or other drain)

Non-Stormwater Discharge (directly from private property to a receiving water)



Minimum Control Measures

- Support LASP's position on MCMs
- MCMs are the heart of the MS4 program and more time is needed to discuss and revise proposed requirements
- Many of the MCMs propose additional requirements that are justified by stormwater monitoring at the outfall
- Requiring infiltration for groundwater storage is not a stormwater program issue – it is water conservation-related and therefore should not be reflected in the MS4 permit

NSW Discharges



Thanks!

Community Water System Discharges & The Los Angeles County MS4 Permit



A Joint Presentation by the Association of California Water Agencies, the California-Nevada Section of the American Water Works Association, and the California Water Association for the Los Angeles Regional Water Quality Control Board Workshop

April 5, 2012

Los Angeles, California

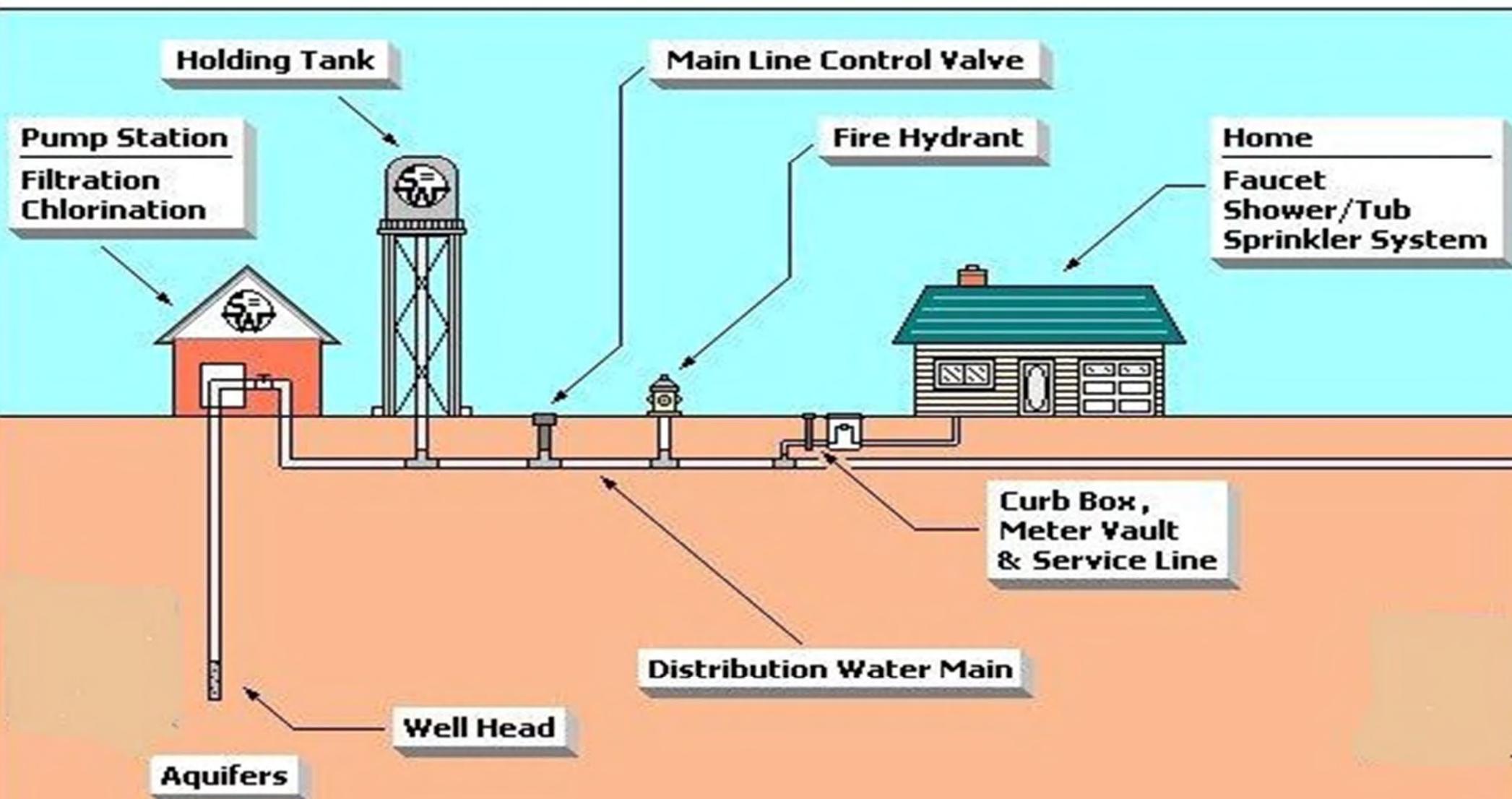
Background

Why Community Water Systems
Discharge into Storm Drains

Community Water Systems

- ❖ CWSs are regulated by the State of California, through the Department of Public Health's (DPH) Drinking Water Program, under authority of the Safe Drinking Water Act (SDWA).
- ❖ The DPH issues permits to operators of CWSs based upon their ability to comply with the requirements of the SDWA.
- ❖ Some requirements for CWSs are found in statute, others in regulations, and others still in the requirements of specific permits.

How Water Is Delivered To A Customer



Community Water Systems

- ❖ A majority of CWSs augment their supply with purchased surface water
- ❖ Only a handful of CWSs in Los Angeles County actually treat surface water
- ❖ The vast majority of surface water is imported

Community Water Systems

- ❖ Chapter 13 - “Operator Certification”
- ❖ Chapter 15 - “Domestic Water Quality and Monitoring Regulations”
- ❖ Chapter 16 “California Waterworks Standards”
- ❖ Article 4 “Materials and Installation of Water Mains and Appurtenances”
- ❖ Article 5 “Disinfection Requirements”
- ❖ Article 6 “Distribution Reservoirs”
- ❖ Article 8 “Distribution System Operations”

Community Water Systems

- ❖ CWSs are required to install “flushing valves” which may be a specifically designed “blow-off” or a conventional fire hydrant.
- ❖ This article mandates minimum velocities (2.5 ft/s) and flows for flushing (e.g. for a 10 inch main, the flow must be at least 600 g/m).
- ❖ Article 2, Section 63770 states that CWSs: “... shall utilize only certified distribution operators...(3) Oversee the **flushing**, cleaning, and pigging of existing water mains...”
- ❖ Section 64600 requires CWSs to develop “Water System Operations and Maintenance Plans” which includes... (3) The schedule and procedure for **flushing** dead end mains, and the procedures for disposal of the flushed water including dechlorination;
- ❖ **Flushing requires discharge**



Water Quality

Discharges from CWSs are Generally of Very High Quality as Compared to Other Discharges



Environmental Impacts of Non-Treatment Discharges From Drinking Water Utilities

Subject Area:
Environmental Leadership

“Typically [Non-Treatment Discharges] comply with Federal and State drinking water standards and contain low levels of suspended solids and other constituents”

Community Water Systems

CWSs are legally obligated to flush and discharge under threat of adverse legal action from Department of Public Health for the protection of public health

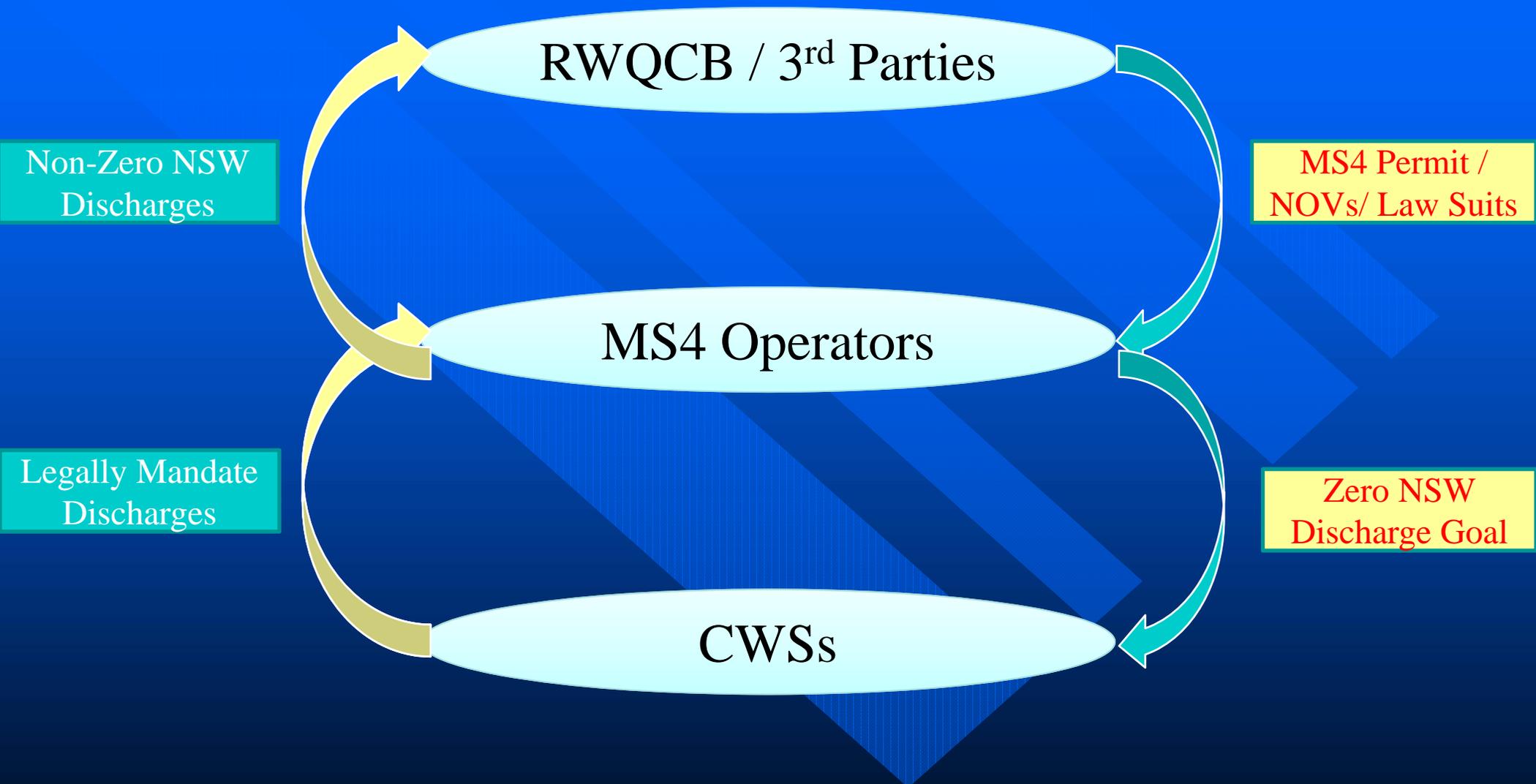
Problem

Why Community Water Systems
are Coming into Conflict with
MS4 Permittees

The MS4 Permit

- ❖ The Existing and Proposed Language in the MS4 Permit Puts a Large Incentive on Permittees to Achieve a “Zero Discharge of Non-Stormwaters”
- ❖ Notice of Violations and Third Party Lawsuits have incentivized a Zero Discharge Policy
- ❖ A Zero Discharge Policy is the only secure “Safe Harbor” that an MS4 Permittee has.
- ❖ Discharges from CWSs prevent MS4 Permittees from Achieving a Zero Discharge of Non-Stormwater Objective

Conflict



The MS4 Permit and TMDLs

- ❖ The Most Difficult Part of the MS4 Permit to Comply with are the Numeric Limits created by the Total Maximum Daily Load (TMDL).
- ❖ There is Already Conflict Between CWSs and MS4 Permittees and There Are Only 2 or 3 TMDLs in the Permit
- ❖ In a Few Years There Will be Over 30 TMDLs.
- ❖ The is Effectively Creates a “Zero Discharge Policy” for Non-Stormwaters for a Majority of Los Angeles County
- ❖ Conflict Between CWSs and MS4 Permittees is Bound to Increase as more TMDLs are Incorporated into the MS4 Permit

Conflicts

- ❖ MS4 Permittees have fined CWSs for Routine Discharges
- ❖ MS4 Permittees have banned the discharges from CWSs
- ❖ MS4 Permittees have required CWSs to obtain NPDES Permits and Waste Discharge Requirements which declare our waters to be wastes.
- ❖ Declaring drinking water to be a waste raises all sorts of legal problems
- ❖ This will only get worse in the future

Solution

How Changes to the MS4 Permit
Can Avoid Conflict Between
Community Water Systems and
MS4 Permittees

Collaborative Alternative

- ❖ The MS4 Permit Could Give Regulatory Relief to MS4 Permittees for those Situations where an Exceedance in a Receiving Water was Caused by or Contributed to by a Discharge from CWSs
- ❖ In Exchange for this Relief, MS4 Permittees Would Take on Additional Responsibilities – Specifically Ensuring that CWSs Complied with Enhanced Best Management Practices (BMPs).
- ❖ CWSs would get Regulatory Relief from the MS4 Permittees for their discharges.
- ❖ In Exchange for this Relief CWSs Would Put into Practice a BMP Manual with all Agreed Upon BMPs.
- ❖ MS4 Permittees and CWSs would sign a Memorandum of Understanding (MOU) Binding CWSs to the practice of these Enhanced BMPs.
- ❖ The MOU would be the Tool MS4 Permittees would use to Enforce the new responsibilities.

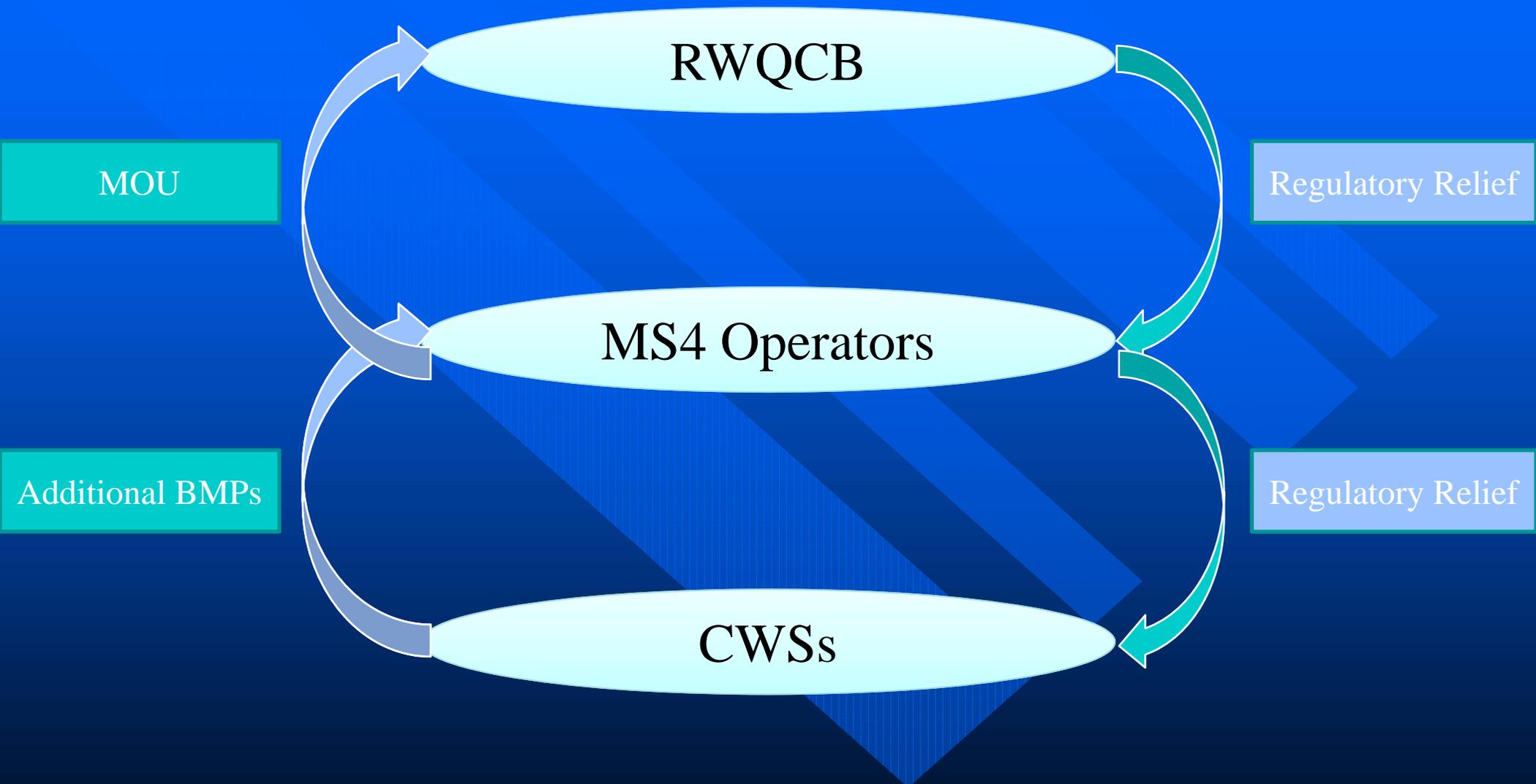
Enhanced BMPs

- ❖ Advanced Notification to MS4 Permittees by CWSs of Planned Discharges
- ❖ Dechlorination of Discharges (Currently in Use)
- ❖ Sediment Control Procedures (Currently in Use)
- ❖ Record Keeping and Sharing.

Regulatory Relief

- ❖ A. Non-Storm Water Discharges
- ❖ 3. Exemptions from Effective Prohibition.
- ❖ c. Legally Mandated Discharges
- ❖ 1. Discharges from potable water sources, including water line flushing (supply and distribution system releases), where not otherwise regulated by a separate NPDES permit;
- ❖ If a Permittee demonstrates that a specific non-storm water Legally Mandated Discharge caused a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, the Permittee shall not be found in violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations for that specific sampling event. Such demonstration must be based on relevant information regarding the location, date, time and duration of the discharge, the discharge pathway and receiving water(s) of the flows, and an estimate of the volume of the Legally Mandated non-storm water discharge.

Cooperation



Numeric Standard for Real World?

Jason Wen, Ph.D., P.E.
City of Downey





- Fire Hydrant > 1800
- Total Drinking Water Cost : \$628/AF

Copper as Example

- Drinking water Action Level = 1300 ug/L
- Sampling: 50/every 3 years
- TMDL (wet) ~ 11 – 17 ug/L
- Each Hydrant/every 3 years > 1800/3 years
- Standard = 118 x lower
- Sampling Frequency = 3600% more
- Costs =???

Weak Base Demonstration Study



City of Glendale, California

425 gpm
Influent of 40 ppb Cr(VI)
Lead/lag bed configuration
pH adjustment with carbon dioxide



City of Glendale, California  ARCADIS

Treatment Facility

Portable ???

RCF Demonstration Study



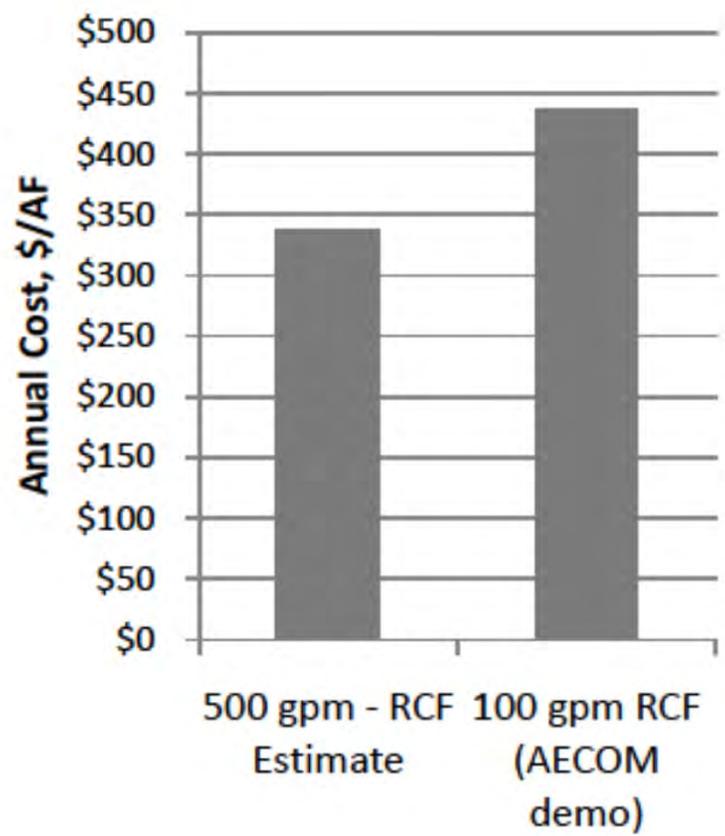
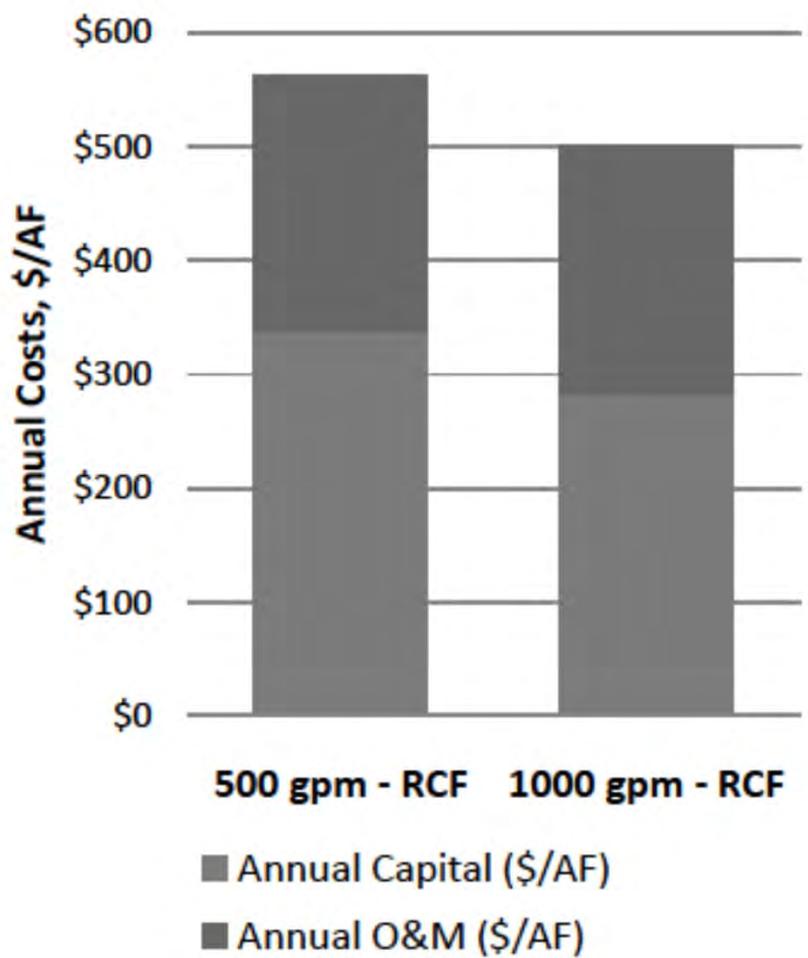
City of Glendale, California

100 gpm
Influent of 80 ppb
Variable reduction time, with and without aeration, granular media filtration, passive solids dewatering



City of Glendale, California

Original RCF Cost Information Compared with Actual Demonstration Costs



**20,000
Gallons
Tank**

**10-20 mins
Flushing**



Summary

?\$!?\$!?\$!?!?!?





MS4 Permit Renewal Minimum Control Measures Staff Working Proposal

County of Los Angeles

Frank Wu
Senior Engineer

Regional Board Public Workshop
April 5, 2012

3 preliminary comments

1. Permit approach
2. LID Program
3. Inventory of retrofitting opportunities



Permit approach

- ▶ Current proposal would divert finite resources from TMDL programs.
- ▶ Need more bang for the buck.
- ▶ Minimize MCMs to focus more resources on highest priority areas.



LID Program

- County LID program (since 2009) endorsed by Heal the Bay and the development community.
- Details of proposed LID program are problematic:
 - Stormwater Quality Design Volume (SWQDv)
 - Alternative compliance process
 - Monitoring and benchmarks for treatment BMPs
- Simplify LID program.



Inventory of Retrofitting Opportunities

1. Very daunting based on initial review.
2. Retrofitting is generally is very costly.
3. Little short term benefits.
4. Will continue to work with staff to find balance.



In closing

- ▶ Simplify minimum control measures.
- ▶ Allow permittees to focus on highest priorities.

Thank You



Comments on the Development of the Greater LA County MS4 NPDES Permit

April 5, 2012
LARWQCB Workshop

LA PERMIT GROUP

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

History

- * Los Angeles Stormwater Quality Partnership (LASQP)
 - * Members from throughout the County
- * LA Permit Group
 - * began January 2011
 - * 61 municipalities



LA PERMIT GROUP

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

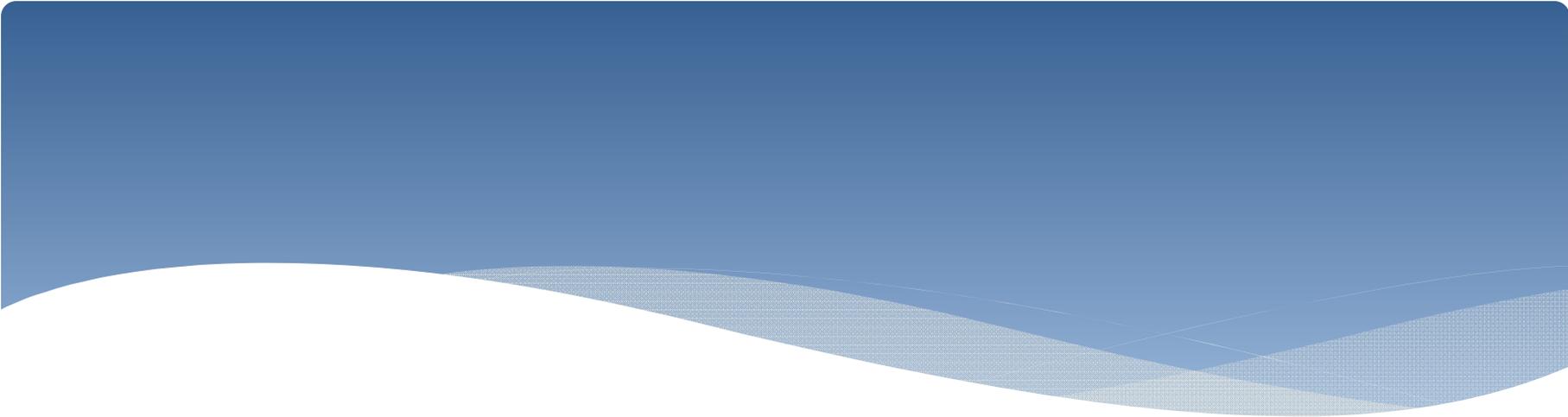
LA Permit Group

61 Voting Agencies

- * Agoura Hills
- * Alhambra
- * Arcadia
- * Artesia
- * Azusa
- * 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

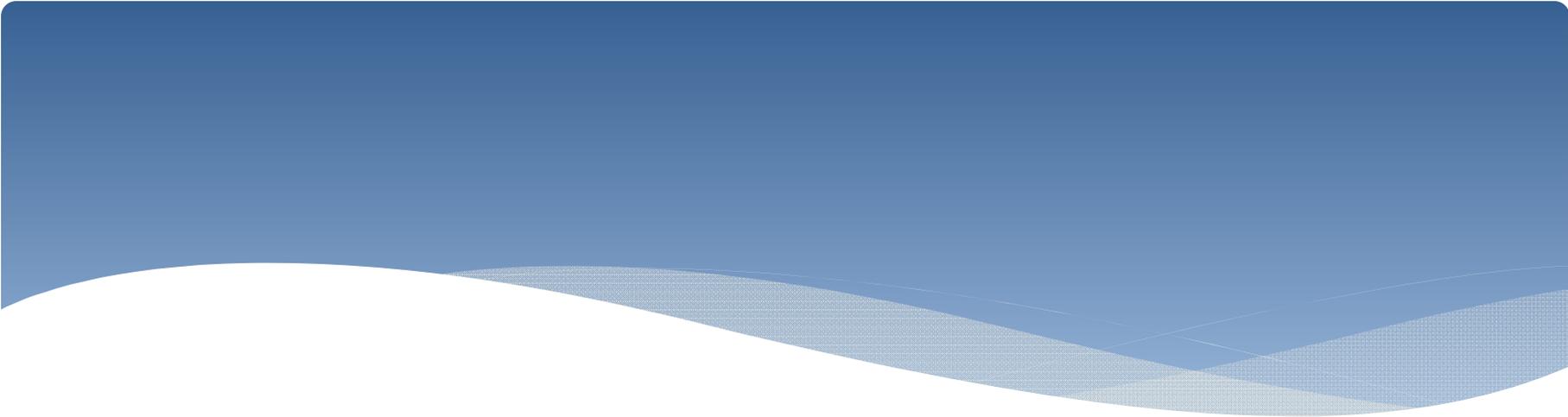
Overall Themes

- * What is the best way of achieving progress towards the the water quality goals?
 - * Integrated, regional planning
 - * Integrated, regional monitoring
 - * Prioritization
 - * Sustainability



“A policy’s value must be measured not only in terms of it’s appeal, but also in light of its implementability”

- Jeffrey L. Pressman and Aaron Wildavsky



Staff Working Proposals

Fiscal Resources

- * Limited control to increase stormwater fees (Prop 218)
- * MCMs + TMDLs goes beyond resources municipalities currently have available
- * Health, Safety, Quality of Life, other regulatory requirements and clean water all need to be developed in balance of each other



Non-Storm Water Discharges

Potable Water Discharges

&

Urban Activities

NSWD

Potable Water Discharges

The Regulatory Relief model as defined in the Staff Working Proposal is not one that Permittees are willing to accept;

- * Too much **responsibility is transferred** to the Permittee without a clearly **defined problem/need**,
- * The **burden of proof** is too high and a responsibility of the Permittee **NOT the discharger**.

NSWD

Potable Water Discharges

Potable water and fire discharges should be “exempted” and the permittees should receive regulatory relief if it such an exempted discharge that causes or contributes to an exceedance.

NSWD

Urban Activities

Regional Board staff's Presentation from 12/15/2011

“ .. Widespread presence of persistent dry weather flows .. ”

AND

“ .. No program in place to address these persistent flows .. ”

NSWD

Urban Activities

Existing Programs and Results

City of Santa Clarita

City of Malibu

NSWD

Urban Activities

Changes –

Another NPDES Permit (**Expand**)

Category A - Natural Flows (**Conditioned**)

Category B – Emergency Fire Fighting Activities (**Conditioned**)

Targeted –

Category C – Incidental to Urban Activities

Starting Point – the current LA MS4 and Ventura Permit

NSWD

Urban Activities

Natural Springs

Condition –Segregate flow to prevent introduction of pollutants . . .

Comments: Should be unconditionally exempt.

NSWD

Urban Activities

Flows from riparian habitats and wetlands

Condition – Provided that all necessary permits or authorizations are received prior to discharge . . . Prior to discharge **the Permittee shall ensure** the discharger complies with all conditions of the authorization.

Comments: This is a natural condition and should not be regulated.
Should be unconditionally exempt.

NSWD

Urban Activities

Diverted Stream Flows

Condition – Discharge allowed only if authorized by the State or Regional Water Board. Prior to discharge **the Permittee shall ensure** the discharger complies with all conditions of the authorization.

Comments: Conditions of the “Authorization” should include “Prior notification to all affected MS4 Permittees.”

NSWD

Urban Activities

Dewatering of lakes

Condition – Discharge allowed only if all necessary permit/water quality certifications for dredge and fill activities, including water diversions, are obtained prior to discharge. Prior to discharge **the Permittee shall ensure** the discharger complies with all conditions of their authorization, etc.

Comments: -

NSWD

Urban Activities

Rising ground water

Condition – Ground water dewatering requires a separate NPDES Permit, AND Segregate flow to prevent introduction of pollutants . . Permittee is in compliance.

Comments: Exemption conflicts with condition . . . Dewatering is not associated with a natural condition. Conditions of the “Authorization” should include “Prior notification to all affected MS4 Permittees.

NSWD

Urban Activities

Uncontaminated pumped ground water

Condition – Discharge allowed only if authorized under a separate NPDES permit. Prior to discharge **the Permittee shall ensure** the discharger complies with all NPDES permit conditions.

Comments: -

NSWD

Urban Activities

Gravity flow from foundation drains, footing drains, and crawl space pumps

Condition – Discharge allowed only if authorized by a separate NPDES permit. Discharge allowed only if authorized by the State or Regional Water Board. Prior to discharge **the Permittee shall ensure** the discharger complies with all conditions of the NPDES Permit.

Comments: Conditions should be removed. Allow for existing plan check processes to address necessary NPDES permit requirements.

NSWD

Urban Activities

Air conditioning condensate

Condition – Discharge allowed only if authorized by a separate NPDES permit. Discharge allowed only if authorized by the State or Regional Water Board. Prior to discharge **the Permittee shall ensure** the discharger complies with all conditions of the NPDES Permit.

Comments: Conditions should be removed. Allow for existing plan check processes to address necessary NPDES permit requirements.

NSWD

Urban Activities

Reclaimed and potable landscape irrigation runoff.

Condition – Permittee implements conservation programs to minimize this type of discharge by using less water, ensure proper operations and maintenance, etc.

Comments: General Support

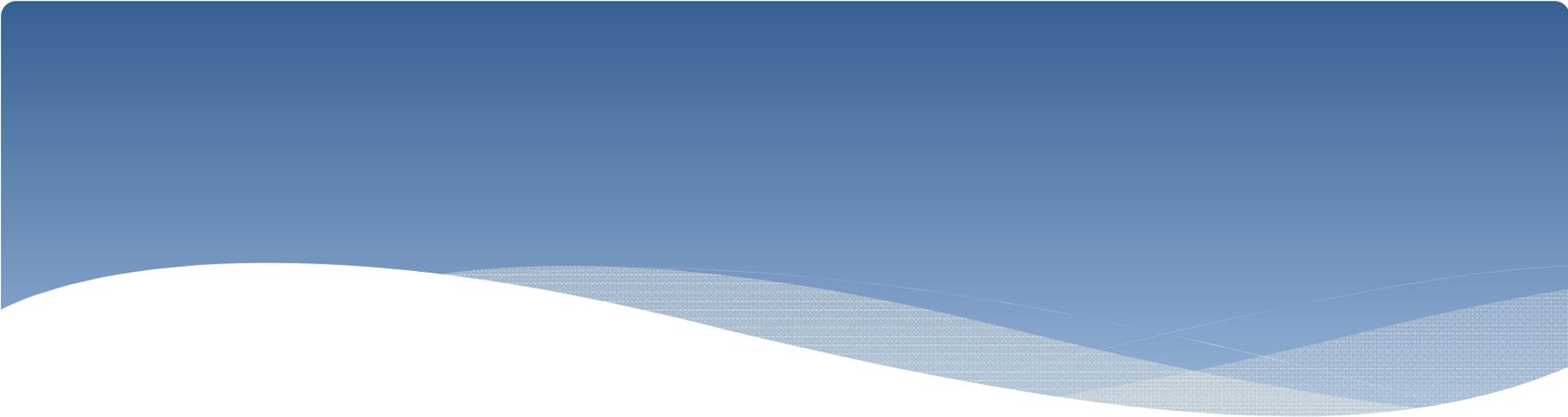
NSWD

Urban Activities

Non-commercial car washing by residents or nonprofit organizations

Condition – Discharges allowed after implementation of specific BMPs, etc

Comments: Should be unconditionally exempt.



Minimum Control Measures

General Requirements

The LA Permit Group supports the language provided in Section “a” since it provides the permittee the ability to work with Regional Board staff on tailoring a program that best suits the municipalities needs based on experience and characteristics of the

Legal Authority

Fiscal Resources

Public Information and Participation Program

No significant Issues

Industrial/Commercial Facilities Program

Major Issue:

- * Transfer of Responsibilities onto the Municipality

Planning and Land Development Program

Requirement:

Section 8.b.i.(1).(g) – Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate stormwater pollution, prior to completion of the project(s) , are:

Streets, roads, highways, and freeway construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance [Green Streets] to the maximum extent practicable.

Suggestion:

We support the Green Streets guidance; recommend increasing the threshold.

Planning and Land Development Program

Preferred BMPs:

Infiltration → Capture/Use → Biofiltration

- * Allow combination of above as well as offsite mitigation;
- * Biofiltration systems to treat 1.5*SWQDv – Over-sizing does not improve water quality;
- * Allow alternative SUSMP/LID programs as equivalent based on well defined criteria;

CONSTRUCTION PROGRAM COMMENTS

(Base on the Staff Working Proposal dated 3/21/2012)

Applicable to all activities involving soil disturbance (Denuded Hillsides vs. Backyard Patio)

Requirements:

- * **Use electronic tracking system to inventory grading, encroachment, demolition, building and construction permits**
- * **Prior to issuance of grading/building permit, approve ESCP**

Suggestion:

Establish reasonable thresholds, excessive number of projects and parameters to keep track of and manage (i.e. L.A. issues 40,000 building permits/year).

Construction Program

Requirements:

- * **The ESCP must include the elements of a SWPPP including risk-based BMPs**
- * **ESCP should include a Rain Event Action Plan (REAP)**

Suggestion:

Support 1-acre threshold provided by State General Construction Permit

- * **Never intended for small sites (typical SWPPP cost is \$20,000 per project)**
- * **Keep the <1-acre SWPPP requirement basic**

Construction Program

Requirement:

The Permittee shall inspect all phases of construction including

- 1) prior to land disturbance,**
- 2) Grading & Land Development**
- 3) Streets and Utilities,**
- 4) Vertical Construction,**
- 5) Final Landscaping and Site Stabilization**

Suggestion:

The requirement is overtly burdensome and they serve no benefit. The only reasonable inspection would be during the grading phase and upon project completion and as part of existing inspections.

Construction Program

Requirement:

The ESCP/SWPPP must include the rationale for the selection and design of the proposed BMPs including quantifying the expected soil loss from different BMPs.

Suggestion:

Remove - This requirements may exceed the cost of the construction of the project itself.

Construction Program

Requirement:

Each Permittee shall require that for projects disturbing 1 acre or more, the ESCP/SWPPP be certified in accordance to GCP.

Suggestion:

Remove - The State is responsible for GCP and collects fees accordingly

Construction Program

Requirement:

The Permittee shall ensure that all staff whose primary job duties are related to implementing the construction storm water program are adequately trained;

Suggestion:

Remove - The requirement that municipal staff be trained similar to QSD/QSP training is excessive. Some basic training on the CGP may be needed, but not to this degree.

Public Agency Activities Program

Major Issues:

- * Contract vs. Large Cities
- * Provide NAICS and SICs
- * Existing Development for Retrofitting Opportunities
- * Additional Trash Management Practices
- * Infiltration from Sanitary Sewer to MS4/Preventive Maintenance

IC/ID Program

- * The proposed “non-stormwater outfall based monitoring program” should be part of the Integrated Watershed Monitoring Program.
- * Outfall should be defined as “major outfall” (36” or greater in size)
- * Legal authority lies with Regional Boards

Minimum Control Measures

- Major Theme of Comments

- * **Provide the requirement, allow the Permittee the flexibility to implement**
- * **Provide the time necessary to comply with the requirements**
 - Some requirements affect agency budgeting processes, contracting agreements, and stakeholder involvement
- * **Requirements should be based on a clear nexus to water quality benefits**
- * **Consider the cost to comply**

0001

1 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
2 LOS ANGELES REGION
3 MARIA MEHRANIAN, CHAIRPERSON
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7 In the Matter of the)
Regional Board)
8 Public Meeting/Hearing)
_____)

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15 TRANSCRIPT OF PROCEEDINGS
16 Los Angeles, California
17 Thursday, April 5, 2012
18
19
20
21

22 Reported by:
23 MARCENA M. MUNGUIA,
CSR No. 10420
24

Job No.:
25 B8132WQLA

0002

1 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
2 LOS ANGELES REGION
3 MARIA MEHRANIAN, CHAIRPERSON
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7 In the Matter of the)
Regional Board)
8 Public Meeting/Hearing)
_____)

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15 Transcript of Proceedings, taken at
16 Metropolitan Water District of Southern
17 California, Board Room, 700 North Alameda
18 Street, Los Angeles, California, commencing
19 at 9:15 a.m., on Thursday, April 5, 2012, heard
20 before the LOS ANGELES REGIONAL WATER QUALITY
21 CONTROL BOARD, reported by MARCENA M. MUNGUIA,

22 CSR No. 10420, a Certified Shorthand Reporter
 23 in and for the State of California.
 24
 25

0003

1 APPEARANCES:
 2 CHAIRPERSON: Maria Mehranian
 3 BOARD MEMBERS: Maria Camacho
 Francine Diamond
 4 Madelyn Glickfeld
 Mary Ann Lutz
 5 Irma Munoz
 Larry Yee
 6
 EXECUTIVE OFFICER: Samuel Unger
 7
 BOARD STAFF: Jennifer Fordyce
 8 Frances McChesney
 Deborah Smith
 9 Ronji Moffett
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14	Termination:	
15	8 - City of Santa Clarita, Santa Clarita (Drainage Benefit Assessment Areas No. 6 and No. 18); NPDES No. CA0061638	
16	Other Business	
17	9 - Consideration of a tentative Resolution approving the Los Angeles County Sanitation Districts' proposed Special Study for the Joint Water Pollution Control Plant	
18		
19	10 - Consideration of a tentative Resolution approving the City of Los Angeles' proposed Special Study for the Hyperion Treatment Plant	
20		
21	11 - Consideration of a tentative Resolution approving the City of Los Angeles' proposed Special Study for the Terminal Island Water Reclamation Plant	
22		
23	12 - Consideration of a tentative Resolution approving the City of Oxnard's proposed Special Study for the Oxnard Wastewater Treatment Plant	
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7	14 - PanAmerican Seed Company, Order No. 87-93, CI No. 4246, File No. 62-76, Santa Paula	
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9	Waste Discharge Requirements and Time Schedule Order	
10	17 - Consideration of revised tentative Waste Discharge Requirements and Time Schedule Order for the California Department of Water Resources (William E. Warne Power Plant), Castaic; NPDES No. CA0059188	
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0008

1 Los Angeles, California, Thursday, April 5, 2012
 2 9:15 a.m.

3

4

5 MS. MEHRANIAN: Good morning. We would start the
 6 meeting of the Los Angeles Water Quality Control Board.
 7 And Board Member Munoz, will you please lead us

8 in the Pledge of Allegiance.
9 MS. MUNOZ: Thank you.
10 (Pledge of Allegiance)
11 MS. MEHRANIAN: Will you please do the roll call.
12 MS. MOFFETT: Yes.
13 Ms. Camacho?
14 MS. CAMACHO: Present.
15 MS. MOFFETT: Ms. Diamond?
16 MS. DIAMOND: Here.
17 MS. MOFFETT: Ms. Glickfeld?
18 MS. GLICKFELD: Present.
19 MS. MOFFETT: Ms. Lutz?
20 MS. LUTZ: Present.
21 MS. MOFFETT: Ms. Mehranian.
22 MS. MEHRANIAN: Here.
23 MS. MOFFETT: Ms. Munoz?
24 MS. MUNOZ: Here.
25 MS. MOFFETT: Mr. Stringer?

0009

1 Mr. Yee?
2 MR. YEE: Here.
3 MS. MEHRANIAN: Sam, on Item 2, Order of the Agenda?
4 MR. UNGER: Thank you, Madam Chair.
5 There are no changes to the Order of the Agenda;
6 however, I would like to announce that the Board has a
7 proclamation for Dr. Mark Gold for his 25 years of
8 service and advocacy for environmental causes and water
9 quality. So I would suggest that we do that now.
10 But before we do that, I would like to just make
11 one announcement to all people here attending the meeting
12 and remind them that the Board is able to hold these
13 meetings at this facility due to the good graces of the
14 Metropolitan Water District; and as part of their rules
15 and out of respect to this facility, which is absolutely
16 a wonderful facility, centrally located and available
17 with public transportation and such, it's requested,
18 demanded, that you do not bring food or drink into this
19 meeting room.
20 So I wanted to let everyone know that we have
21 that request to make that statement from MWD. And,
22 again, we're very grateful for them allowing us to use
23 that facility.
24 So with that, I would recommend that we proceed
25 with the proclamation.

0010

1 MS. MEHRANIAN: This is a proclamation to Mark Gold
2 of Heal the Bay for all the work and the vision and the
3 years that he's spent improving, protecting and improving
4 the water quality, and I want to read this and then
5 there's going to be a few people from the Board that
6 will -- that would like to say a few words. I'll read
7 this:

8 "The Los Angeles Regional Water Quality
9 Control Board, April 15th, 2012: Whereas

10 while working on his Ph.D. in environmental
11 science and engineering at UCLA, Mark Gold
12 joined Heal the Bay as its first employee in
13 1988 when he was hired to be its staff
14 scientist; and whereas Mark Gold, guided by
15 his mentor, the late Dorothy Green, the
16 founding president of Heal the Bay, was
17 named Executive Director of Heal the Bay in
18 1994 and president in 2006; and whereas
19 Mark Gold has left an enduring legacy while
20 at Heal the Bay for 23 years and has
21 represented its members and millions of
22 beachgoers with integrity, persistence, and
23 perseverance; and whereas under his
24 leadership, the beach report card was
25 created to evaluate beaches statewide,

0011

1 coastal cleanup dates at statewide beaches
2 reminds people of their personal connection
3 and responsibility to protecting our
4 beaches, the Santa Monica Aquarium for the
5 pier educates people and their families
6 about the living ocean; and whereas
7 Mark Gold has been a visionary leader of
8 water sustainability in Southern California
9 as he led efforts to bring about low impact
10 development, rainwater capture reuse and
11 recycling; and whereas Mark Gold has
12 testified at Los Angeles Regional Water
13 Quality Control Board more than 100 times
14 over the last two decades, his passion of
15 water quality protection and his scientific
16 solution-based advocacy has helped the Board
17 understand significant and effective ways to
18 improve water quality; and whereas
19 Mark Gold's efforts with other water quality
20 scientists to conduct epidemiology studies
21 has led to greater understanding and fast
22 analysis methods of impact of pathogens in
23 the ocean; and whereas Mark Gold's
24 leadership at Heal the Bay has led to
25 legislation such as controlling marine

0012

1 debris, improved standards and protection of
2 water quality in areas using septic systems,
3 banning the use of single-use plastic bags;
4 and whereas everyone who enjoys the
5 incredible ocean and beaches in Southern
6 California has Mark Gold to thank for his
7 tireless efforts to keep our water safe and
8 clean.

9 "And now, therefore, be it resolved
10 that the Los Angeles Water Quality Control
11 Board congratulates Mark Gold on his

12 achievements at Heal the Bay, thanks him for
13 his advocacy for water quality protection,
14 and looks forward to his continued
15 leadership while at UCLA's School of the
16 Environment and Sustainability."

17 Should we take a photo?

18 DR. GOLD: Thank you.

19 MS. MEHRANIAN: Should we take a photo?

20 MS. GLICKFELD: Sam, before we all come up, is there
21 a camera?

22 MR. UNGER: There will be several cameras.

23 Mark, the Board is willing to entertain your
24 101st testimony.

25 MS. MEHRANIAN: We have two members of the Board that
0013

1 asked for time to speak, and we will open it to other
2 Board members.

3 The first one will be Board Member Fran Diamond,
4 as a person who has chaired the Board for so many times
5 and being on the Board would like -- and has seen so
6 closely the work that Mark Gold did, would like to say a
7 few words. And then we'll have Board Member Madelyn
8 Glickfeld, as a past Board Member of Heal the Bay, would
9 like to say a few words. And anyone else from the Board
10 who would like will have time, and then I know from the
11 State Board, we have Fran Spivy-Weber and she would like
12 to say a few words. So we're going to be here for a
13 little while on this, Mark.

14 Please.

15 MS. DIAMOND: Well, Mark, I think I first started
16 working with you and met you actually about 1990 when I
17 was working for State Controller Gray Davis as a special
18 assistant on the environment and was supposed to know a
19 little bit about a lot of issues statewide and so I said,
20 "Well, what about water? Who should I talk to about
21 water?" And then Controller Gray Davis said, "Well,
22 there are a few people you should talk to, but number
23 one, you need to talk to Mark Gold." And that was when I
24 first met you. I called you and I said, "I'm supposed to
25 meet with you because I hear you know something about
0014

1 water," and that was a very generous thing for you to do.

2 You spent time with me, kind of giving me a
3 perspective on statewide water issues, and I came to know
4 that you are always very generous with your time; and
5 over the years, I know, having worked with you and still
6 working with you with the City of Los Angeles on
7 Proposition O, a city that had the worst sewer overflow
8 problems, probably in our region, came to be a city that
9 was not only in compliance, but did so much good and is
10 continuing to do so much good on water quality; but a lot
11 of it was because you were willing to give them your time
12 and sit down not just to criticize them, but to work with
13 them and continue to work with them, and I know you work

14 with cities all over the region, anyone who wants to
15 improve water quality. And it's been wonderful to see
16 you do that and the generosity of your spirit and your
17 time has been an amazing example to set for everybody who
18 wants to improve water quality.

19 I would say that your passion for your mission,
20 coupled with your scientific background and your candor,
21 and sometimes your brutal honesty at our meetings, has
22 helped us all to see a perspective on water quality and
23 helped us to look at the full picture.

24 You have a great legacy and I think the legacy
25 that Maria read, a lot of the things that you have begun

0015

1 at Heal the Bay, the score card, I don't know any family
2 that doesn't sometimes check the score card to find out
3 which beach they should go to on any given beautiful
4 summer day; the aquarium, which I have gone to many times
5 with my grandchildren, which opens up the world to the
6 ocean and the living ocean become real for the children;
7 the amount of effort that you've put in to legislation,
8 to initiatives, to environmental education around the
9 state, I think the legacy that you have at Heal the Bay
10 is an ongoing dynamic one. It's not over, because the
11 next generation, the children who already know because of
12 their experiences through the efforts of Heal the Bay and
13 your leadership, I feel that the problems that we face in
14 all environmental areas, but particularly in water, is
15 the education of the children because they "get it," and
16 a lot of the reason they "get it" is because of the
17 education that you have found to be a primary element of
18 Heal the Bay and the work there.

19 So I want to thank you for the generosity of
20 your time, your presentations to us, the education that
21 you have given to many people throughout the state,
22 particularly the children; and the fact that you're now
23 going to UCLA to help educate and energize the next
24 generation of advocates and leaders in water quality is
25 wonderful, so it's ongoing. And we thank you for all

0016

1 that you've done and all that you're going to do, and
2 congratulations.

3 DR. GOLD: Thank you so much.

4 MS. MEHRANIAN: Board Member Glickfeld?

5 MS. GLICKFELD: Well, I can't follow that. Thank you
6 very much.

7 A few weeks ago, there was a roast for Mark and
8 Fran and I put together something. We started out saying
9 we've gone over the 100 times that he testified and that
10 we were going to give some quotes from him and there was
11 a look of complete terror on his face because he
12 remembered what he said in those 100 times. We made up
13 what we were going to say; he thought we actually went
14 back through the record and did this. But at any rate,
15 we roasted him. A lot of the people in the audience

16 would have been very happy to be there.

17 I'm very lucky in that I have known Mark for a
18 long time. My first time I met you was when I was on the
19 Coastal Commission and you testified and I got to know
20 Heal the Bay then, and I think that between you and
21 Dorothy Green and some of the other founders of Heal the
22 Bay, you sort of reinvented the environmental nonprofit
23 to being a group that not only advocated based on
24 emotions and local concerns, but used science and used
25 education, and you are not only in the regulatory arena.

0017

1 Some people probably thought you slept here in
2 between the meetings and only came to life at the
3 meetings, but your life outside this area and the
4 contributions that you made not only to try to find
5 affirmative solutions to water quality and water supply
6 problems, but to assist in finding the resources that
7 local governments need to get these problems solved and
8 sitting down face to face with local governments and
9 solving problems, that's an example that I hope Heal the
10 Bay continues with and that I hope that other nonprofits
11 continue to emulate.

12 Thank you very much for being the advocate for
13 the millions of Los Angeles residents who care about
14 their creeks and their rivers and the ocean and want the
15 quality of life that clean water brings. Thank you.

16 MS. MEHRANIAN: Thank you.

17 Should we go to Fran Spivy-Weber and then come
18 back to the Board, if anyone else from the Board would
19 like to say anything?

20 MS. SPIVY-WEBER: I'll be brief because so much has
21 already been said, but I think the real honor here is to
22 this Board. You have listened to Mark Gold. Some of you
23 are new; some of you haven't heard him very often. But
24 the Boards in the past have taken -- have taken wisdom
25 from Mark's comments and his analysis and the hard work

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1 that he's done behind the scenes to make sure the science
2 is as right as could be; and when you're in a Board
3 situation where you're listening to everyone, it's
4 extremely important to hear from a group that is really
5 quite small. It seems quite large, the environmental
6 voice; but, in fact, it's really quite, quite small.
7 There are not that many organizations that show up at
8 Board meetings and actually contribute positively and
9 constructively to the dialogue, and I think it is
10 something that you have benefited from, particularly
11 here, and so has the State Board.

12 Heal the Bay has not just been very active here
13 at the Regional Board, but they have been very active at
14 the State Board level and it is a great benefit, and
15 unfortunately we don't get very many people coming to the
16 State Board with views that have the depth that Heal the
17 Bay brings.

18 The other thing that Mark has done is that he
19 has worked with his staff. He's given the time to his
20 staff and he has a fabulous staff that is going to carry
21 on that tradition and that excellence that he's set up,
22 so I am looking forward to that and I am very much
23 looking forward to his role at UCLA because I agree it's
24 going to be exciting. Thank you.

25 MS. MEHRANIAN: Board Member Lutz wants to say a few
0019 words.

1 MS. LUTZ: You know, Mark, "Heal the Bay" and
2 "Mark Gold" is synonymous. When someone says "Heal the
3 Bay," what's the first thing they think? They think of
4 Mark Gold. When someone says "Mark Gold," you know
5 they're talking about Heal the Bay, and that is really a
6 true testament for the legacy and to the importance that
7 you brought to water quality and the awareness around
8 this region and, as Fran says, not just even this region,
9 but at the State level, and that is -- that is your
10 legacy.
11

12 That's what I think you are going to be leaving
13 with Heal the Bay. Your ability to not just take an
14 organization and grow it to the point where everybody
15 knows who Heal the Bay is. Everybody knows who you are.
16 Like I said, they're synonymous; but to grow it to a
17 point where you are consistent in your message, you're
18 very strong in the science; you can always be counted on
19 speaking to us to be very clear in where Heal the Bay
20 would like to see this Board work and work with the
21 constituents and work with the stakeholders.

22 I think consistency has been over the years very
23 important because as a Board member, if there's
24 inconsistency from anybody, you sometimes don't know
25 where to go. You don't know how much stake to put into
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1 the comments that are, but you and the staff that you've
2 trained and the staff that you have given of yourself to
3 have risen to a level where your message is consistent;
4 the things that you're saying have factual basis behind
5 it, and I think that is where you are going to actually,
6 as Fran says, shine in your next role, in your new role,
7 because you're going to be able to take those skills that
8 you've given to the Boards, to the staff at Heal the Bay,
9 and you're going to take those just wide all throughout,
10 through UCLA and abroad, because all of the people, the
11 young minds that you touch at UCLA, are going to move on
12 and they're going to spread it nationwide, not just here.

13 So you really -- the things that you've done at
14 Heal the Bay have been amazing. Where you're going to go
15 from here is another amazing step and I congratulate you
16 and hope for the best in your new endeavor.

17 Thank you very much for everything you've done.

18 DR. GOLD: Thank you.

19 MS. MEHRANIAN: Yes.

20 MS. MUNOZ: Hi, Mark. I wanted to personally thank
21 you and congratulate you for your wavering strong ethic
22 that you've had since I've met you and, I guess, beyond.

23 You are one of the most persistent and
24 passionate and stubborn individuals I've ever met because
25 I, too, am like that and I was real surprised to meet

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1 someone that had those values that were just as equal to
2 me. Also, the way I've described my relationship with
3 you with folks the last couple of years is that since I
4 met you, we've been learning how to tango, and we finally
5 got the steps right and now you're leaving Heal the Bay.
6 I guess we continue our dance as you move towards UCLA
7 and I want to thank you because I know that we didn't
8 always agree, but you would always listen and I would
9 always listen to you and you're a remarkable man who
10 believes that people can have disagreements and have very
11 active conversations and discussions and still try to
12 reach the best solution, because at the end of the day
13 all we want is a better world, a better life for our
14 families and our children and our communities.

15 So thank you for your continued stubbornness. I
16 hope you never lose that value.

17 MS. MEHRANIAN: Thank you.

18 Yes. Larry?

19 MR. YEE: Mark, this is the first opportunity that
20 we've had a chance to meet, but you are partially to
21 blame for my being here. I'm not sure whether to thank
22 you yet or not.

23 I have not had the benefit of your 100
24 presentations to this Board. I just wonder if you have
25 any DVD that I could --

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1 MR. UNGER: What goes on here stays here.

2 MR. YEE: Anyway, congratulations. Thank you.

3 DR. GOLD: Thank you so much.

4 MS. MEHRANIAN: Yes, please, Maria.

5 MS. CAMACHO: I don't want to be the only one not
6 congratulating you, Mark. I'm obviously a new member of
7 the Board so when I heard that you were venturing to
8 UCLA, I was thinking, Oh, did I miss the fun of all those
9 presentations? But congratulations and I recently met
10 with your colleague, Ms. James, and so I know that your
11 legacy is definitely there and I know that the staff at
12 Heal the Bay and your team is going to be right there
13 walking the steps that you've taught them. So
14 congratulations.

15 DR. GOLD: Thank you so much.

16 MS. MEHRANIAN: Go ahead. Mark, do you have anything
17 in your defense?

18 DR. GOLD: Yeah, exactly.

19 Well, first of all, thank you so much. I'm
20 incredibly flattered by all the kind words and I know you
21 didn't always think such kind things of me, depending on

22 what I was saying in any given testimony. So I really
23 appreciate that.

24 And one of the things I just really wanted to
25 emphasize is that Heal the Bay would not be what Heal the
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1 Bay is without the Regional Water Board and without the
2 State Water Board. You are really the two agencies that
3 we've worked most closely with and had the strongest
4 relationships with and hopefully had the greatest impact
5 on protecting this incredible resource we have in
6 California, our coastal waters and water quality inland
7 as well and our water supply.

8 And, you know, it really started with the
9 Regional Boards. Some of my closest friends -- you know,
10 and it didn't start out that way -- are Regional Board
11 staff. You know, I've known Deb and Y.R. and, you know,
12 Sam and others forever, you know, and, you know, it's one
13 of those things where I don't think there's anybody out
14 there, especially not my wife or people who work for me
15 or anything, that, you know, agree with me all the time.
16 But -- and as well they shouldn't. But the prospect of
17 sitting down and trying to figure out how to protect
18 these valuable resources, 'cause they're so important for
19 public health and the environment, has really been an
20 incredibly rewarding and enriching opportunity for me and
21 something that frankly, I think in my new job, I'm going
22 to sorely miss.

23 I love being an advocate and I love sitting down
24 and negotiating on very complex issues. This is the
25 first County Stormwater Permit that won't have my

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1 fingerprints on it, you know, from the standpoint of
2 having worked on it. I've worked on every single
3 Stormwater Permit that's ever come before here and so,
4 you know, I know that obviously with Kirsten and her
5 training also at our Regional Water Quality Control Board
6 up north before she started working for Heal the Bay,
7 obviously water quality is in very capable hands at Heal
8 the Bay and I never would have made the move to UCLA
9 without knowing that there was that sort of support and
10 expertise still at Heal the Bay.

11 But the relationships I've made both with the
12 Board members and with staff members have been absolutely
13 incredible and one of the things I really want to
14 emphasize is I'm not dying. I'm not moving to another
15 country. I'm still local and I'd really love it if you
16 guys take me up on, you know, an offer to be a resource,
17 you know; that if there are complex problems, whether
18 they're in, you know, recycled water or water quality or
19 whatever the case may be, I'm here to help. We're both
20 State employees; right? So we both work for the State of
21 California and so I think there's a real opportunity for
22 our relationship to continue, but to grow in a different
23 direction, and I'd like to think that, you know, the 25

24 years I spent testifying before you trying to entertain
25 you, you know, gives me a little bit of a different

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1 perspective and some expertise in the field that
2 hopefully can be of some value to the State of California
3 in the future. So I hope you take me up on that.

4 And, again, thank you so much for everything and
5 hopefully it won't be too long before I see you all
6 again. Thanks.

7 MS. MEHRANIAN: Thank you, Mark. Thanks a lot.
8 Thank you.

9 We move on to Item 3, Approval of the Draft
10 Meeting Minutes for March 1, 2012. If there are any
11 changes --

12 MS. LUTZ: I have a question. Because I was only at
13 a portion of the meeting, should I be recusing myself
14 from the minutes or I can go ahead and vote on them?

15 MS. GLICKFELD: The meeting was adjourned before you
16 left.

17 MS. LUTZ: That's true because that was a Study
18 Session.

19 MS. MC CHESNEY: That's right.

20 MS. LUTZ: Okay. Then that answers it. I just
21 wanted to make sure I didn't step on something I
22 shouldn't be doing.

23 MS. MEHRANIAN: Motion for approval?

24 MR. YEE: Motion.

25 MS. MEHRANIAN: Second?

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1 MS. LUTZ: Second.

2 MS. MEHRANIAN: All in favor.

3 (Whereupon the motion was passed)

4 MS. MEHRANIAN: Okay. Great. Moving on to Item 4,
5 Board member communications.

6 Board Member Camacho, do you want to start?

7 MS. CAMACHO: Yes. I did have lunch with Ms. James
8 from Heal the Bay and we discussed their education
9 component. It was just a training of the organization
10 itself, the work that they used to do when CRA was around
11 on projects, the joint efforts that they work on with
12 other organizations. We discussed the aquarium at the
13 pier, their funding sources, the pier education and their
14 beach report card, and how they work with the cities to
15 receive the data. So that's what we discussed.

16 MS. MEHRANIAN: Thank you.

17 Board Member Glickfeld?

18 MS. GLICKFELD: Yes. Thank you, Madam Chair.

19 I was invited last week to an all-day workshop
20 organized by the California Water Foundation, which is an
21 initiative of the Resources Legacy Fund and the Southern
22 California Water Committee and the Natural Resources
23 Defense Council.

24 The Water Foundation is trying to facilitate an
25 effort to bring together people from across Los Angeles

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1 County to actually figure out how to ramp up storm water
2 capture for water supply augmentation. Luckily for me,
3 they did not talk about the permit at all so I never had
4 to leave the room, but there were -- Board Member
5 Spivy-Weber was there and a number of people across the
6 Region that were there and there were people from the
7 development community and the Flood Control District was
8 there, and there was some very productive discussions
9 about what needed to happen to incentivize and finance
10 storm water capture. I am hoping that that effort
11 continues and if I continue to be involved, I'll give
12 regular reports.

13 MS. MEHRANIAN: Board Member Diamond?

14 MS. DIAMOND: I have nothing to report.

15 MS. LUTZ: I have nothing to report.

16 MS. MEHRANIAN: Board Member Munoz?

17 MS. MUNOZ: Yes. I met with three members of the
18 staff for Heal the Bay. We talked about the importance
19 of watershed education in the inland cities, projects
20 that Mujeres de la Tierra is taking on, which is my
21 nonprofit, and issues regarding the green coalition and
22 their leadership.

23 Also, I went to a park opening in the city of
24 El Monte, Mariposa Park, which is a park that our
25 organization was involved in.

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1 MS. MEHRANIAN: Thank you. Board Member Yee?

2 MR. YEE: Nothing.

3 MS. MEHRANIAN: I would report on, I think at this
4 part of the agenda, the meeting that we had with
5 Supervisor Mark Ridley-Thomas's office and also I would
6 follow up on the chair's meeting. I think I should do a
7 summary of what happened in the chair's meeting.

8 So on the Mark Ridley-Thomas meeting, we had a
9 meeting with the staff and Deidre Jenkins was in
10 attendance, and we discussed the issue that is still
11 outstanding and she committed that -- or explained that
12 they're making a parcel available, looking to find or
13 identified a few parcels that are available -- will be
14 available at a low cost to Exxon for funding, either in a
15 lease or buying capacity, and that they're providing
16 pro bono work to Ms. Jones, the owner of the day care
17 center.

18 And also, Ms. Jenkins told us that the Regional
19 Board should be actively following up with Exxon, which
20 we said we are, and that we should go after Exxon and not
21 the County and the supervisor's office and we said, we
22 are, we are following up with them. And we have a
23 meeting scheduled on the 11th, April 11th, to follow up
24 with Exxon.

25 At the same time, I will let Sam, in his report,

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1 elaborate on a little bit of where we brought an order at

2 the same time and we're following up with it. So as we
3 discussed last time, we're doing parallel tracks of
4 following up on this. So that was the meeting on the
5 County supervisor's office.

6 Anything, Sam, that you would want to add or you
7 would do this in your report?

8 MR. UNGER: I don't have anything to add on that
9 item, but I will be talking about other items with Ujima
10 and the Former Athens Tank Farm during my report.

11 MS. MEHRANIAN: Sure.

12 And then we had the March 26th meeting where all
13 the chairs met of all the different boards and Fran
14 Spivy-Weber, of course, was running the meeting and the
15 State Board members were there.

16 And some of the items that I would summarize,
17 that I have summarized and I will make it available to
18 all the Board members, but I'll just go through them
19 quickly right now: There was a significant action by
20 other Regional Boards, including MS4 permits and other
21 developments in San Diego, and the Ag Waiver was a big
22 discussion item that was adopted last month in Central
23 Coast Region. And then for Region 4, we informed other
24 regions about the end of the Consent Decree between NRDC
25 and USEPA and how we're finishing off the last Consent

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1 Decree of TMDLs and MS4 permits under the development
2 that we're doing. There was a lot of attention to MS4
3 that we're doing and they understood how complicated ours
4 is in terms of having 80-some different jurisdictions and
5 40 TMDLs in it, so how much more complex it is than the
6 others.

7 There was a brief update on the budget process
8 and we're informed that the recent hirings was going to
9 be slowed down in the near future.

10 And there was a legislative update that focused
11 on two bills. The first was Senate Bill 965, which seeks
12 to ease some of the ex parte rules. The result is --
13 this resulted in a spirited discussion by the chairs.
14 Many of the chairs saw that -- I know that this is an
15 issue that was discussed in this Board. Many of the
16 chairs did not support easing the ex parte, the ex parte
17 rules, because they felt that they would somewhat then,
18 you know, open to so many approaches that they will get
19 from stakeholders and it will be demanding too much of
20 their times, and they are volunteers in these positions.
21 So they don't think it's a good idea.

22 The second was S.B. 900, which would reduce the
23 number of Board members to seven, eliminating the
24 categorical appointment and eliminate the Colorado Region
25 Board. So that was a discussion that took a while.

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1 And then we of course brought up the -- or did a
2 summary of how we saw the whole ex parte in our Board and
3 how there was an issue that I know I remembered it was

4 discussed when we had our new Board members join that
5 "ex parte" could be working as -- I almost wanted to say
6 this social or environmental justice issue where you have
7 communities that are affluent and educated. They can
8 come to you, bring the issues, raise their -- you know,
9 raise their concerns. Yet the communities that are at
10 disadvantaged and don't have that kind of skills and
11 expertise, kind of stay behind and the ex parte works
12 against them. And we kind of like talked about this and
13 Lauffer was our -- you know, was interested in this
14 concept. So we discussed a little bit; and then
15 process-wise, he said that -- Michael Lauffer said that
16 they're going to be discussing this internally and
17 they're going to take it to the governor's office at some
18 point, some of the concerns, pros and cons, and have some
19 discussion and then come back with us responding to the
20 input that we've had.

21 And then other than that, we were then addressed
22 by California EPA Secretary Matt Rodriguez and Deputy
23 Undersecretary Gordon Burns. Mr. Rodriguez appeared to
24 be very knowledgeable on Water Board structures and he
25 knew exactly how this works.

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1 He was concerned about groundwater resources and
2 feels strongly that we need to improve our groundwater
3 regulation. His office sees itself as a resource to
4 support and integrate to the various agencies and boards
5 under Cal EPA, and then also he talked a little bit about
6 current peripheral canal and the importance of this
7 project; that this year, you know, it's something that is
8 on the governor's plate and agenda and he's adamant about
9 moving on with that, different paradigms in which the
10 resources and ecosystem resources can both be enhanced
11 while they're working on the peripheral canal.
12 "Alternative conveyance measures," I think, is the right
13 term these days. And then places a high value on the
14 process, transparency, and practicality in solving
15 problems.

16 Then there was an update on State Water --
17 Statewide Groundwater Strategic Work Plan and Sam Unger
18 provided a comment that it seemed to be nutrient-centric
19 when looked at by the whole state, and in our region, we
20 are more challenged by industrial wastes. He advocated
21 that a TMDL approach should be used in addressing
22 groundwater basins and will be working to bring this
23 information to the working draft.

24 And finally, we talked about scheduling the fall
25 Water Quality Coordinating Committee. And unfortunately

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1 for us, it's that -- there's a date conflict that they
2 want to have this on the 9th. Am I right, Sam?

3 MR. UNGER: It's on the 1st.

4 MS. MEHRANIAN: And that's where our meeting is.

5 MS. GLICKFELD: Can we change our meeting?

6 MS. MEHRANIAN: So yeah. That's something that we
7 would like to discuss today and finalize.
8 MR. UNGER: Well, I think what I'm going to recommend
9 is that Ronji poll you all individually after today's
10 meeting by e-mail and we'll suggest some dates in
11 November and we'll agree on a date then and then we'll
12 adjust our calendar --
13 MS. MEHRANIAN: Sure.
14 MR. UNGER: -- for that month.
15 MS. CAMACHO: Sorry. Really quickly, so they are
16 proposing November 1st?
17 MS. MEHRANIAN: For that meeting.
18 MS. CAMACHO: And it's in Sacramento.
19 MR. UNGER: Sacramento.
20 MS. CAMACHO: All day?
21 MS. GLICKFELD: Two days.
22 MS. LUTZ: It's usually two days.
23 MR. UNGER: Yeah, and all the Board members can go.
24 MS. LUTZ: So it's usually the afternoon of one day
25 and the morning of the following day --

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1 MS. CAMACHO: So November 1st --
2 MS. LUTZ: -- so we really only have to stay over one
3 night.
4 MS. GLICKFELD: I would really -- I know the Board
5 would have just said this, but I would really encourage
6 all our new members to go. It's highly valuable to see
7 how other boards are working and to deal with -- learn
8 more about what the State Board is doing to help or not
9 help us.
10 MS. MEHRANIAN: Right.
11 And just to finish this, Board Member Camacho
12 had a few questions that she directed to me right before
13 this meeting for discussions and some input that she had.
14 One of them was how do we learn about the other
15 boards and what they do and what levels? First of all, I
16 think these meetings are very good just because the
17 issues are so different from region to region and for us,
18 it's such an educational process and I will share with
19 you a little more details on it. But at the same time,
20 so that I just wanted -- it was clarified for me, too,
21 that there's an E.O. to E.O. level meeting that is every
22 week. There's a conference call, and then there's also
23 monthly meetings, and we can always ask Sam for whatever
24 you need to know or he can debrief you on that. So that
25 was something that I learned in that level; a lot of

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1 technology and sharing happens.
2 And then also, you discussed -- one of your
3 questions was to know about the legislative policy and
4 all the legislation that comes out that impacts water
5 quality and impacts this Board. Yes, it does and there
6 is a legislative policy office that has all this that we
7 can always regularly ask them for briefings and Sam

8 probably can help us with that.

9 So those are some of the comments that -- and I
10 have some more that I'll share with you later.

11 MS. CAMACHO: Sure.

12 MS. MEHRANIAN: That was the report from the chair's
13 meeting.

14 MS. GLICKFELD: I just have a question on -- we have
15 a Board Reorg- -- we have a State Board and Regional
16 Board Reorganization Bill. There's one out every single
17 year.

18 MS. LUTZ: Yeah.

19 MS. GLICKFELD: And is this one -- it would be nice
20 to hear from Board Member Spivy-Weber about is this the
21 same bill? Is this going anywhere this year or not?

22 MS. MEHRANIAN: Sure. We'll do.

23 Okay. That's all we have on the ex parte Board
24 member communication. I think we move on to the E.O.
25 report.

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1 Mr. Unger?

2 MR. UNGER: There's a timer on. That may be a good
3 thing. I'll try to be brief.

4 I just want to report to you on our two large
5 cleanup sites and there were two items from your
6 directives checklist, items that you asked me to check in
7 on, and finally just one quick item on MS4 issues and
8 beach water quality from last summer.

9 So first is the Former Athens Tank Farm,
10 otherwise known as the Former Ujima Village site, and
11 basically I just want to update you on the off-site
12 characterization and the day care relocation.

13 As I reported last month, we've received
14 preliminary results from our first step-outs from the
15 site to the east and to the southeast. The preliminary
16 results have been confirmed, unfortunately, and the soil
17 vapor plume has migrated from the Former Athens Tank Farm
18 into the neighborhood east and south of the park. There
19 appears to be high levels of light hydrocarbons vapors at
20 a depth of about 35 feet, but fortunately as you move
21 closer to the surface, the vapor plume appears to
22 attenuate.

23 Based on this information, we have issued three
24 directives on Exxon this month. The first is to continue
25 the delineation of the plume and find out how far it

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1 extends, where exactly it extends. The second is to
2 initiate indoor air testing on nearly 40 homes in the
3 Willowbrook area that overlie this vapor plume. And the
4 third is to initiate interim remediation by soil vapor
5 extraction. Again, all this is off site in the
6 Willowbrook area.

7 We've also submitted all our data to the
8 Department of Toxic Substances Control to review the risk
9 assessment work and at this point, we have not yet

10 determined that health risks are elevated due to the
11 underground hydrocarbons, which is fortunate.

12 We have also asked the Los Angeles County
13 Department of Public Health to also independently review
14 the data and DTSC's work.

15 And so just real quickly, I just wanted to put
16 up a slide real quickly, if Alex has it, just to give you
17 an idea of our activities on this site over the past four
18 years. And essentially what we started off when we first
19 took over as lead agency on the site in 2008, there was a
20 lot of work that was done. Our activities slowed down as
21 we just focused on the park area and the Former Ujima
22 Tank Farm area; but as you can see, for the last two
23 years, we've stepped up things quite markedly and the
24 2012 is only for the first three months of this and it
25 does not include the work that we just ordered that I

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1 just told you. So we really expect a dramatic increase
2 in both Board activities and the activities in the
3 remediation to respond to community concerns.

4 I want to just give quick kudos to Art Heath and
5 Thizar Williams and Teklewold Ayalew. All this is
6 essentially being done by three staff with some help from
7 Paula and me, but it's really an incredible amount of
8 material to receive, to review, and turn around quickly
9 into other orders so that we can try to get to a
10 resolution of this issue as quickly as we can.

11 Chair Mehranian had spoke to you about the
12 meeting that we had with the County supervisor's office,
13 so I'm not going to repeat that other than to say we know
14 that the Board has asked Exxon to appear. Exxon is
15 reluctant due to the class-action lawsuit that they're
16 under -- considering on this site; however, we will have
17 a meeting early next week with Chair Mehranian and myself
18 with the Exxon folks to see what we can do to try to move
19 along the relocation of the day care center.

20 So that's basically it for the Former Athens
21 Tank Farm.

22 The Kast site: Last month, I reported to you
23 that most of the site testing, if not all of it, had been
24 shut down again due to the litigation. There is a
25 class-action lawsuit against Shell Oil on that site, but

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1 I reported to you that we were hopeful that there was
2 going to be a ruling which would open things up so we
3 could get on to the site and start doing some work.

4 I'm pleased to report that that ruling did come
5 in and we are going to be continuing and completing the
6 work over the next several months on all the indoor air
7 testing. We have started. Pilot activities have begun
8 in terms of different excavation techniques and Shell is
9 looking at various in-situ technologies for the site,
10 too, which may prove to be beneficial as we go into a
11 full-scale remediation.

12 So here we are a year since we issued the pilot
13 testing Cleanup and Abatement Order and we're really
14 getting started now, so I'm happy to report that.

15 The residents, of course, find some of the work
16 to be very intrusive, but we're trying to limit that as
17 best we can, trying to work in some areas that are public
18 rights-of-ways rather than on the individual homes. But
19 in order to address some of their concerns, we are going
20 to meet with residents on a one-on-one basis in May at
21 their request and we are working with the City of Carson
22 to have a meeting room and things like that where
23 Dr. Ayalew, Thizar Williams, and other staff will be
24 available to meet with residents on a one-on-one basis.

25 We have done that once before, before the work
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1 had been shut down. We found that to be very beneficial
2 where they can get their questions answered very
3 efficiently there. So we expect to have those meetings
4 starting sometime in May.

5 On to two issues on the Board checklist that --
6 and both of them Board Member Munoz had asked for some
7 information. First, you had asked staff investigate the
8 roles of pipelines in discharging waste over various
9 areas in our region and so staff had arranged a meeting
10 and we held a meeting with Cal Fire -- and I'll explain
11 this in a minute. First, just to let you know, we came
12 up to speed quite a bit to let you know that the State
13 regulates pipelines really under two different agencies
14 in accordance with the materials that they carry and
15 essentially whether they're liquid hydrocarbons or
16 whether they're natural gas.

17 So we focused our work on the liquid pipelines
18 and we met with Bob Gorham and he's with Cal Fire.
19 They're the agency that implements the regulations,
20 federal regulations for regular pipeline testing. The
21 agency's been in existence for roughly 20 years and
22 essentially, they've developed guidelines and rules and
23 regulations for regular pipe testing every five years.
24 Mr. Gorham was very informative to us to show statistics
25 on the number of pipeline leaks and things like that that

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1 happened 20 years ago for what's happening now and due to
2 their program, there's been a major reduction in the
3 number of leaks from pipelines due to the rehabilitation
4 and the regular testing.

5 Basically, they are also notified on all spills
6 and we get copies of those notifications, but we're going
7 to get further details of their reports with us on a
8 regular basis. So if there is a spill from a pipeline or
9 a leak from a pipeline, we'll have better information
10 about it. And I think what was most interesting to staff
11 on this is as we look at sites for cleanup with
12 pipelines, they have developed quite a GIS information
13 database by which they have pipelines, what they think is

14 a complete inventory and location of all the pipelines in
15 Los Angeles and Ventura Counties.

16 We are working right now to work with them to
17 get that database into our system so our staff can use it
18 when they're doing their work on site cleanups to see if
19 there's any nearby pipelines. Typically, it's been a
20 rather lengthy and rigorous exercise to try to find out,
21 you know, if they are pipelines, number one; number two,
22 who owns and operates those pipelines; and three, what
23 the recent testing was. So I think it's -- we're
24 working, like I say, with Cal Fire. They're
25 under-resourced, but we're doing the best we can to try

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1 to get that database into our shop, into our staff's
2 hands, so they can do a more complete job when they're
3 looking at their cleanup orders and such.

4 So thank you for that, that initiative. I think
5 it's going to -- there's a lot of information that's
6 available that we're going to be able to put our hands
7 on.

8 You also asked us to investigate the nature and
9 extent of hydraulic fracturing, which is also known as
10 fracking in our region, and it's f-r-a-c-k-i-n-g. And so
11 on March 13th, a number of staff met with the Division of
12 Oil, Gas, and Geothermal Resources in their office in
13 Southern California. Their regions somewhat overlap ours
14 in the sense that the office handles essentially
15 Los Angeles and Ventura Counties and basically what they
16 do is they regulate the USEPA underground injection
17 program in these counties, and so what that means
18 basically is that there are wells into the oil fields.
19 When oil is produced from various fields, it comes up and
20 brings up some water with it. They try to then circulate
21 that water back into the oil fields to keep essentially
22 the same pressure on to operate those fields, and they
23 operate that program.

24 DOGGR informed us that there are about 8,000
25 active UIC wells inside of Los Angeles and Ventura

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1 Counties. Going back to the history of oil exploration
2 and production in these counties, they think there's as
3 many as 40- to 50,000 well bores that may have been
4 installed since the early days.

5 They also informed us that hydraulic fracking is
6 not under the jurisdiction of the USEPA underground
7 injection program. So that was in the Federal Energy
8 Bill of 2005 that it was removed from these regulations
9 and so at this point, they have very little information
10 on where and to what extent fracking occurs in the state.

11 Basically, with the overwhelming work that they
12 have, they are looking at ways to prioritize things and
13 on a State level, there is a Memorandum of Understanding
14 between DOGGR, which is the Division of Oil, Gas, and
15 Geothermal Resources -- I'll refer to them as DOGGR --

16 and Regional Boards that dates back to 1988 regarding
17 underground injection. And in that MOU, if DOGGR staff
18 feels there's a concern about the effects of a well field
19 or well operations on water quality, they can seek what
20 is known as an informal opinion from the Regional or
21 State Board; and over the past 25 years, this MOU has not
22 been used very extensively, to my knowledge.

23 I don't think I found an instance of its use
24 previously, but you may recall that just last year, DOGGR
25 did request an informal opinion from the Regional Board

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1 staff on the Inglewood oil field and last September, I
2 issued such an opinion stating that groundwater in the
3 vicinity of Inglewood oil field is of great importance
4 and deserving of the highest level of protection.

5 So if you need to get a copy of that letter, I
6 think I've distributed it once before, but if you want to
7 see a copy, I can get that to you.

8 DOGGR has placed the Inglewood oil field, in
9 particular, under what is known as an Area of Review, and
10 so what that means is that other wells in the vicinity
11 must be evaluated for their potential to possibly
12 discharge their injectate, their water, into an aquifer
13 and possibly impact that aquifer. And so what that means
14 basically is their fracking activities are somewhat
15 limited by the fact that to complete this AOR, this Area
16 of Review, they have to inventory and evaluate all the
17 other well bores that are in place.

18 I also had a telephone conversation with
19 representatives of PXP, the operator of the Inglewood oil
20 field, and they informed me that they have some pilot
21 fracking tests under way at this time in the oil field.
22 And in response to that, I also had a phone meeting with
23 State Board staff -- and for the Board members who were
24 around last year, you may remember John Borkovich. He
25 was the GAMA program member. I reached out to him and he

0045

1 and his staff were very, very helpful and they're trying
2 to essentially, I guess, coordinate their database with
3 information that they have from DOGGR.

4 Mr. Borkovich informed us that there are two
5 other groundwater production wells within one mile of the
6 Baldwin Hills area and he also informed me about
7 A.B. 591, and this bill would define hydraulic
8 fracturing, fracking, and would require the person
9 carrying out the hydraulic fracturing to provide the list
10 of the chemical constituents used in the fracking fluid
11 and the amount of water and fracking fluid that is
12 recovered from the wells.

13 The bill would require the State Oil and Gas
14 supervisor on or before January 21st, 2013, and annually
15 thereafter, to prepare and transmit to the legislature a
16 comprehensive report on the hydraulic fracturing in the
17 exploration of oil in California. The bill made it

18 through the assembly, I understand, and right now it is
19 in the -- and through the Senate Environmental Quality
20 Policy Committee, but it is held in the Senate
21 Appropriations Committee at this time in their suspense
22 file.

23 So staff will continue to work with State Board
24 staff on the oil productions here in our area.
25 Mr. Borkovich has committed that he can make some

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1 resources available. As you know, our resources are tied
2 to cost recovery in the cleanup sites, so we're hoping we
3 can get some direction and coordination with State Board
4 staff on this and we continue to do that.

5 And, again, thank you for that initiative. I
6 think it's really -- it's going to really help us carry
7 out our mission in protection of water quality on the
8 groundwater side.

9 And then finally, last month, you may recall
10 when I had to announce to you that the schedule for the
11 MS4 is being delayed to September and Heal the Bay came
12 and gave a list of water quality exceedences of last
13 summer, Board members expressed concern about the
14 bacterial exceedences and what would be done this summer.

15 I wish to report to you that earlier this month,
16 we sent out 17 letters to the County and 16
17 municipalities asking them to provide information on what
18 they know about the exceedences, the BMPs that have been
19 installed, that the Board installed at those locations
20 during the summer dry weather; and we asked that any such
21 information regarding the BMPs that have been implemented
22 to be sent to us by the end of this month. So we're
23 expecting to have a lot more information which may help
24 us on the new permit and other matters as well.

25 And that's about it for me this month.

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1 MS. MEHRANIAN: Great. Questions?

2 Yes, please.

3 MS. GLICKFELD: I have -- first of all, on the --
4 your report was very helpful today. Thank you very much,
5 Sam. Thank you very much for acting on the request of
6 the Board on the beach bacteria exceedences. I also want
7 to commend you on the approach, which is to write a
8 letter and to seek compliance and find out what people
9 are doing, not to just send a Notice of Violation. So I
10 really appreciate that we take -- we should take that
11 kind of step as a first step every time we see these
12 kinds of exceedences; and as we now are finishing the
13 TMDL development stage, we really should be focusing in
14 on the most productive way to work with our dischargers
15 on compliance and avoiding enforcement where we can, just
16 working with them in a positive way on compliance. So I
17 wanted to thank you about that.

18 On the subject of the Kast site, a couple of
19 things, and there is another site that I noticed in the

20 remediation program that I haven't seen before, which is
21 called -- it's on page 8 of your report and it's called
22 the Former HY "C" Tank Farm. Every time I see "tank
23 farm" now, it gets my attention and I wanted to know
24 whether or not -- first of all, what's on top of this
25 little tank farm? Is it industrial or residential? And

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1 are we talking about problems of the scope that we've
2 seen in the Athens and Kast site?

3 MR. UNGER: I'm going to ask Art Heath to come up and
4 help me out with this one.

5 MS. GLICKFELD: While he's doing that, I wanted to
6 note that since we don't have a press person or anyone
7 doing public relations, I now have a reminder on Google
8 alerts for this -- for the L.A. Regional Water Board and
9 one thing that came up from the USC News was the Carousel
10 site, really, and I'd like to share this piece. I'm
11 going to circulate it.

12 MS. LUTZ: I got the same one.

13 MS. GLICKFELD: Yes, and it really gives us a little
14 map which shows how extensive the impacts are on the
15 subdivision, but it also talks about how long and
16 uncomfortable and disruptive this process is being, and I
17 really appreciate the fact that staff is trying to do it,
18 make it go fast; but I think the Board also has to note,
19 has to figure out at some point if this is going to be a
20 ten-year process or a five-year process. What -- what
21 can we do for those residents who just want to get out,
22 just want to get out? They can't sell their houses.
23 They can't live there in peace.

24 So I just raise that issue with you, so I'm
25 asking about both the HY "C" and the Kast site.

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1 MR. UNGER: Go ahead on the HY "C".

2 MR. HEATH: Good morning. Arthur Heath, Chief of the
3 Remediation Section. I don't have a lot of details
4 specifically about the site, but it's within the Port of
5 Los Angeles. A lot of their properties are being
6 redeveloped in terms of they're bringing down the tank
7 farms. They're going through assessment, cleanup, and
8 typically most of the redevelopment will be, you know,
9 commercial or a continuing industrial type of activities
10 there. But specifically, I really don't know what's
11 being planned for this particular site.

12 MS. GLICKFELD: So this is basically a vacant site at
13 this point?

14 MR. HEATH: I really couldn't tell you that.

15 MS. GLICKFELD: It would be great if you could come
16 back with some information on it.

17 And the other point that I'd like you to come
18 back with is whether or not there's actually impact on
19 ocean waters, whether there's any testing you're
20 requiring to find out whether it's just polluted soil and
21 whether there's migration in the groundwater.

22 MR. HEATH: Through our process of a lot of these
23 sites that are next to the Harbor, we definitely look at
24 that, whether they're impacting the Harbor or not. Some
25 are, and so that's being considered in terms of

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1 assessment and cleanup again.

2 MS. GLICKFELD: Okay. You know, Sam, I would like to
3 see us -- I had raised this when we first got into the
4 seriousness of the Ujima and the Kast site and I
5 suspected and the Board suspected that there were lots of
6 these, and there's got to be a more systematic way of
7 discovering them and I'm wondering whether or not, given
8 the State boards -- and this is something for Board
9 Member Spivy-Weber; maybe she can help us with this.

10 Given the State Board's and our interest and our
11 important interest in looking at groundwater and
12 groundwater supply, some parts of our region are
13 depending up to 90 percent on groundwater's water supply
14 and some people are drinking unsafe water. So it would
15 be to our advantage to be able to do some kind of
16 historic analysis, GIS analysis, to find out where these
17 tank farms are and to what extent this is a regionwide
18 problem for us.

19 We have more industrial sites in Los Angeles
20 County than almost the rest of the state combined, so
21 it's a special issue where we should be seeking that kind
22 of help and I would ask that you do so.

23 MR. UNGER: Okay. Thank you. Yeah. We will.

24 MS. GLICKFELD: And then my last question is I'm
25 looking at our Monthly Enforcement Report, and it's very

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1 different this month than it's been in the past. There
2 are well over 100 NOV's for construction permits and I was
3 wondering whether this is some kind of -- now that we're
4 winding down the MMP process, whether this is some kind
5 of a new initiative and what are people doing wrong that
6 they're getting all these NOV's? Are they not complying,
7 are they not getting permits, or how is it that we
8 identified all of these?

9 MR. UNGER: Primarily, we identify most of them
10 through inspections, and our inspection group has been
11 out very vigorously. I mean, we went through a whole
12 series. You may recall that we had a whole series of
13 these before we had these benchmark exceedence letters
14 and things like that. So through review of those, the
15 responses to those benchmark exceedence letters and
16 through inspections now that we're through that process,
17 staff has been more available to go out and carry out
18 inspections.

19 MS. GLICKFELD: Do we ever provide workshops to the
20 construction industry working with industrial trade
21 groups so that we can educate people rather than have to
22 fine them?

23 MR. UNGER: We have worked with State Board and they

24 come down occasionally to provide such workshops, but we
25 have not initiated those on our own yet. Maybe -- I

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1 think I'm hearing from you maybe we might look into that.

2 MS. LUTZ: I may be able to help with that. I know
3 that the municipalities, on a regular basis, hold
4 workshops in their own municipality for construction
5 crews that are coming. That's something that, at least
6 in the region I'm at, they even work together and do
7 regional updates. Particularly when something changes
8 with the SUSMP rules, they will do that; but I think it
9 is, but I think it would be great if we could coordinate
10 some of that.

11 MR. UNGER: Let me -- I'd like to get back with you
12 on that because essentially it comes from two -- I think
13 this comes from two different areas. One is our current
14 MS4 permit, as you just mentioned, Board Member Lutz, and
15 the other is from the State permit that we implement in
16 the regions so -- with the general construction.

17 I think, at some point, it may be worthwhile for
18 us to come back to you with an information item
19 essentially on how essentially construction works here,
20 how regulation of these sites is carried out, under which
21 of the two mechanisms, and what we can do and we can get
22 that point.

23 MS. GLICKFELD: Just the last point. This is all the
24 construction general permit?

25 MR. UNGER: Right.

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1 MS. GLICKFELD: This is not the NPDES permit.
2 Something's obviously going on.

3 MS. LUTZ: I might suggest, too, that after the Board
4 completes the new MS4, that that's a good time to sit
5 down with all of the construction companies and, you
6 know, have a big kind of "Let me explain to you what's
7 new" kind of thing and so maybe we should put that on our
8 calendar to start working towards once this permit is
9 done and it's got all the changes in it, and we can have
10 the State Board come and assist and talk about their
11 permit at the same time.

12 MR. UNGER: Okay. I'll work with Ejigu Solomon and
13 Ivar Ridgeway to coordinate these activities.

14 MS. MEHRANIAN: Anything else? Questions?

15 MS. DIAMOND: I was only going to mention that, as
16 Board Member Lutz just said, many of the municipalities
17 probably are doing these kinds of things and we just
18 don't know about that.

19 MS. LUTZ: Yeah.

20 MS. DIAMOND: So given the staff resources that we
21 have and don't have, possibly we could be working with
22 the cities to coordinate that and the Regional Board
23 would be part of the program that already exists and
24 expand it, participating in it rather than coordinating
25 it.

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1 MS. LUTZ: Yeah. I think that's what I just asked,
2 but --

3 MS. DIAMOND: I think that would be a better way for
4 us to go, to have it happen and not be responsible for
5 coordinating the whole thing, but be a part of it.

6 MS. MEHRANIAN: Okay. Board Member Munoz?

7 MS. MUNOZ: Sam, thank you for a thorough and solid
8 report and for getting back to me on the pipeline,
9 getting back to us on some of the fracking issues. I do
10 have a couple of comments about that, but I want to talk
11 to you -- I want to ask you about the 40 homes that
12 you're going to be doing indoor testing. Can you explain
13 the process? How you notify the folks? How long it
14 takes? Do you get back to the folks when you find out
15 the results? 'Cause I think it's real important that --
16 I know if someone knocked on my door and said they needed
17 to do indoor testing because of impacts to something
18 going on in a local industry, it would scare me and
19 especially if I had four or five children, I'd be real
20 upset. So can you walk me through that process, when you
21 do that and who does that?

22 MR. UNGER: Actually, the processes are a bit
23 different in the two sites in Kast and Willowbrook, next
24 to Ujima, because in the Kast site we are working
25 essentially through the litigants in the class-action

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1 lawsuit. So essentially what happens there is the Water
2 Board directs Shell. Shell then informs the plaintiffs'
3 attorneys that certain properties need to be tested due
4 to the fact of -- due to the conditions beneath the
5 property, that the levels are at a sufficient level, and
6 then the plaintiffs' attorneys then get back with
7 essentially Shell's attorneys and the schedule's formed.

8 That's what was totally shut down essentially up
9 and through this month when the Court ordered essentially
10 that a certain number of properties had to be made
11 available every week. So in the Kast site, it works
12 through the class-action lawsuit.

13 When we're talking about Willowbrook, it's a
14 different procedure and what we are planning on doing at
15 Willowbrook is for the first 40 homes that we're looking
16 at, we're going to -- staff is going to knock on doors.
17 We have a notice that is drawn up. We have an
18 information video on our website that people can go to
19 and sort of see what's entailed in the testing and at
20 this point, it's going to be up to those homeowners to
21 provide us access. I'm not sure that we're going to get
22 100 percent agreement to do the testing, but nonetheless,
23 it's still going to provide us some very good information
24 on generally what's going on in the neighborhood.

25 So here, our first approach for the Willowbrook

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1 area is to look for voluntary agreement. We're working

2 out with Exxon right now that there's going to be a
3 relocation package such as there is at Kast where the
4 people can leave the house and pick a hotel in the nearby
5 area; and in that case, the responsible party picks up
6 the charges for those. It's -- that part of the process
7 has worked very smoothly in the Kast site because they'll
8 accommodate pets and, you know, it just -- you know, it
9 is very accommodating to try to make it as less intrusive
10 as possible, but still to be told that you have to move
11 out of your home for two or three days, there's
12 definitely an impact on people and there's no getting
13 around it because that's what it takes to do the tests.

14 MS. MUNOZ: So when you knock on the doors, you talk
15 to the people, do you tell them specifically what you're
16 testing for?

17 MR. UNGER: Yes.

18 MS. MUNOZ: And then when you get the results, how do
19 you go back to them and inform them what the results are?

20 MR. UNGER: Well, again, we haven't gotten to that
21 point with the Ujima site. We will -- what we're finding
22 through our work at Kast is when we can access the
23 residents one on one, that seems to be the most effective
24 way to transmit information. So that's what we will do.
25 That's what we will do at the Willowbrook site next to

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1 Ujima.

2 At Kast, it goes back differently where
3 essentially the results go to the attorneys, then to the
4 plaintiffs' attorneys, and then from the plaintiffs'
5 attorneys to the homeowner.

6 MS. MUNOZ: I just want to make sure that when you
7 are going into homes that are not English-speaking homes,
8 whether they be Korean, Spanish, or others, that you take
9 professional translators and information in the language
10 in which they speak and read, 'cause I think that's very
11 critical when you're talking about, you know, potential
12 toxins found in their homes, that they truly understand
13 what's taking place, what's going to happen, and the next
14 steps, 'cause it is a very fearful process where you do
15 understand it. So if you don't understand it fully, it
16 becomes even more devastating.

17 MR. UNGER: Yes, thank you. Just to let you know, we
18 are finalizing our request for access, the written
19 request for access, and we are working with State Board
20 to have it translated into Spanish at this time.

21 MS. MUNOZ: Great. I have a couple of -- thank you
22 so much for the information on the fracking and
23 pipelines.

24 Every time I come to a Board meeting, I see a
25 number of sites that we're doing cleanup or real

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1 concerned and we're doing testing. Have we ever taken
2 the approach of trying to prevent a lot of these
3 situations from occurring by providing -- I know we're

4 doing the TMDLs, but providing strong guidance and
5 encouragement to those industries who have done this
6 historically in many parts of L.A. and Ventura County so
7 they can prevent that from doing that in the future?

8 I think the point here is not to get to a point
9 where we don't have these similar reports over and over
10 and over again and since we know that we have one of the
11 largest oil field sites in urban area in the country that
12 affects a million people, plus others that are in
13 Long Beach and other places that we would take, I guess,
14 a more -- a different approach, a more, for me,
15 reasonable approach and rational approach of talking to
16 them before we have to start doing cleanups and having
17 impact to environment and community health.

18 MR. UNGER: Well, to the extent -- thank you. I
19 appreciate that, but -- and believe me, it's not pleasant
20 for me to come here and report to you that these sites
21 are in the state that they are, but one thing I'm sure
22 you all know, you know, the condition of these sites
23 dates back to early in the last century, not this
24 century. I mean, in the '10s and '20s are the very
25 vigorous oil industry here in the Los Angeles basin. So
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1 that's one thing to deal with.

2 The other is we do -- the manner in which we try
3 to address that now, first of all, is we're more active
4 in responding to EIRs and things like that and making our
5 concerns known, you know, when we do see some of these
6 sites that could potentially affect water resources and
7 whatever -- we're on the phones with our attorneys all
8 the time, asking what we can say and what we can do in
9 order to try to prevent these.

10 I would say, back to my point, that this
11 contamination is legacy. There are other laws in place
12 and other regulations in place such that these types of
13 situations hopefully will not occur again. I think
14 there's other regulations. There's other regulatory
15 bodies such as DOGGR, things like that, that are trying
16 to prevent these types of situations from occurring
17 again. There's other standards and things like that that
18 we do look to, we do invoke, we do get involved.

19 In discussions on like at the Port of
20 Los Angeles, for example, when people want to put in a
21 new tank farm there, what sort of containment is going to
22 be used and things like that. So to some extent, we do
23 get involved in that and to my knowledge, we're involved
24 to the extent that we're legally allowed to be involved.

25 MS. MUNOZ: And my last comment: Could you just keep
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1 the Board informed on issues and updates on the fracking
2 issue that's taking place I guess not just here, but
3 throughout the state?

4 MR. UNGER: Yes, I will. Yeah. We had a very -- a
5 very vigorous and a good dialogue with Mr. Borkovich, and

6 I'm sorry you didn't get a chance to meet him last year.
7 I think he reported to our Board. It was a very good
8 report on the general state of groundwater in the state
9 of California and he's committed to help us and to keep
10 us better informed. He's well aware, again, of the oil
11 production legacy both in this county and in
12 Ventura County as well, parts of Ventura County.

13 MS. MUNOZ: Thank you so much.

14 MS. DIAMOND: I'd like to just comment on that, about
15 the fracking. I do know that there is going to be a
16 hearing. I don't know -- there's no date set yet, but in
17 the not too distant future, members of the Legislature,
18 including Senator Fran Pavley, Assemblymember Betsy
19 Butler, and Assemblymember Holly Mitchell, are going to
20 be doing some type of a town hall on the issue of water
21 and all of the associated issues, including fracking,
22 because some of the area where you're -- where you've
23 been talking about, the Inglewood oil farms, the oil
24 drilling is in Assemblymember Mitchell's district, but
25 there's the whole concern about the Biona leading out

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1 into the Pacific Ocean. So there are going to be
2 hearings held and I'll let you know and let the Board
3 know when they occur.

4 MR. UNGER: And two little quick things I just
5 remembered. I think you heard about it earlier, but,
6 again, we came to a milestone in the Consent Decree
7 between NRDC and USEPA. We still have one other TMDL to
8 do in the Ventura River for nutrients and algae and such
9 as that; but other than that, it was quite an
10 accomplishment. The entire staff, we had a little
11 in-house party, a potluck lunch, and I really want to
12 thank all the staff on the TMDL, as well as the Board,
13 for having the courage and the foresight to adopt and
14 implement these TMDLs, to guide us as we move forward to
15 clean waters. So that was quite an item.

16 And I just wanted to say one other thing. We
17 have started a regular phone call -- Paula, Deb, and I --
18 with Judie Panneton at the State Board because we do not
19 have press support like we had previously and we expect
20 to speak with her -- we speak with her regularly. We
21 keep her updated. She's been very proactive and you've
22 probably seen that we've had some press in this past
23 month. So that's how we've been able to do it. So we're
24 trying to work as best we can without someone in the
25 office directly, and she's been very -- she's very

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1 skilled and very helpful.

2 MS. MEHRANIAN: Board Member Camacho, that was one of
3 the issues you had. So we can do updates, regular
4 updates for you.

5 MS. CAMACHO: That's great.

6 MS. MEHRANIAN: Okay. Any more questions?

7 MR. YEE: Yes. I had a question. Once you issue an

8 NOV, what happens next?

9 MR. UNGER: Well, several things can happen after we
10 issue a Notice of Violation. Basically, generally
11 Notices of Violation are accompanied by either requests
12 or orders for information; and if we receive that
13 information, we evaluate that information for, as we call
14 it, a compliance evaluation to see if it is -- if what is
15 reported possibly as an exceedence is truly an exceedence
16 of an order or a permit, and then we take several -- we
17 have several paths to go from that point, some of which
18 result in civil liability penalties. Others can result
19 in orders such as Cease and Desist Orders or Cleanup and
20 Abatement Orders.

21 MR. YEE: Thank you.

22 MS. MEHRANIAN: Thank you very much. Thank you for
23 your report, Sam.

24 MS. LUTZ: Thank you, Sam.

25 MS. MEHRANIAN: Oops. One more.

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1 MS. LUTZ: No. I said thank you.

2 MS. MEHRANIAN: Oh, I thought you had a question. We
3 have an update from State Board Fran Spivy-Weber.

4 MS. SPIVY-WEBER: Thank you. Since Madelyn didn't
5 mention it, I'll mention that John Borkovich is an alum
6 from UCLA and he is going to be your friend in terms of
7 not only helping to give you the information about
8 groundwater conditions, but give it in a way that you can
9 actually understand it because he does a lot of mapping
10 and pictorial efforts through the State Board through
11 GAMA and so you can go on to GAMA, you can look up the --
12 you can go on to the map, you can find where you live,
13 and you can look and see what wells are nearby. I don't
14 know if he has all the tank farms in there, so that'll be
15 something --

16 MR. UNGER: There's quite a few.

17 MS. SPIVY-WEBER: But I know he would have those that
18 have come to light. So he is someone I think you're
19 going to be seeing a lot of over the next year or two.

20 You asked particularly about the reorganization,
21 the Board reorganization; and as I think Madelyn pointed
22 out, these bills come up fairly often and rarely do they
23 go very far, but this is not a bill. There is a bill for
24 reorganization. That's true. It's a Steinberg bill so
25 it's, you know, it's got some oomph behind it; but more

0064

1 importantly, I would say that some of -- some of what is
2 in the Steinberg bill has and some that is not in the
3 Steinberg bill has appeared in the governor's Finance
4 Report and that is going to be -- it's a report that came
5 out in January and it was the one that said that they
6 would reduce the size of the boards to seven; and the way
7 in which it would be done, they would eliminate Region 7,
8 which is Imperial, and would eliminate the
9 classifications, but then describes how the Board members

10 would be selected to try to get a diverse geographic and
11 expertise approach without having particular
12 classifications.

13 We will know -- so it's serious. We will know
14 whether or not it's going to be carried any further when
15 the governor's May revise comes out. Usually it's around
16 the middle of May. And if it gets -- if it gets
17 incorporated into the May revise and gets accepted
18 through the budget process, it will be -- we will know
19 for sure in -- well, whenever the budget is adopted.
20 Usually the May revise comes right before the budgeted
21 options. Last time, it came a little bit early. But
22 anyway, so it'll be May and June when we will know if
23 this is going to happen.

24 Now, it gets phased in. So I can answer more
25 questions as we get closer, but the Finance Letter is
0065

1 available. It's online and so if you are interested in
2 reading more details about this in terms of -- I guess
3 you've got eight people now and it would be through
4 attrition that you would reduce down to seven in most of
5 the boards. Only Region 9 and Region 7 would be affected
6 in terms of all the Board members having to resign and
7 then they would have to piece together a new Board made
8 up of Board members from Region 7 and Region 9, but
9 that's not your problem.

10 MS. GLICKFELD: On this issue, first of all, if
11 they're going to do a bill, can they please consider the
12 10 percent rule, the issue that keeps so many people off
13 the Board?

14 MS. LUTZ: But that's a federal rule. Is that the
15 not the Clean Water Act.

16 MS. SPIVY-WEBER: Well, there's some work on that as
17 well and certainly Steinberg's Bill is looking at that.

18 MS. GLICKFELD: If we could just have a rule to
19 automatically disqualify people from voting on anything
20 they had a 10 percent interest in, that would seem to me
21 we should at least ask if that would comply because way
22 too many people are disqualified from being on this Board
23 for all the wrong reasons, it seems to me.

24 MS. SPIVY-WEBER: Exactly.

25 MS. GLICKFELD: Are we going to eliminate all the
0066

1 classifications? So that means that the governor can
2 appoint municipalities representatives or not appoint
3 agricultural representatives or not? So they will just
4 be taking a pool of people?

5 MS. SPIVY-WEBER: That's right. That's the reason
6 it's a little bit iffy as to whether or not it will
7 actually happen.

8 MS. GLICKFELD: Right.

9 MS. SPIVY-WEBER: Again, that's -- because it's in
10 the Finance Letter and because it's part of the May
11 revise, it's -- I would say, the chances are higher that

12 something will actually happen. Whether all of that
13 happens, you know, it's a political world, so I don't
14 know.

15 In terms of budgets, from everyone that I've
16 talked to, no one is anticipating that there will be a
17 late budget this year, so that's good news.

18 For -- most of the State Board and Regional
19 Board's budget is now fee supported and at our Board
20 meeting next Tuesday, we are going to be discussing an
21 information item which is the Resource Alignment Report,
22 which the State Board asked staff to put together, and
23 it's a report that displays and discusses and assesses
24 really how aligned are the fees that people are paying to
25 us to the work that we're doing and then, perhaps more

0067

1 importantly, to the priorities that we have set as
2 Regional Boards and as a State Board.

3 This Resource Alignment Report is the first of
4 probably several reports that will be coming out, but it
5 gives you a picture of where we are right now, which is
6 largely pretty good.

7 There are two areas where our fees and
8 expenditures are a little out of whack. One is on our
9 401 certifications for free licensing for dam --
10 basically dam relicensing issues, which again doesn't so
11 affect here, but the other is in the irrigated ag
12 programs. More staff time is being spent in those areas
13 than there is money to cover them and in this new fee
14 world in which we are moving, this is a concern because
15 certainly both of those areas are very important. That's
16 why we're spending more time in them, but figuring out
17 how to actually pay for the work that we do and then to
18 pay for the priorities that we've set is a challenge.

19 So I would -- I believe the report -- certainly
20 it will be up by next Tuesday 'cause that's when we have
21 our Board meeting. I think it goes up on the web today
22 and so you might want it look at it. It's very
23 interesting and it shows some areas where we will need to
24 do some -- certainly some more work; but one of the big
25 challenges is a number of fees come in to one fund, but

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1 they come in from different fees, and so the inference
2 will be how pooled are those fees; and that's certainly a
3 legal issue, but it's something that certainly the
4 stakeholders are going to be very interested in. And
5 we're going to be discussing this with them as well, but
6 it will have an effect on all of us because we are more
7 and more not only being scrutinized for the way in which
8 we spend the money that people are giving to us or
9 required to give to us for doing our work, but we want to
10 do that, too. We want to be as responsive as possible.

11 So I would urge you to look at this Resource
12 Alignment Report. It will be on the web and it's -- if
13 you're interested and can't find it, let me know or let

14 Sam know.

15 We had a low-impact -- we will have at our Board
16 meeting on Tuesday the Low-Threat Underground Storage
17 Tank Case Closure and Draft Substitute Environmental
18 document hearing and we will be voting on that in May.
19 This is -- as you know, you've got lots and lots of
20 underground storage tanks in your area as well as
21 throughout the state and we are considering a policy on
22 closing some of those that are considered low threat and
23 doing it in a -- through a policy mechanism so that it is
24 done sort of more broadly and actually there would be
25 more areas brought into it. This is quite controversial

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1 because there are a lot of people who are very concerned
2 about that. It has arisen because, again, the cost of
3 continuing to do the updates on closure for these
4 low-cost -- low-threat sites is expensive and sometimes
5 those are getting the funding and some of the more --
6 perhaps more important sites are not. And so it's a
7 priority choice. It's going to be a lively debate at the
8 State Board on Tuesday and, again, a vote is scheduled
9 for May the 1st. So that, too, will be a very lively
10 discussion. I don't know exactly how it's going to all
11 shape up, but it will affect your program and others
12 because if it does get adopted in some form close to what
13 it is right now, there will be a much larger number of
14 sites closed.

15 Another favorite topic for all of you is
16 septic, our on-site wastewater treatment system. We had
17 a staff workshop yesterday. We're going to have a Board
18 hearing on May 2nd. This is for our Septics Policy, the
19 latest Septics Policy. Hopefully this one will make it
20 through. And we'll have a Board vote -- we have a Board
21 vote scheduled for June the 19th, so it's on a fairly
22 fast track.

23 After it -- assuming that it does go through
24 June the 19th, it would have to go through the
25 Administrative Law Office and that takes a while. So it

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1 probably would not be out as a real policy until early
2 next year, maybe June or July -- pardon me, maybe January
3 or February, and the emphasis in this new rendition of
4 the policy -- and, again, I think you -- I hope you will
5 look at it -- is that there's a lot of emphasis on local
6 planning and local enforcement and local activities
7 working very closely with the Regional Board.

8 So I would -- I would urge you and, Sam, I would
9 urge you to once -- if this does get adopted in June, to
10 set up an information meeting with the Board to go
11 through what is going to be required, because at the
12 hearing, at the staff workshop yesterday, the City of
13 Los Angeles was there and they were concerned about some
14 of the issues with the policy.

15 So it would be very important to give you a

16 heads up early before you get into actually -- actual
17 implementation; and lest you think that a whole lot of
18 stuff is going to be thrown on you all at once, there is
19 a time period -- I think a three-year time period -- for
20 this implementation activity to take place and so it
21 won't be immediate, but it would be something good to be
22 in front of early. So that is coming up very soon.

23 We've started the Ocean Desalination Policy. We
24 had a scoping session last Friday and there are three
25 reports. One is out right now, one is coming out very

0071

1 soon, and a third one is coming out. So this scoping
2 deadline, I believe, is Friday.

3 Because these reports will be coming out over
4 the next several -- over the next month or two, there
5 will be many opportunities for people who are interested
6 in ocean desalination to write in and I would recommend
7 that those who are interested or who are concerned that
8 their scoping comments are not being taken seriously or
9 that they have more to say than they have time to say by
10 Friday, there will be plenty of opportunities,
11 particularly if you use these reports when they come out,
12 to add to your ideas as to what we should be looking at.

13 And finally, three big policies that you're very
14 interested in: The Toxicity Policy -- oh, yes. Well,
15 due to some very unfortunate situation, we have had to
16 send the Toxicity Policy out for our own peer review.
17 EPA was doing a peer review, but we've not been able to
18 get from Washington D.C., not from Region 9 -- we've not
19 been able to get all the comments posted and so we've had
20 to go out to another peer review; and in talking with
21 Jonathan, it looks like that peer review report will
22 be -- will not be available to us until May or June. So
23 sorry about that.

24 The Trash Policy should be out in the summer.
25 We've got a very active group that's helping to put that

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1 together, and it's -- it would be -- we would hope that
2 it would be voted on or up for a vote at least in
3 February, January or February of next year.

4 And the Constituents of Emerging Concern: We
5 got a grant from the Packard Foundation or there was a
6 grant from Packard Foundation to expand the focus on the
7 Constituents of Emerging Concern to the coastal areas and
8 oceans near marine ecosystems, particularly near shore,
9 and that is in internal review and Deb has been able to
10 contribute to that internal review, and that will be out
11 to the public for comments in a few weeks.

12 And I did have one other thing. There is a
13 recycled water bill, the water reuse had worked on and
14 has had introduced it. It's quite large. It's about 49
15 pages and it is trying to consolidate a lot of the
16 water -- or the recycled water components that are spread
17 throughout the Water Code into one place; but because

18 it's pulling things from all different parts of the Water
19 Code, it's quite complex and it is getting a lot of
20 attention.

21 There is a hearing on Tuesday in the Assembly on
22 this bill and we are following it extremely closely.
23 We're working with water reuse. We are internally.
24 We're -- again, Deb is on the -- on our advisory group to
25 review the bill and it's -- but, again, it's so big and
0073

1 so, so large that I don't know exactly what's going to
2 happen to it, whether it'll be divided up in parts or
3 only a small part of it will be considered this year or
4 if they're just going to keep it all together. That's
5 still being determined and I suspect after this hearing
6 on Tuesday, we'll know a lot more.

7 MS. LUTZ: Fran, do you happen to know the bill
8 number on that one?

9 MS. SPIVY-WEBER: I don't.

10 MS. SMITH: I can send it to you. I think it's 28.

11 MS. LUTZ: A.B. 28?

12 MS. SMITH: 2853 or something? It's four numbers.

13 MS. SPIVY-WEBER: Yeah. It's four numbers. I did
14 not bring that with me. I'll look and see if I have it
15 with me, if I can get it to you. But the Assembly
16 committee where it will be heard is Huffman's committee
17 and it's the Water Parks and Wildlife and so it's
18 Tuesday, Water, Parks, and Wildlife, and that's the
19 subject of the hearing. But I will get a copy of it for
20 you.

21 MS. SMITH: It's 2398.

22 MS. LUTZ: 2398. Thank you.

23 MS. DIAMOND: Fran, can I ask you a question on just
24 legislation in general? When you get updates from the
25 legislative -- the person responsible for updating you on
0074

1 legislation, is it possible for you to forward some of
2 that to us so that we can keep current on the key water
3 bills?

4 MS. SPIVY-WEBER: Right. Yes. We get a list of the
5 top priority bills that we're tracking and those that
6 we're actively engaged in and those that we're just
7 tracking. Right now, the bills are just getting -- the
8 latest bills are just getting -- the spot bills are being
9 turned into real bills and so it's very much in flux, but
10 we should have a report out, I would say, in probably
11 another week or so, and I know Sam gets it.

12 MR. UNGER: Yeah. I can provide those. I don't
13 know. Does everybody want those?

14 MS. DIAMOND: Yeah, I think so.

15 MS. LUTZ: Very helpful.

16 MR. UNGER: When I receive them from Office of
17 Legislative Affairs, I'll just forward them on to you.

18 MS. DIAMOND: Great. Thank you.

19 MS. MEHRANIAN: Very good.

20 MS. SPIVY-WEBER: Well, thank you very much.
21 MS. MEHRANIAN: Thank you very much.
22 MS. LUTZ: Thanks, Fran.
23 MS. MEHRANIAN: I think we need -- we have the public
24 forum right after, but I think we need a break.
25 You need a break, right, for the court reporter?

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1 So it's now 10 minutes to 11:00. Let's say 11:05?

2 MR. UNGER: 11:00.

3 MS. MEHRANIAN: 11:00? Okay.

4 (Recess)

5 MS. MEHRANIAN: We're back in session.

6 Let's start with Item 7, which is Public Forum.

7 We have two cards.

8 One is Mike Solomon from United Water
9 Conservation District in Ventura County and he requested
10 15 minutes. If you can do it shorter, we would really
11 appreciate it. We have a tight, tight schedule today.
12 Could you do it in a little shorter?

13 MR. SOLOMON: Absolutely. I'll speed through it.

14 MS. MEHRANIAN: Like seven minutes?

15 MR. SOLOMON: Thank you.

16 First of all, members of the Board and Sam, for
17 giving me the opportunity to talk. I'm representing not
18 only United Water Conservation District, but Supervisor
19 Kathy Long, Rob Roy and Ventura County Ag Coalition, and
20 Steve Bachman, Dr. Steve Bachman.

21 I never thought I would be up in front of this
22 Board as much as I have been. I certainly never wanted
23 to be the poster boy for a NOI, but I did hear something
24 when you were giving the award to Mark Gold that -- a
25 word that I'm going to use here, "brutal honesty." I'm

0076

1 going to use that throughout mine, and I do appreciate
2 that you appreciate brutal honesty.

3 The only reason I'm here is I want to give you a
4 little history and there's a couple of new Board members.
5 I wanted to give them a little bit of history of what
6 we've been dealing with on the Chloride TMDL in the Upper
7 Santa Clara River and I'd like to leave you with the
8 following messages: We need to keep the pressure on L.A.
9 Sanitation District to comply with the law in a timely
10 fashion. Their self-imposed delays should not be
11 acceptable. We need to make this a priority.

12 You've made a ruling. Four years ago, you made
13 a ruling and we're still sitting around doing nothing but
14 hoping something else will happen.

15 I would say this also: Your staff gets it. I'd
16 even say the L.A. Sanitation District staff gets it.
17 It's the Santa Clara Valley Sanitation District Board
18 that doesn't get it. They don't want to get it and they
19 believe they have political clout that's greater than
20 this Board's enforcement authority.

21 So with that, I'll go on to the next one,

22 please. Do I have the clicker or -- thank you.

23 The TMDL's from 2002: It's the chloride
24 degradation of the waterways by Santa Clara Valley
25 Sanitation District that releases from their Saugus and
0077

1 Valencia Wastewater Treatment Plants. Several players
2 are involved: United Water Conservation District, who
3 has the responsibility down the Santa Clara River in
4 Ventura County of protecting the groundwater in the seven
5 groundwater basins. You have the Ventura County Ag
6 Coalition of over a thousand members. You have
7 Ventura County. You have several Upper River water
8 purveyors and you have the Santa Clara Valley Sanitation
9 District.

10 I think the important thing for some of the new
11 members I want to make clear is this was a collaborative
12 effort we worked on together. Santa Clarita was not
13 forced to do anything. We worked with them to come up
14 with a resolution to help them get to where they needed
15 to be and I'll show you that in a minute.

16 It was hugely successful at this Board and at
17 the State Board level. In fact, we got a lot of
18 accolades for how hard we worked together and how long we
19 worked together to come up with something that was really
20 a win-win situation. As soon as it was signed, MOU was
21 signed in 2008, Santa Clarita Valley Sanitation District
22 said, "We're not going to do it. So what are you going
23 to do to us?" So what happens now? And that's a
24 question I have for this Board.

25 Next, please. This is the area we're talking
0078

1 about. This is from the TMDL. The green area is
2 Reach 7, the purple is Reach 6, blue is Reach 5, and the
3 other is red, and Ventura County is Reach 4. That's when
4 the -- with the Chloride TMDL at 100 milligrams per
5 liter.

6 Next, please. Why is this important to
7 Ventura County? We have over a \$2 billion a year ag
8 economy, hugely important to our county. The USEPA says
9 that this Alternative Water Resource Management plan
10 ensures the agricultural beneficial use of the water is
11 protected. The TMDL protects salt-sensitive crops;
12 strawberries and avocados, which are two of our top five
13 crops.

14 I think another thing I want to point out to you
15 is we hear constantly from the Sanitation Board members
16 that it's bad science. The public of Santa Clarita says
17 it's bad science. It's their own science; they did it.
18 We accepted it and they did it, so how can they say it's
19 bad? It's very frustrating to us. Finally, we're
20 concerned because they're dumping their crap into the
21 river and damaging our crops and adding costs to our
22 farmers.

23 Next, please. So we worked with them and we

24 came up with -- along with the Regional Board, we broke
25 that one reach that was in the Ventura County section

0079

1 into Reach 4B and 4A, as you can see, and some
2 conditional site-specific objectives were set at 117
3 versus 100 and we upped it to 130 during critical
4 conditions or drought. So we gave -- the science said
5 that drought, salt-tolerant plants could handle this
6 without being damaged and so we said, "We'll work with
7 that. That's good."

8 Next, please. Quickly, I want to show you the
9 red dots and the orange dots give you an idea when the
10 chlorides are greater than 100 or over 117. In this case
11 with the red, this is what it looked like in 2005
12 (indicating). Next, 2010; and now look at 2011, the
13 recent data. The problem's not getting any better. It's
14 just moving westwardly and now past the Piru Creek where
15 it comes together with the Santa Clara River. So don't
16 let anybody fool you. The problem's not getting better.
17 It's just moving along and causing us more and more
18 trouble.

19 Next, please. The conventional approach that
20 L.A. San was looking at to deal with the 100 milligrams
21 per liter TMDL, they were going to construct a desal
22 plant. They wanted to put a brine line down the river,
23 basically, and dump it out to the ocean. The cost was
24 about 500 million. Working with the Regional Board,
25 especially Sam, the site-specific -- the conditional

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1 site-specific and objective and the science, getting it
2 up to 117 milligrams per liter, we came up with this
3 Alternative Water Resources Management plan that dropped
4 the cost down to about 250 million and that included
5 Ventura County's participation by us, the cost, and
6 running a plant along the way.

7 Next. So that Memorandum of Understanding was
8 signed in 2008 by all those parties I mentioned before
9 including Santa Clara Valley Sanitation District. Their
10 signature's clearly on it. It revises the TMDL to 117
11 and I won't go into the other details. You know that.

12 Next, please. So like I said, it was sort of a
13 love fest here at the Regional Board in 2008 and 2009.
14 We received accolades. There was two groups that were
15 just opposed that came together and solved a problem and
16 we were like friends. It was nice. We were working
17 together and we came up with a great idea and the
18 Sanitation District even represented to you, your Board,
19 and the State Board, they've made commitments; that if
20 you give in and give that conditional site-specific
21 objective of 117 so that we can go ahead with this AWRM
22 project, they'll -- here are the commitments they'll go
23 with and they'll get going right away.

24 Next, please. So what's happened since then?
25 Yeah, in November of 2008, they got Measure S passed,

0081

1 which removes water softeners. We have seen
2 improvements. But if you look at the MOU, the MOU says,
3 You have to remove water softeners and there would be
4 improvements. So we expected that. Nobody should think,
5 "Oh, that solved everything."

6 But what happened is in May 2009, the
7 Santa Clara Valley Sanitation District, they decided not
8 to vote on it to fund any of the work on the AWRM. Their
9 comment was, "Measure S is enough. We don't have to do
10 any more." They told staff, "Go out and look for
11 funding." They even asked us to support them in looking
12 for state and federal funding. We agreed. We said,
13 "Look, we've been working together hard. We'll go out
14 there and help you. We'll beat the bushes, too, with
15 state and federal representatives." But there wasn't any
16 luck; and the reason there wasn't any luck is the
17 Sanitation District wanted it all funded. They didn't
18 want to pay for anything. They wanted 100 percent
19 funding. They weren't going to settle for a 10 million
20 help there. So we had no luck.

21 So we go back to Santa Clara Valley Sanitation
22 District -- we're in July 2010 -- and they do a Prop 218
23 vote to get funding, get some initial funding, because
24 remember all they have to do is some design work and
25 studies until 2015 to get the process going.

0082

1 They refused to increase the rates, and I'll
2 show you the rates. They refused to increase the rates
3 even though they didn't even get close to the required
4 "no" vote of the public. They got 7,000 out of 35,000
5 votes that were possible and they still voted "no"
6 against it, and the local paper there started bashing
7 Ventura County, oh, we were greedy, we wanted them to fix
8 our problems, which is as far from the truth as you can
9 imagine, and I'll show you that.

10 Next, please. So in 2010, they did a Prop 218.
11 They didn't get their "no" vote and they said "no." In
12 2011, they did a 218 vote for money they needed because
13 they weren't funding their Sanitation District properly,
14 and I'll show you this -- it's really interesting -- so
15 you can see what we're dealing with. I'll show you the
16 rates. Almost nothing's been done other than the
17 Measure S, other than going out and trying to come up
18 with other ideas, and the constant misinformation that's
19 out there that it's not their problem; it's
20 Ventura County that drives us nuts. We're not the ones
21 dumping the water into the river; they are.

22 So real quick, I'm going to go. Here's 2010
23 when they put out the 218 vote to the public. That's
24 where the public has a chance to say "no" if you get a
25 50 percent vote plus one. They put this thing together.

0083

1 Here are the rates and in that yellow part it says, "Use

2 the enclosed envelope." They enclosed an envelope that
3 was stamped and ready to go, addressed.

4 Next page. The second page of that says -- it
5 does say, "If we don't approve this, we're going to have
6 to pay a fine," but look down at the bottom. They have
7 this protest form that they even include that shows you
8 bring your scissors out, cut it, and fill it in. Still,
9 they only got 7,000 votes out of this and they had Board
10 members literally soliciting the grocery stores trying to
11 get people to vote "no."

12 Next, please. Now, in 2011 when they wanted an
13 increase because the Sanitation District couldn't operate
14 anymore, this is the 218 they put out. That area that's
15 yellow (indicating) says, by the way, any money you
16 approve here will not be used to fix the chloride issue.

17 Look over to the right there. Do you see
18 anything that talks about how to do the protest like you
19 saw on the other one? There was this huge protest with
20 directions on the one that had the Chloride TMDL issues,
21 but here it has nothing and on the next page -- next
22 page -- they have this little thing that says, "This is
23 how you protest." There's no cut-out form; there's no
24 envelope or anything. My gosh, they didn't get enough
25 votes to kill it either. They went ahead and approved

0084

1 this one. But you can see what we're dealing with. When
2 it's something they need, great; but when it's something
3 that needs to be done, they basically try to make it not
4 happen. And even though they didn't get the "no" vote,
5 they still said, "We're not going to do it."

6 So here are the rates we're looking at right
7 now, and it's important to note that Santa Paula,
8 Fillmore, and Piru, they had huge problems with their
9 sanitation problems. They had huge problems and they
10 were -- these aren't rich communities. In fact, Piru is
11 designated as an impoverished community. Look at the
12 rates they are paying per month. I did put up City of
13 Oxnard and Ventura. That's there for information. Back
14 in '10, '11, Santa Clarita was pick 16.58. That 17.92
15 was the increase that I showed you where they avoided
16 showing people how to protest and these are the rates
17 that they're going to approve to just deal with the
18 operational costs of the plant. They had to approve
19 something and move on.

20 The thing I find really interesting about the
21 Santa Clarita Valley Sanitation District's bill also,
22 they're on your property tax so these people not only pay
23 the highest, but they get to deduct it on their federal
24 income tax returns, which blows me away, and yet these
25 people up in Santa Paula, Fillmore, and Piru, they've got

0085

1 to pay it out of their pocket.

2 Next, please. So here are the rates. The rates
3 on the left side are what the Board was given to say,

4 "Hey, we have to implement the AWRM. We've got to do
5 studies." On the left side, that's what the rates would
6 have been. On the right is what they've approved just to
7 operate. There's very little difference and, in fact, if
8 the AWRM was fully implemented, constructed, the rate
9 would have only have gone up to \$55 in the year 2022. So
10 the rate increases were nominal.

11 MS. MC CHESNEY: Mr. Solomon, I think the chair was
12 giving you seven minutes and your buzzer went over quite
13 a while ago.

14 MR. SOLOMON: Okay. Then I'll let you know we had
15 letters that came out from Michael Antonovich, the County
16 Supervisor, that gave some really ludicrous statements
17 about, hey, help us so we don't have to comply with the
18 Clean Water Act -- next -- and basically saying that
19 making the water fishable and swimmable is all that was
20 needed.

21 So in other words, he's basically saying we can
22 dump ocean water down the river because fish can live it
23 and you can swim in it, so what the heck? I'll skip
24 that.

25 All I can say is we've tried everything we can
0086

1 in Ventura County. We've visited Santa Clarita. We've
2 given presentations. In fact, a presentation we gave to
3 the Canyon County folks, the press was there. They came
4 up and talked to us and they said, "You know, you guys
5 have been real consistent with your statement. What we
6 keep hearing from Santa Clarita is off the wall and
7 changes from over and over."

8 We're frustrated. Please help us. The only way
9 we can get through to these folks is to get to their
10 Board members and people have to start being fined.
11 Otherwise, they're not going to do anything. They're
12 working on two different alternatives right now that the
13 public doesn't support and there's no proof that it will
14 work.

15 So I'd ask you to help us and make this a
16 priority. Thank you.

17 MS. MEHRANIAN: Thank you, Mr. Solomon. Thank you.

18 MS. DIAMOND: Well, the only thing I would like to
19 say to staff is can you let us know what the next steps
20 are? I think the question that Board Member Yee asked
21 before is the right question. What happens next? And
22 this has been going on for so long, we're all frustrated.

23 I think I met with you, Sam, with the
24 councilwoman from Santa Clarita last year.

25 MR. UNGER: That's right.

0087

1 MS. DIAMOND: And this is very frustrating to all of
2 us.

3 MS. LUTZ: And I met with them when I was Chair.

4 MS. DIAMOND: And it's just -- it feels like we're
5 stuck in quicksand right now in a way and, meanwhile, the

6 breadbasket of Ventura County is suffering.

7 MR. UNGER: Yes. Staff agrees. Staff has -- as you
8 may recall, I guess the one thing I would say that's not
9 in that chronology is we issued a Notice of Violation
10 last year, and I think all I can say at this point is
11 that staff is actively working on enforcement options
12 with the Santa Clarita Sanitation District and I don't
13 know exactly when we'll be able to report to you, but I'm
14 hoping it's sometime this calendar year on where we go
15 from this Notice of Violation.

16 MS. DIAMOND: So you're assuring us that this is a
17 very high priority with staff?

18 MR. UNGER: Oh, absolutely, yes.

19 MS. GLICKFELD: Madam Chair --

20 MS. MEHRANIAN: Yes.

21 MS. GLICKFELD: -- so the last time the Sanitation
22 District came to report on this, they told us we had
23 authorized under the TMDL an alternative of meeting a
24 lower level of salt by other methods and -- where they --
25 they have an alternative to do the proposed MOU approach

0088

1 or to actually reach a lower-level of salt pollution
2 through another method and they said, "We have chosen to
3 use this other method." Are they making progress on it?
4 Are they now within the realm of compliance with the TMDL
5 deadlines or are they not?

6 MR. UNGER: No. They are making progress, but
7 they're -- in our view, in staff's view, at this point
8 they are not in compliance with their permit
9 requirements. Recall that this TMDL has been brought
10 into their permits for the Valencia and the Saugus
11 plants, which is a good thing; and at this point,
12 although they are making efforts to go with the
13 lower-salt alternative that they've reported to you that
14 they favor, they are not in compliance at this point with
15 their permit on these issues. So that's why we issued an
16 NOV, a Notice of Violation, and that's why we are very
17 actively discussing compliance options with them at this
18 time.

19 MS. MEHRANIAN: Board Member Lutz?

20 MS. LUTZ: Sam, the directors at County Sanitation
21 have changed in the last few months.

22 MR. UNGER: Yes.

23 MS. LUTZ: I asked them twice to come and introduce
24 themselves to us, which I don't think they're here
25 today -- I don't think see them out there -- but I think

0089

1 that it's important that we hear from them, considering
2 that there's a new manager, and get their point of view.

3 MR. UNGER: I'll reach out to Grace Kast and inform
4 her that the Board is interested in hearing from her and
5 try to get her to speak to you either as an information
6 item or public comments as soon as possible.

7 MS. LUTZ: Well, I think it's -- I mean, like I said,

8 I've asked twice that they make themselves available to
9 come introduce themselves to the public during the public
10 forum; and it's been three months I think I've been
11 asking and they have not come forward. But I think it's
12 important that this Board see the new face there and hear
13 from the new director.

14 MR. UNGER: I will convey that message.

15 MS. MEHRANIAN: Can you please help to facilitate
16 that. Thank you, Sam.

17 MR. YEE: Well, I would agree that it would be nice
18 to actually hear from the new faces on their board, but I
19 think this has just drug on far too long and to me, to
20 wait until the end of the calendar year, I think -- and
21 just hearing everything and coming from Ventura County, I
22 follow this issue off and on -- that, you know, it's time
23 that something needs to happen and I just find it a
24 little bit unacceptable to wait until the end of the
25 year.

0090

1 MR. UNGER: Well, maybe -- I'm going to ask Frances
2 to clarify what she can about the status of where we are.

3 MS. MC CHESNEY: Yeah. What I just want to say is
4 there was the Notice of Violation. The staff is working
5 on enforcement options and because the parties to that
6 enforcement -- possible enforcement aren't present, we
7 can't really talk about the details. It wouldn't be
8 appropriate. But I suspect that something will happen a
9 lot sooner than December; you know, more like the fiscal
10 year.

11 MR. YEE: Good.

12 MS. MEHRANIAN: Thank you. Anything else?

13 Okay. The next speaker is Hannah Koo, L.A.
14 County Department of Public Works.

15 MS. KOO: Good morning.

16 My name is Hannah Koo. This is Bruce Hamamoto.
17 We are with the Los Angeles County Department of Public
18 Works and we're here to share with you about one of the
19 projects that we're currently working on called the
20 Hancock Park Pit 91 Drainage Project over at the La Brea
21 Tar Pits.

22 The project involves the installation of a
23 permanent sewer connection diverting the water from the
24 tar pit lake from the storm drain system now into the
25 sanitary sewer system.

0091

1 So here (indicating) you see here is just an
2 aerial view of the site. This is the Page Museum site.
3 Over at the bottom corner of the south part of the site,
4 you'll notice the lake pit right along Wilshire
5 Boulevard. So this is located in sort of the Mid City
6 area along Wilshire. The permanent sewer connection is
7 going to be installed just to the west of the lake,
8 you'll see here in red, extending from the west end of
9 the lake pit out into Wilshire Boulevard, connecting into

10 the City's sanitary sewer system.

11 Here is just sort of a schematic sketch showing
12 the proposed clarifier system for the discharge that's
13 going to be coming out of the lake pit, and I'll get into
14 a little bit more detail in the next couple of slides.
15 As I explained earlier, the discharge will be going into
16 the City's sewer system as sort of a batch discharge.

17 The first clarifier is basically a settling
18 chamber allowing all the heavier particles and solids to
19 settle to the bottom. There's these -- there's going to
20 be a WER wall allowing the solids to settle and there's
21 these oil absorbent pillows; and then in the second
22 clarifier, it collects more of the finer materials.
23 There are three chambers here and there are these wire
24 mesh panels with oil-absorbent media capturing the oils
25 and lighter particles.

0092

1 This is basically the Phase I portion of the
2 project.

3 The Phase II includes future landscaping around
4 the lake pit, what you see here on these photos. Where
5 we are now, basically the project has completed the
6 design portion of the Phase I, which was the design of
7 the permanent sewer connection. It is slated for
8 construction to be completed by the end of this summer,
9 and that's pretty much it. It's just a brief description
10 about the project.

11 MS. MEHRANIAN: Questions?

12 I have a question. What happened before?

13 MS. KOO: What happened before?

14 MS. MEHRANIAN: Before this whole measure was taken.

15 MS. KOO: Right. Well, the water from the lake pit
16 was previously discharging into the storm drain system,
17 and so now what the County has proposed is to install a
18 permanent connection, a six-inch pipeline to the sanitary
19 system, so we're no longer discharging all of the oil
20 from the tar into the storm drain system.

21 MS. MEHRANIAN: And then one more question.

22 MR. UNGER: Excuse me. Chair Mehranian, Paula may
23 want to add to it, but the subject of these previous
24 discharges were subject to enforcement action by the
25 Regional Board.

0093

1 MS. MEHRANIAN: Thank you.

2 And then the maintenance of -- because you have
3 a lot of equipment there that does all this, is there
4 like a permanent maintenance on this or --

5 MS. KOO: The museum basically maintains all of these
6 clarifiers and chambers and they're cleaned out annually.

7 MS. MEHRANIAN: Annually?

8 MS. KOO: Right.

9 MS. MEHRANIAN: All of them?

10 MS. KOO: Uh-huh. That's correct.

11 MS. MEHRANIAN: Thank you.

12 Any other questions? Thank you.

13 Oh, I'm sorry.

14 MS. CAMACHO: This could be totally off the wall, but
15 I'm just going to go for it. Is this an opportunity to
16 educate the public of some of the cleaning, water quality
17 efforts that you're going through? Because I know I live
18 in that area and there's people there all the time --

19 MS. KOO: Right.

20 MS. CAMACHO: -- and I think this is an opportunity;
21 and I've always thought of how can we demonstrate -- how
22 can the cities or the counties demonstrate all of the
23 hard work that you do in creating quality of water? And
24 so I know this is kind of a random question, but I don't
25 know if there's a way that you would -- even if it's like

0094

1 placards or a sign or something small that could lead to
2 just some type of education to the public who maybe don't
3 know. They just see a tar pit and a dinosaur.

4 I mean, it's really a great park and a great
5 area. So it's educational in that way, but there's other
6 things that --

7 MS. MEHRANIAN: And, Board Member Camacho, I think
8 the students go there all the time.

9 MS. CAMACHO: Oh, right.

10 MS. MEHRANIAN: It could be such an awareness
11 campaign.

12 MS. CAMACHO: Anyway just a question --

13 MS. KOO: To answer your question, the Phase II
14 portion, which is the landscaping, which the funding
15 hasn't really been in place yet, I think that's actually
16 a good point that you bring up. There's a lot of
17 opportunity I think for an educational experience at the
18 tar pits. So maybe things such as signage when we get
19 into the landscaping phase, we'll definitely look into
20 that.

21 MS. CAMACHO: Thank you.

22 MS. KOO: Thank you.

23 MS. MEHRANIAN: Wonderful.

24 Yes, please.

25 MS. GLICKFELD: I would note that we've been having

0095

1 issues with oil sheen in the Biona watershed for a long
2 time and I'm hoping that when you clean this up, we're
3 not going to have that problem anymore. So thank you
4 very, very much for the work you're doing. We don't
5 often get a chance to say thank you to the County, but I
6 want to make sure I say thank you when we can and this is
7 one of the times that we can. Thank you for complying
8 and thank you for doing such a good job.

9 MS. DIAMOND: I would just like to say that a good
10 example of signage that's being done is at the L.A. Zoo
11 with some of the Proposition O money that was used to
12 renovate the parking lot so that it would use -- it would
13 use water quality features, and there are signs all over

14 to educate all those people who park at the Zoo, and I
15 think that might be something that you could look at just
16 as an example of what you could be doing. "Why are we
17 changing? Why is" -- 'cause a lot of times when you do
18 those kinds of changes, it makes it more difficult for
19 people. "Why are they digging this up now? Why are we
20 being inconvenienced?" And so the answer to that
21 question, especially if it's educational, I think, would
22 be great.

23 MS. KOO: Sure.

24 MR. HAMAMOTO: I was hoping to be able to respond to
25 Madelyn about in the Biona, there is sometimes the oil

0096

1 sheen and this project would definitely remove some of
2 that, but the area overall experiences natural oil
3 seepage and so we wouldn't anticipate that to be a
4 complete removal of all oils on this one project.

5 MS. MEHRANIAN: Anything else?

6 Thank you. Thanks a lot.

7 MS. KOO: Thank you.

8 MS. MEHRANIAN: The next speaker is David McNeill,
9 Baldwin Hills Conservancy.

10 MR. MC NEILL: Good morning, members of the Board,
11 staff. I'm David McNeill with the Baldwin Hills
12 Conservancy. I'm also a representative of the Community
13 Advisory Panel for the Baldwin Hills Community Standards
14 District.

15 I'm sure you're all familiar with the
16 Baldwin Hills area. We have a large oil field operating
17 in the middle of approximately, I think, 200,000
18 residents as well as a large urban park. This has
19 brought -- a situation that's kind of come to a hilt in
20 terms of monitoring important elements, whether it's
21 soil, water, or air as they're impacted by the operations
22 of oil drilling in the area.

23 We've worked with Sam. We've had a couple of
24 meetings in the last year or so and I've had a lot of
25 conversations with Mr. Albright up in Sacramento with

0097

1 regards to what we can do to make sure the safety of our
2 water stays intact in Baldwin Hills, one of the most
3 important things I'm focused on.

4 There is a long list, of course, of ideas and
5 concepts, but one of the things I'm focused on right now
6 is the soil. You have land treatment units on-site. I
7 don't know if you can call them tank farms as well, but
8 you guys issue permits for those land treatment units.

9 I am curious as the soil is remediated with
10 microbes and all the monitoring that is being done
11 there -- I have asked this question several times. There
12 are about 100,000 cubic yards of dirt going through there
13 a year and I'd ask, what happens to that dirt after it's
14 been "cleaned," quote, unquote? What is the status of
15 that dirt? What is the makeup of it relative to its

16 safety and its use on-site? Can human contact be
17 interfaced with it? Can it be used to grow things in?

18 And I'm not sure what agency handles that, but
19 it would be a very interesting thing to find out in terms
20 of the kind of soil that's being recycled and reused in
21 the Baldwin Hills throughout in the sense that there are
22 public landowners as well as private landowners that will
23 be addressing that soil, moving forward. So that's one
24 important aspect I want to keep track with as you guys
25 monitor the land treatment units and the soil that is

0098

1 there.

2 The other one is just water monitoring, water
3 quality monitoring. I know there's some monitoring
4 stations throughout the perimeter of the park -- of the
5 oil field that are monitored for water quality, the
6 groundwater. I'm not sure how old those are and how many
7 there are relative to the activity that's being stepped
8 up in the oil field, but I'd certainly like to have more
9 information or at least a recommendation relative to
10 whether or not there's a need to increase the amount of
11 water monitoring stations. I know most of them are dry
12 because we live in a desert a lot of the time, but I'm
13 not really sure what we can do to increase the ability to
14 gather information and maintain good monitoring of water
15 quality in the Baldwin Hills.

16 So these are two things that I hope to work
17 together on moving forward and maybe get some answers and
18 continue moving forward to make sure that the
19 Baldwin Hills are safe and as clean as possible under
20 these issues that they're operating currently.

21 MS. MEHRANIAN: Thank you very much. Questions?

22 MR. MC NEILL: That was great timing.

23 MS. GLICKFELD: I'd just ask the staff to see if they
24 can sit down with David and at least illuminate what his
25 path is to finding out about the questions he's asking,

0099

1 particularly what standard the oil field soil remediation
2 is being set to and who's setting the standards so he
3 could be apprised of the health of the soils and what
4 they can be used for.

5 MR. UNGER: Yes. We've sat down at least once and as
6 a result of that meeting, we have to two types of permits
7 in the Baldwin Hills area regarding the oil field
8 operations; one is for the soils, as discussed, and staff
9 is now reviewing those permits.

10 MS. GLICKFELD: So you'll be able to tell us and him
11 what level of -- what appropriate uses are for these
12 areas after -- when they're finished being remediated?

13 MR. UNGER: Yes.

14 MS. GLICKFELD: Because there is the Baldwin Hills
15 Conservancy trying to build a park there and they want to
16 be careful about what areas they acquire and how they
17 design them and what public access there is.

18 MR. UNGER: Yeah. What we're looking at is the
19 requirements of those permits and seeing if they're
20 suitable for unrestricted use or restricted use.

21 MS. GLICKFELD: Thank you.

22 MS. MEHRANIAN: Anything else?

23 Next speaker is Damon Nagami at NRDC.

24 MR. NAGAMI: Thank you. Good morning, Madam Chair
25 and Board members. Also here is my colleague, Lark

0100

1 Galloway-Gilliam with Community Health Council. We'll be
2 speaking on the same issue, so we may want to coordinate
3 our comments.

4 We are here to bring the issue of fracking in
5 the Baldwin Hills to your attention, so I was pleased to
6 hear Mr. Unger's report this morning. Fracking is
7 happening in Southern California. There was an
8 L.A. Times article that just came out on Monday. State
9 lawmakers are showing interest, and with good reason.

10 The Inglewood oil field in the Baldwin Hills is
11 the largest urban oil field in the country. More than a
12 million people live within a few miles of the oil field,
13 as Board Member Munoz said earlier. We're concerned
14 about potential contamination of the groundwater beneath
15 the oil field which is currently designated as potential
16 or existing supply of -- for drinking water or other
17 municipal uses or MUN.

18 Under a July 2011 settlement, the oil field
19 operator, PXP, is required to conduct a study to examine
20 the feasibility and potential impacts of fracking
21 activities. The public's been invited to weigh in on the
22 scope of this study and it's my understanding that a
23 Regional Board staffer has provided comments.

24 With this fracking study under way, we requested
25 a public meeting on fracking which was held about a month

0101

1 ago and more than a hundred people showed up. The room
2 was packed to overflowing. This was where many in the
3 community first learned of these fracking activities in
4 the Baldwin Hills and they expressed great concern,
5 especially about potential groundwater contamination,
6 which comprised almost half of all the comments that came
7 in from the public as a result of this meeting.

8 Folks were also troubled by remarks from State
9 officials at DOGGR, the oil and gas drilling regulatory
10 agency, who said that they don't know where fracking is
11 happening or what potential impacts might arise from the
12 practice. No state regulations cover fracking and the
13 governor and the legislature are starting to take some
14 heat for this, as well as DOGGR.

15 You heard earlier about Assembly Bill 591, which
16 could be the first regulations on fracking, but they only
17 require disclosure of the chemicals that are in fracking
18 fluids and the amount of water and finally we're starting
19 to know where this is happening. The Regional Board has

20 also already expressed concern about groundwater under
21 the oil field. Mr. Unger sent a letter to DOGGR last
22 November urging the agency to take appropriate measures
23 to protect groundwater underlying the oil field and we
24 appreciate that, but that was before the issue of
25 fracking really came to the fore.

0102

1 We do have a meeting scheduled with Regional
2 Board staff on the 19th to discuss this further, so we
3 appreciate that. In the meantime, I wanted to give the
4 Board a heads up about this and a couple of suggestions
5 going forward.

6 You may want to invite staff from other programs
7 besides Remediation to weigh in on the scope of this
8 fracking study if they do have concerns. You may want to
9 hold an informational session on fracking at an upcoming
10 Regional Board meeting, and you may want to invite DOGGR
11 to attend an upcoming meeting to explain how it plans to
12 ensure groundwater quality beneath the oil field.

13 And one thing that Mr. Unger said about being
14 involved in the EIR process: There was an EIR for future
15 oil development at the Baldwin Hills oil field and the
16 Regional Board was not involved in those discussions.
17 There was some talk about a gag order, that's -- we
18 always heard there was some reason why the Regional Board
19 couldn't weigh in. So there actually hasn't been any
20 discussion or oversight from the Regional Board on this
21 oil field for a very long time.

22 I'm going to pass this along to my colleague.

23 MS. GALLOWAY-GILLIAM: Good morning.

24 My name is Lark Galloway-Gilliam. I am the
25 Executive Director of the Community Health Council.

0103

1 We're a nonprofit advocacy organization situated in south
2 Los Angeles, and more specifically within a half mile of
3 this oil field, and I appreciate the opportunity to come
4 before you today to really articulate what I think is a
5 growing concern in our community about this bill.

6 Damon is right that in 2008, when the EIR was
7 completed, we had written to the Water Board, but you
8 were unable to really respond at that time or comment on
9 that oil field because of the ongoing litigation or some
10 order from the governor, we were told. So that was a
11 real important missing piece from us.

12 We had no idea that fracking was happening, that
13 the amount of water that's being injected into this oil
14 field is something that I think is unprecedented. You
15 may recall -- I've lived in Los Angeles long enough --
16 that we had the Baldwin Hills Dam that collapsed. I
17 won't tell you what year because that will date me, but
18 that was a result -- finally it was determined that that
19 was a result of this oil field. That's been significant
20 subsidence in this field, but there were a number of
21 natural water-collecting pond-like things in this field

22 and of course the park where many of us exercise. I go
23 out there at least twice a week and walk around that
24 field and you can see the large deposits of water in that
25 field.

0104

1 What concerns us beyond what is happening with
2 the injection of this water, what happens to that water,
3 what happens to the runoff, which is one of the things we
4 had hoped would have been discussed by this Board in the
5 EIR. What is happening to the runoff and the storm water
6 as a result of the oil that is being percolated out of
7 this field? You can look at that barren land and you can
8 see that the soil is damaged at a point as just a part of
9 the regular process; and when the rain comes down in
10 L.A., and it does come down every once in a while, the
11 amount of water that comes out of that area is tremendous
12 and of course that is dumping into the sewer system and
13 we have no idea what its content is.

14 So it's going to be very important for this
15 Board to step up at this time and be a part of the study
16 that is happening. It was a study that we required as
17 part of the settlement. We had to sue the County to
18 improve some of the standards that were adopted through
19 the County Ordinance. We didn't get everything that we
20 wanted and clearly part of it was establishing this
21 regional -- MACC, what is it called? The --

22 MR. NAGAMI: MACC, Multiple Agency Coordination
23 Committee.

24 MR. DIAMOND: Which think staff from this agency are
25 supposed to be a part of as an effort to get the

0105

1 agencies -- 'cause we see a lot of the pointing of the
2 fingers between DOGGR and Air Quality and Regional Board.
3 So we want folks sitting at the table together and we
4 hope that the staff in this agency will take that
5 responsibility seriously and be at the table at all
6 times.

7 And then as Damon said, I think it would be
8 really important for you to have a conversation with
9 DOGGR to really understand what's happening, what's the
10 impact on the water table as to what's happening with
11 runoff.

12 So thank you for this opportunity to raise this
13 issue and know that we are part of what we call the
14 Greater Baldwin Hills Alliance. We have over 300
15 residents who are involved in this on a regular basis who
16 are deeply concerned about this oil field. We don't
17 quite understand and don't have the luxury of years of
18 knowledge that some other communities have about this and
19 so we really rely on this agency to be our eyes and ears
20 and technical experts and to make sure that we are
21 protected. We need you desperately to step up to the
22 plate and be a very active agent in this issue around
23 fracking and then the ongoing operation of that field.

24 Thank you so much.
25 MS. MEHRANIAN: Great. Thank you.

0106

1 Questions?

2 MS. MUNOZ: Thank you for the presentations from the
3 public on this.

4 I think the one thing that -- you've heard me
5 speak up about the oil fields since I first came on the
6 Board. One of the things that I haven't mentioned that
7 really troubled me is that the leaders that were involved
8 with this plight were from Culver City, other surrounding
9 neighborhoods, Ladera Heights, Baldwin Vista, et cetera,
10 et cetera. They were professional people. They were
11 folks of all races and ages and ethnicities, but it was
12 so wonderful to see that none of those things mattered
13 because what everybody's focus was was the health of
14 their children and their neighborhoods; and one of the
15 failures that we had during that time as a Board is that
16 we did not respond to anybody, including me. I mean, we
17 did not respond to the EIR. We felt very much alone, as
18 well as AQMD. There was silence and maybe it was a big
19 mix-up. Maybe there's a good explanation, but we have a
20 big oil field in that area and now we have community
21 people coming to us saying, "Can you help us? Can you be
22 with us?" Because the truth is, as Ms. Galloway-Gilliam
23 stated, we are not experts and we rely on regulatory
24 agencies to fill in those gaps for us and to inform us
25 and educate us and be our advocates and the scientists

0107

1 and so on and so forth.

2 So I really would like us to seriously consider
3 that this be given a top priority for staff and for the
4 Board so that we do not have -- so we instill a little
5 more confidence in those million residents that live near
6 or around there.

7 I do believe that Mr. Unger and staff have been
8 very responsive in the last couple of months, meeting
9 with community members and leadership, and I really want
10 to thank you for that. Mr. Unger has kept me informed
11 and I'm really pleased with the direction they're taking
12 and I just want to emphasize that we need to continue
13 that, because when you lose the faith and you lose the
14 goodwill of the people in the community, it's really hard
15 to regain it and I think we're moving in that direction
16 right now. But we really -- the stuff on the oil well is
17 all about time lines and deadlines and if you miss it,
18 you miss it and you can't recapture that, as we weren't
19 able to recapture it a couple of years ago.

20 So I really urge that we take this very
21 seriously and that we lead on this in a very courageous
22 manner, as I think we need to. Thank you.

23 MS. MEHRANIAN: Thank you. There are no more
24 cards --

25 MS. CAMACHO: Sorry. I think, just to reiterate what

0108

1 Maria -- what Irma was just saying, I think it would be
2 interesting to figure out a way -- I know the staff has a
3 lot, obviously, on our plates, on your plates, but I
4 think it would be interesting to try to see if there's a
5 way to create some kind of subcommittee or some kind of
6 group, whether it's staff and Board members, who can be a
7 part of just some dialogue on how we can bring these
8 folks together to discuss these issues. And I think it's
9 obviously an important matter and, you know, it impacts a
10 lot of people's lives.

11 And so if there's a way to create a sense of a
12 dialogue or bringing different parties together to sit
13 around the table, I think it would be important to bring
14 that up, as Irma is saying, to, you know, a top or a
15 section of our priority list.

16 MS. MUNOZ: Ms. Camacho, I think that's a great idea.
17 There is actually monthly meetings of the Community
18 Advisory Panel that's made up of all the leaders of the
19 neighborhood. It would be a really good step for staff
20 to attend the next meeting, whether it's to listen and to
21 coordinate that with Mr. McNeill, who chairs the CAP,
22 because it's -- our question is we just want to know, and
23 the oil company doesn't feel any sense of obligation to
24 let anybody know if the reason we have so many cancer and
25 so much respiratory diseases and asthma with our children

0109

1 has anything to do with what they're doing there and you
2 want to know and, you know, it's been years and years and
3 years.

4 So I would encourage the staff that they attend
5 the next CAP meeting and coordinate it with Mr. McNeill
6 so we start having a presence there because I do think we
7 have a lot of hope that's being placed on the work that
8 we can do in the Baldwin Hills oil well.

9 MS. MEHRANIAN: Yes, please.

10 MR. YEE: Yes. As long as the newest members are
11 speaking, I guess I'd better chime in as well.

12 If I'm reading my tea leaves correctly, I think
13 fracking in the state is going to be a huge, huge
14 environmental challenge and issue. There's an old
15 Scottish definition of leadership and that is very simply
16 "to go forward and show the way."

17 I think we have an opportunity with
18 Baldwin Hills to do that, so I can only echo the
19 sentiments of my two Board members and suggest that this
20 be a very high priority in moving forward.

21 MS. GLICKFELD: The question I have is that I hear
22 three Board members and I'm not sure they're all asking
23 for the same thing and it might be worthwhile for the
24 chair to think about what's being said and maybe come
25 back to us with a proposal. Should the Board be involved

0110

1 as a subcommittee on fracking? Do we want to develop a

2 connection, a more formal connection between the staff
3 and the Community Advisory Committee? I mean, what is it
4 that's appropriate for us to do?

5 MS. MEHRANIAN: Yeah. Actually, I agree with you and
6 I was actually going to defer to Sam right now because I
7 did hear there's the suggestions; and the other side of
8 this is that every other day there's an article in the
9 newspaper. You know that this is becoming an important
10 issue and we're at the forefront of this and I'd like to
11 ask Sam to comment on what do you think or what your
12 suggestions are for us to get ahead of this and not,
13 like, you know, trail the rest of the movement?

14 MR. UNGER: Let me assure you that the message has
15 been received and I think I would rather defer on saying
16 anything because it tends on some authorities and
17 activities that we have that we may wish to execute in
18 the Baldwin Hills/Inglewood field. So if I could get
19 back with you with a formal plan in the future --

20 MS. MEHRANIAN: That's correct.

21 MR. UNGER: -- rather than trying to think out loud.

22 MS. MEHRANIAN: Figure out how -- what the plan of
23 action is.

24 MS. GLICKFELD: But, also, you know, it's not only
25 communicating to the Board. It's that we have somebody

0111

1 working -- specifically working for us that takes on
2 environmental justice duties. This would seem to be a
3 ripe area for you to investigate that so that we can --
4 whatever you're thinking about doing and you're sharing
5 with us and the public, that they're sharing it within
6 that realm, too, so everyone knows, that they're on the
7 same page.

8 MS. MEHRANIAN: Could we put this on the agenda for
9 next time so we revisit this issue?

10 MR. UNGER: I would ask that maybe I just report back
11 to you during the E.O. report.

12 MS. MEHRANIAN: That would be great. Yes, please do.
13 Great. Thank you.

14 We have no more cards and then on the agenda
15 items, we are at Item 8, Uncontested Items. And on the
16 calendar --

17 MR. UNGER: Yeah. Let me. We have a calendar right
18 now that has Items 8, 9, 10, 11, 12, 13, 14, and 15 on
19 our Consent Calendar.

20 MS. MEHRANIAN: Right.

21 MR. UNGER: I've also been informed on Item 17 that
22 the Discharger is here, but there are no issues and he's
23 agreeable to placing that on the Uncontested Calendar as
24 well.

25 MS. MEHRANIAN: Let's see if the Board members agree.

0112

1 MR. UNGER: So I would recommend that we --

2 MS. GLICKFELD: Which item?

3 MS. MEHRANIAN: 17.

4 MS. GLICKFELD: That's fine.
5 (Whereupon Ms. Munoz exited the proceedings)
6 MS. LUTZ: So I will move the Uncontested Items 8, 9,
7 10, 11, 12, 13, 14, 15, and 17.
8 MR. YEE: Second.
9 MS. MEHRANIAN: All in favor?
10 So moved.
11 (Whereupon the motion was passed)
12 MR. UNGER: There is one more thing, if I might --
13 and I know we announced the order of the agenda, but I
14 think we have some representatives here from the City of
15 Avalon that need to be on a boat at 12:30.
16 Is that correct?
17 So I was wondering if we could switch. So if
18 we -- and I think if you have a very brief discussion,
19 perhaps we could accommodate their schedule.
20 MS. LUTZ: They're not going to make a 12:30 boat.
21 MR. UNGER: No. They have to leave here by 12:30.
22 MS. MEHRANIAN: At 1:30, the public hearing starts;
23 right?
24 MR. UNGER: Right.
25 MS. MEHRANIAN: So after this, we go into closed
0113

1 session.
2 MR. UNGER: Well, we have two other items.
3 MS. MEHRANIAN: So how are we going to --
4 MR. UNGER: My suggestion is that we take Item 19
5 now. Staff has a very abbreviated report for you and
6 then we let the City of Avalon speak.
7 MS. DIAMOND: You mean 18, not 19.
8 MR. UNGER: Excuse me. 18, yes; not 19. Correction,
9 18. And then we go back and we try to do 16 before
10 lunch.
11 MS. MEHRANIAN: But, see, this is what we can't do.
12 It's 12:00. You need at least an hour and a half for
13 your closed session.
14 MS. MC CHESNEY: No. No.
15 MS. MEHRANIAN: How much do you need?
16 MS. MC CHESNEY: Closed session is probably 20
17 minutes.
18 MS. MEHRANIAN: Is that true, Sam, because you and I
19 were talking. Didn't you say there were a few more
20 items?
21 MR. UNGER: I think -- I think we can cut it down.
22 Certainly it's not an hour and a half.
23 MS. MC CHESNEY: At the most would be 45 minutes
24 total is what we need.
25 MS. MEHRANIAN: So at 12:30 we should break here
0114

1 because we can't make the people who come for a public
2 hearing wait for long, and the Board members will need an
3 hour for the closed session.
4 So we have 15 minutes for each of these items.
5 Is that doable?

6 MR. UNGER: We'll try. Let's try.
7 MS. MEHRANIAN: Let's try for that.
8 MS. DIAMOND: 15 minutes for Catalina?
9 MS. MEHRANIAN: It can't be more than that.
10 MS. GLICKFELD: That's ridiculous.
11 MR. UNGER: Well, my suggestion is that we start with
12 Catalina, we see how long it takes, and then we'll make a
13 decision at that point.
14 MS. MEHRANIAN: Right, but we're going to break at
15 12:30 because we need an hour and we can't make the other
16 people wait when they come for a workshop.
17 MR. UNGER: Okay.
18 MS. MEHRANIAN: Let's start.
19 MS. MC CHESNEY: Maria, there's a script for Item 18.
20 MS. MEHRANIAN: Okay. Hearing procedures, City of
21 Avalon Cease and Desist Order, Los Angeles County. This
22 is the time and place for a public hearing to consider
23 the issuance of a Cease and Desist Order for the City of
24 Avalon in Los Angeles County.
25 This hearing will be conducted in accordance

0115

1 with the meeting procedures published with the meeting
2 agenda and with the applicable Notice of Public Hearing.
3 At this time, evidence should be introduced on
4 whether the proposed Cease and Desist Order should be
5 adopted. All persons expecting to testify, please stand
6 at this time, raise your hand, and take the following
7 oath.

8 (Whereupon all prospective witnesses were
9 collectively sworn)

10 MS. MEHRANIAN: Following the staff report, the
11 Discharger shall have 15 minutes to present testimony and
12 Heal the Bay has requested 12 minutes to also present
13 testimony. All other interested persons shall have three
14 minutes to present their testimony. A timer will be
15 used. Please state your name and your affiliation and
16 whether you have taken the oath before testifying, and we
17 will begin the testimony with our staff.

18 MR. COLBY: Good afternoon, Chair Mehranian, members
19 of the Board. My name is Ross Colby. I'm a staff
20 environmental scientist with the Enforcement Unit of the
21 Regional Board. I'm going to make this --

22 MS. MEHRANIAN: Can you speak up?

23 MR. COLBY: Sure. Again, Russ Colby with the
24 Enforcement Unit. We're going to go through these slides
25 very quickly. I do have Dr. L.B. Nye here with the TMDL

0116

1 Unit if you have any specific questions on the TMDL.

2 So the purpose of this presentation is to brief
3 you on the basis of the Cease and Desist Order that we're
4 going to issue.

5 MS. GLICKFELD: Excuse me. As a point of
6 clarification, if you could just stop for a minute, they
7 have 29 minutes on the clock.

8 MS. MEHRANIAN: We're not doing the 29 minutes;
9 right? That's from before, the clock.

10 MR. COLBY: No. We're going to do it in five
11 minutes.

12 MS. GLICKFELD: That would be great if somebody could
13 reset that so you could --

14 MS. MEHRANIAN: Okay. Could you?

15 MR. COLBY: So we're going to present the basis of
16 the CDO to you and present a recommendation for the Board
17 to consider.

18 The city of Avalon is home to roughly 3800
19 permanent residents. The city also is a major tourist
20 destination which attracts upwards of one million
21 visitors a year. Avalon Bay is also currently on the
22 cleanwater list of impaired waters because of bacteria
23 pollution. The beach is often posted as unsafe for
24 swimming. As you can see in the foreground here on the
25 left-hand side the lower picture, there's a posting,

0117

1 "Unsafe for swimming." Avalon beaches consistently
2 receive poor grades on Heal the Bay's beach report card
3 and a recent U.C. Irvine study has also suggested that
4 Avalon's leaky sewers are contributing to the bacterial
5 pollution here.

6 For all the reasons I've just mentioned,
7 Regional Board staff feel that a Cease and Desist Order
8 is appropriate. However, we have a unique situation here
9 where we have an opportunity to also address the bacteria
10 contamination here through the issuance of a TMDL and we
11 can do that through a Cease and Desist Order because it's
12 a single regulatory action and also because there's a
13 single responsible party here.

14 The City of Avalon has an NPDES permit for the
15 Avalon Wastewater Treatment Facility. They're permitted
16 with this Board. They discharge up to 1.2 million
17 gallons per day into the Pacific Ocean. They are --
18 there's also a Statewide General WDR for sanitary sewer
19 systems under which the City was enrolled on August 17th
20 of 2006.

21 Just background: The collection system again
22 serves a population of 3800 permanent residence, upwards
23 of a million visitors per year, 11 miles of gravity
24 sewers, two pump stations, just over one mile of force
25 mains, and the sewage is tributary to the Avalon

0118

1 Wastewater Treatment Facility.

2 Some provisions that are in the statewide
3 general SSO WDR that basically prohibits the discharge of
4 wastewater to waters of the United States: Any SSO that
5 results in a discharge that also creates a nuisance is
6 prohibited, and that the enrollee shall properly manage,
7 operate and maintain all parts of the sewer system and
8 similar prohibitions in their NPDES permit as well.

9 Some background: Section 13301 gives the

10 Regional Board the authority to issue a Cease and Desist
11 Order. The Water Code Section 13267 authorizes the
12 Regional Board to require the Discharger to submit
13 technical or monitoring enforcement which is required.

14 Briefly, the SSO history here: They've had six
15 sanitary sewer overflows in the last 12 years. A total
16 of 54,000 gallons were discharged from the system, of
17 which just over 49,000 were discharged to the Pacific
18 Ocean. Four of those were due to poor operation and
19 maintenance and two were due to operator error.

20 On October 28, 2010, the Regional Board, along
21 with the USEPA and the Attorney General's office,
22 inspected the City's collection system for compliance
23 with the SSO WDR. A number of findings came out of that
24 increased efforts to eliminate SSOs, report all their
25 SSOs, conduct supplemental training, and so on. The

0119

1 Inspection Report is in your binder for reference.

2 Enforcement actions we've taken to date: We've
3 issued three 13267 Investigative Orders and one Notice of
4 Violation. The City's responses were timely and
5 complete.

6 Ongoing actions -- and Mr. Charlie Wagner here
7 from the City of Avalon is here to probably go over more
8 detail. Just quickly, they've already implemented some
9 practices to improve their operation and maintenance and
10 they've also committed expenditure of almost \$6 million
11 in improvements.

12 We have a number of TMDL slides that deal with
13 the Avalon Bay Bacteria TMDL. I'm going to breeze
14 through these because the TMDL follows the same approach
15 as other Bacteria TMDLs which the Board has adopted.
16 Again, Dr. Nye is here available if you have any
17 questions.

18 MS. MEHRANIAN: Okay.

19 MR. COLBY: So I'll just highlight a few requirements
20 that are in the CDO. They need to develop an SSO
21 Emergency Response Plan. They need to update their
22 current Sewer System Management Plan. They need to
23 submit a plan on how they're going to comply with the
24 wasteload allocations that are included in the TMDL.
25 They need to develop a route control program, a FOG

0120

1 program -- a fats, oil, and grease control program. They
2 need to develop an Illicit Discharge Elimination Program.
3 They need to complete a Sewer Condition Assessment,
4 update their System Evaluation and Capacity Plan; prepare
5 and implement a Capital Improvement Plan as long as -- as
6 well as a 10-year and a 20-year financial plan on how to
7 pay for any improvements that may come out of those
8 studies.

9 By June 30th of 2015, discharges shall not
10 result in detectable levels of fecal indicator bacteria
11 within Avalon Bay. By April 1st, 2016, no allowable

12 exceedences during summer dry weather. By November 1st
13 of that same year, they must achieve compliance with the
14 allowable number of winter dry weather exceedences; and
15 by November 1st, 2017, achieve compliance within the
16 allowable number of wet weather exceedence days and
17 geometric mean targets.

18 So we've received a couple of comments from Heal
19 the Bay. Overall, they were -- they expressed support
20 for the CDO and reiterated the importance of addressing
21 water quality issues at the beach. There were a couple
22 of concerns that we addressed in the CDO itself. If Heal
23 the Bay still has some issues, I'm sure they will comment
24 on that.

25 So staff recommends that you adopt the draft
0121

1 Cease and Desist Order as proposed. That concludes our
2 presentation. Thank you.

3 MS. MEHRANIAN: Thank you.

4 Now we'll have the -- we have Avalon. I'm going
5 to ask both Avalon -- Avalon has 12 minutes -- 15 minutes
6 and then Heal the Bay has 12 minutes. I would like to
7 ask you guys to reduce your presentation by --

8 MR. WAGNER: I'm sorry. I couldn't hear what you
9 said.

10 MS. MEHRANIAN: I was going to request that both
11 speakers -- you and then later on is Heal the Bay -- you
12 have 15 minutes and they have 12. I wanted both of you
13 to reduce it by five minutes.

14 MR. WAGNER: I think I can do that.

15 MS. MEHRANIAN: Wonderful. Thank you.

16 MR. WAGNER: I'd like to just hand one exhibit --
17 that's going to be my slide show -- to the members, if I
18 may.

19 Chairman and members of the Board, my name is
20 Charlie Wagner. I'm the Chief Administrative Officer of
21 the City of Avalon and I'd like to start my presentation
22 by doing something that's probably not very common from
23 people who are receiving a Cease and Desist Order, which
24 is I would like to thank your Board staff for the help
25 that they've given us as we've gone through this journey

0122

1 for the last four months. Russ, Paula, L.B., Deb, and
2 staff have been fair to us. They've been good listeners
3 and we feel like the City of Avalon has gotten a fair
4 shake since the first draft of the Cease and Desist Order
5 was issued.

6 We're here today, all of us, the City of Avalon,
7 the Board, and Heal the Bay. We all have the same goal.
8 We want a clean and pristine Avalon Bay, and the City has
9 been working on that goal since 1988 through a series of
10 public improvements of slip lining, lateral replacements,
11 renovations of lines and manholes in the downtown area,
12 adopting holding tank regulations, and surface water
13 management.

14 Right now as we speak today, the City is
15 spending \$5.8 million on public improvements, primarily
16 to trench and replace sewer lines, to slip line where
17 slip lining is acceptable and to rehabilitate manholes,
18 not as an inconsequential amount of money. In the city
19 of Avalon, \$5.8 million is equal to about one-third of
20 our annual budget.

21 Over the last 24 months in particular, we have
22 done a lot of activities. We came to realize about two
23 years ago that all of the past efforts that I talked
24 about have not been successful so 19 months ago in
25 September of 2010, we issued a RFP for a professional

0123

1 firm to come in and develop a Sewer Master Plan for us.

2 The next month, in October of 2010, we served a
3 Notice of Default to the contractor who managed our sewer
4 system. We did not manage our sewer system with City
5 staff. We had a master contract with a private purveyor.
6 We gave them a Notice of Default of not doing their job
7 in November of 2010.

8 14 months ago, in December of 2010, we began our
9 Sewer Master Plan; and 15 months ago, in January of 2011,
10 we hired a new firm, Environ Strategies, who are here
11 today to take over the management of our sewer system and
12 our wastewater treatment plant.

13 In April of last year -- I'm sorry. In April of
14 last year, the firm that we hired, RBF, issued this
15 800-page report called Avalon Sewer and Manhole Condition
16 Assessment. They made 800 pages worth of evaluation of
17 our 11-mile collection system. They made a series of
18 recommendations of improvements in categories depending
19 on "urgent" to "can wait," and on the same month of March
20 of 2011, the City Council authorized a \$5.2 million
21 contract to RBF and Environ Strategies to make the
22 improvements that are in this plan.

23 We started working on doing the physical
24 reconstruction in September of 2011. It's ongoing today.
25 I gave you a map. You can see the map on the screen; but

0124

1 if you look at the map in person, it's pretty
2 straightforward. It's the entire city of Avalon sewer
3 collection system. There's really only four colors that
4 you need to look at there. Red means we're going to
5 replace the entire sewer main on those streets where you
6 see that or do spot repairs. Blue means we're going to
7 be doing slip lining. Black means the sewer lines were
8 determined to be okay through the CCTV process, and
9 yellow indicates lines that had been approved in the
10 previous activities.

11 If you were involved -- if you came over to our
12 city in the last month, you would see what you see on
13 your screen there. You would see this work taking place.
14 There's a brand-new sewer line that's going down Marilla
15 Avenue. You can see the bay in the background that goes

16 all the way up from the top of a main street to the bay.
17 You would see a new line being installed in the alley in
18 the area that we call The Flats. You can see new
19 laterals being installed to the property line on main
20 business streets such as Sewer Avenue -- Sumner Avenue.
21 You would see a new main being installed in
22 Vieudelou Avenue, one of the main streets out of town.

23 You would see workers who are trimming sewer
24 laterals coming from private properties and attaching
25 them to the new sewer lanes that are in the street. You

0125

1 would see our construction crew putting the fine touches
2 on the two pipes that they're going to join together to
3 make a new main in one of the streets. Here you can see
4 them measuring a manhole that's being installed at the
5 top of one of our streets that's going to facilitate the
6 cleaning program that we need to do.

7 These improvements are not just limited to the
8 sewer system. Here's a picture of one of the three
9 aeration basins that we have at our wastewater treatment
10 plant. Our new firm, over this course of this
11 wintertime, has drained each of those three aeration
12 basins to provide maintenance to them. They estimate to
13 me that there hasn't been maintenance on those basins for
14 the last three years and they took nearly 10 tons of grit
15 that had accumulated on the base of those basins. As
16 that work is done, the plant's going to operate more
17 efficiently and our effluent, which meets all of your
18 standards, will be even cleaner.

19 On Tuesday night, just two nights ago, our City
20 Council authorized another \$450,000 to be spent to hire
21 consultants to meet the terms that are required in the
22 CDO that Russ just took you through and I want to
23 emphasize to you that we -- these are activities that we
24 voluntarily agreed to do in our first meeting with your
25 staff in December of 2011. We didn't wait until today to

0126

1 start this activity. We've been working on it for the
2 last four months.

3 It's true that we have agreed to all the
4 conditions in the report, but there is one condition,
5 number 33, that was put in at the request of Heal the
6 Bay. What it states is that if a test fails in our bay,
7 that we should retest every day until the test succeeds.
8 We feel that that's a waste of money. When the bay is
9 tested and it fails, a posted sign is put on the beach.
10 The sign is not taken down until the bay is tested
11 positive again. If we do that, we're going to be
12 spending thousands of dollars doing tests and not one of
13 those dollars is going to go towards solving the problem,
14 putting in the infrastructure to create solutions, not
15 one.

16 What we suggested as our counterproposal to your
17 staff was that we retest the third day after a failure,

18 approximately halfway between the normal testing cycle.

19 Finally, there's one issue that I want to bring
20 to your attention about -- in the Exhibit 3, it talks
21 about and Russ mentioned that there's been six sanitary
22 overflows over the last five years, and in one part of
23 the materials that you have, it implies that those
24 sanitary overflows happened at Avalon Beach. If you look
25 at that slide, the arrow on the left shows where Avalon
0127

1 Beach is. The arrow on the right points one mile to the
2 east of our main city where there's a big sewer lift
3 station called the Pebbly Beach Lift Station. That's
4 where every one of those six sanitary overflows happened;
5 not on Avalon Beach.

6 So I have two slides to conclude my
7 presentation. I want to restate again there's no
8 daylight between the City of Avalon, between you, and
9 between Heal the Bay. We all want to have a clean and
10 pristine Avalon Bay and right now, as I stated, we're
11 spending \$6 million to make that happen.

12 I have recently invited the staff from Heal the
13 Bay to come over. I do have a date to do that in one
14 week from now to show them the progress that we're
15 making, and I would invite any of you to take advantage
16 of that as well because we are pretty proud of the work
17 that we are doing and that we have been embarked on for
18 the last two years to solve this important problem.

19 And that concludes my presentation. If you have
20 any questions, I'll be happy to answer them.

21 MS. MEHRANIAN: Questions? We'll ask you questions
22 after.

23 MR. WAGNER: Okay. Thank you.

24 MS. MEHRANIAN: Heal the Bay.

25 MS. JAMES: Good afternoon. Kirsten James with Heal
0128

1 the Bay. I'll make this short so we can save on some
2 time.

3 As was mentioned before, Heal the Bay strongly
4 supports moving forward with this CDO and TMDL. As you
5 know, I myself have been before you many times. My
6 predecessors have as well, speaking to the severity of
7 the issues at Avalon and how action is desperately needed
8 in this area. So we're excited to see this item finally
9 up and I just want to go over a little bit of the
10 history, since Heal the Bay has been working on this for
11 a long, long time.

12 You all by now are familiar with our beach
13 report card and unfortunately Avalon has been on our
14 beach bummer list for eight of the last ten years. You
15 can see here all the rankings. You know, it's been
16 number one on numerous occasions, and this is a ranking
17 of the top ten most polluted beaches throughout the
18 state. So you can see the severity of the beach water
19 quality issue at Avalon.

20 This just goes into a little bit more detail
21 here (indicating) shows the percentage of exceedences of
22 the bacteria water quality standards by year. As you can
23 see, sometimes there's as much as 100 percent exceedences
24 of our beach water quality standards.

25 Unfortunately, 2011 was inadvertently left off
0129

1 this slide, but we see the similar ranges from 46 percent
2 exceedence to 93 percent. So this is just to demonstrate
3 the severe problem we've been seeing at Avalon.

4 Again, just more evidence: Many of the
5 prominent universities in our state have looked at this
6 beach in particular and have again identified problems
7 linking it to the wastewater plant.

8 You know, we've seen a lot of action since 1999
9 when we first started on this through studies,
10 identifying the problem, and also some work from Avalon;
11 but unfortunately we've seen these more as Band-Aid
12 solutions and not really getting to the crux of the
13 problem. So we're very encouraged by what Avalon
14 presented earlier today and are hopeful that we're on the
15 right track here; but for these many reasons, we really
16 believe that it's critical that we move forward today
17 with both the CDO and the TMDL so that both of these
18 actions can work in tandem and really get us on the right
19 track for where we need do be.

20 Staff did a great job of answering our concerns
21 and questions. We appreciate the retesting requirement
22 that they put in. We think this is really important so
23 we can really understand what is going on if there are
24 exceedences and trace those problems, track those
25 problems; and this is consistent with other TMDLs. So we

0130
1 appreciate their change and modification on that point.

2 There is one clarification that I would
3 appreciate to be made within the CDO and that is a
4 specification that the geometric mean be a rolling
5 geometric mean. This is really important because using
6 something like a calendar month where you just basically
7 start again on the 1st of the month and calculate for the
8 calendar month is really arbitrary and so, you know, the
9 Ocean Plan, which is the reigning document here, requires
10 a rolling geo mean and we believe that this should be
11 specified so we have that calculation on a rolling basis,
12 and this helps us track and abate chronic problems.

13 Staff gave the reasoning that this is going to
14 be addressed in a future reopener of TMDLs, but we don't
15 know when that's going to happen. We don't want to put
16 all of our eggs in that basket, so we ask that you make
17 that clarification today.

18 So just to summarize, we're encouraged by what
19 we heard from Avalon, but we believe this action is
20 necessary today and hopefully the next time I come before
21 you, we'll be talking about how Avalon Beach is on our

22 beach record card honor roll and no longer on our beach
23 bummer list.

24 So thank you very much.

25 MS. MEHRANIAN: Thank you.

0131

1 Okay. Questions. You want to get started,
2 Larry?

3 MR. YEE: I would just like to applaud all of the
4 cooperative and collaborative efforts that have gone into
5 addressing this problem. I think it's terrific, as
6 opposed to the situation we heard earlier about
7 Ventura County and Santa Clarita Valley Sanitation
8 District. So thank you to all of you.

9 MS. MEHRANIAN: Board Member Munoz?

10 MS. MUNOZ: No.

11 MS. LUTZ: I just would like to echo my colleague's
12 comments on the collaborative effort. I think the nice
13 thing is we know that this collaborative effort started
14 very early on and that Avalon really, you know, went and
15 took the responsibility and looked at what was happening
16 and started to work with our staff and with the
17 environmental communities to try to eliminate this. You
18 have a very aggressive program and I'm cheering you on in
19 your program. So thank you.

20 MR. WAGNER: Thank you.

21 MS. MEHRANIAN: Board Member Diamond?

22 MS. DIAMOND: Well, as someone who has spent a number
23 of occasions there with my entire family, including my
24 four grandchildren, I am very happy to see that progress
25 is going to be made because knowing what I -- we all know

0132

1 too much about water quality and we know enough -- I knew
2 enough not to allow my grandchildren to swim in
3 Avalon Bay. We were on the other side of the island
4 where it's beautiful and the water quality was safe; you
5 know, but yet at the same time that we saw your beautiful
6 picture, we saw the danger sign and even in the picture,
7 there were always children swimming in those beaches that
8 I knew were not safe.

9 So that was -- you know, I don't want to be the
10 "beach bummer" today in my comments, but we're all so
11 serious about this because so many young children are
12 impacted when you talk about and read about the fact that
13 the worst quality water is in the ankle-deep water in the
14 sand -- and in the sand; not just in the water, but in
15 the sand -- and that is of great concern to me because we
16 know that these are babies playing in the sand and little
17 children who can't go further than ankle-deep.

18 So I was struck by the report on the Inspection
19 Summary which was an attachment in our binder that talked
20 about the time in 2010 when EPA Region 9, along with
21 Regional Board staff and State Attorney General's staff,
22 visited Avalon and again and again, there seemed to be
23 almost a shocking lack of procedure; the fact that there

24 were supposed to be procedures, forms filled out and
25 response time and 9-1-1 calls, all of these things again
0133

1 and again, that were not done in a timely fashion or
2 according to the permit that you do -- that you have and
3 that you did have then, and so I'm -- I'm hopeful, but
4 I'm also cautious.

5 And so I want to just ask you, what confidence,
6 what assurance, can you give us that the new -- that the
7 CDO and the TMDL with its requirements will be -- will be
8 complied with and all of the procedures that will be
9 required of you under this will be followed, since under
10 the permit, they really weren't? There was a real -- to
11 me, it was kind of shocking how there were no procedures
12 that were not being -- and the procedures were not being
13 followed.

14 MR. WAGNER: Well, I have three points that I'd make
15 to your comments.

16 First of all, with respect to the conditions
17 that weren't being met, I fully acknowledge that that was
18 the case and as I pointed out in my slide show, the
19 people who were responsible for ensuring that the City of
20 Avalon do that are no longer working in the city of
21 Avalon. They've been replaced and that was through a
22 negotiated legal settlement.

23 Second of all, how can you be sure that these
24 things are going to be happen? You can be sure in two
25 ways: The first and foremost to you is that we have to
0134

1 provide reports to your staff. In the CDO is a
2 requirement for reporting and proving that each of these
3 steps has been done, and been done in accordance with the
4 schedule that's been laid out.

5 Most importantly to me is I will give you my
6 personal word that every one of these things will be
7 made, done, and they'll be done properly and they'll be
8 done ahead of the schedule that's being required because
9 I am committed to making sure that the City of Avalon
10 does what it should do.

11 MS. DIAMOND: Well, I thank you for that response and
12 I look forward to going back there again.

13 MR. WAGNER: You can come on our side of the island.
14 It's beautiful over there, too.

15 MS. DIAMOND: I know it's beautiful. That's not a
16 question. I look forward to going there and being able
17 to swim in Avalon.

18 MR. WAGNER: I join you in that looking forward.

19 MS. MEHRANIAN: Before we continue with the Board
20 members, there was one card that listed two items
21 together and it was stuck under the other card items and
22 that was the Baykeepers. If you would like to testify, I
23 think we can let you testify right now and then we'll
24 continue with the Board members.

25 MS. GLICKFELD: Do we need to reopen the hearing?

0135

1 MS. MC CHESNEY: Well, I don't think you closed the
2 hearing yet.

3 MS. MEHRANIAN: You want to --

4 MS. GAUR: Yeah.

5 MS. MEHRANIAN: Did you take the oath?

6 MS. GAUR: I did.

7 MS. MEHRANIAN: Go ahead.

8 MS. GAUR: Good afternoon. Madam Chair and members
9 of the Board. Tatiana Gaur with Santa Monica Baykeepers,
10 staff attorney. My comments are going to be very brief.

11 We are supportive of the CDO and generally of
12 the TMDL, imposing a TMDL to clean up the waters in
13 Avalon Bay. However, what I wanted to ask and what I'm
14 really -- we are really concerned about is whether staff
15 has looked into using a different and better reference
16 beach for that TMDL, because we don't think -- and as far
17 as I recall, when the Santa Monica Bay Beaches TMDL --
18 the TMDL that originally used Leo Carrillo as a reference
19 beach, said this is not -- Leo Carrillo is not the best
20 beach and a better beach should be sought for our TMDLs,
21 for our bacterial TMDLs.

22 At that point, there wasn't enough data. There
23 were some other considerations. Now we have a lot of
24 data. We also know that there's better references,
25 cleaner-reference beaches. So we believe that at least

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1 other reference beaches should be evaluated, should be
2 considered, and staff should inform us why those other
3 reference beaches, potential reference beaches, weren't
4 chosen.

5 For example, Nicholas Beach is a much cleaner
6 beach in our bay, less exceedences. Why are we sticking
7 with a beach that has actually turned out to not really
8 be a good beach, just as staff thought? I don't know.
9 And I believe the public is entitled to know why, why
10 Regional Board staff is using Leo Carrillo and not
11 another beach. Thank you.

12 MS. MEHRANIAN: Thank you.

13 Should we continue?

14 MS. GLICKFELD: Yes. Thank you, Madam Chair.

15 Well, it's interesting that that testimony came
16 up because that was my question. I know Leo Carrillo
17 Beach very well. It's like a small city on a summer
18 weekend. It has -- there's a lot of use of that beach.
19 It's intensively used by beachgoers and overnight
20 campers; and as we know, State Parks, which operates and
21 owned the beach and the overnight camping facilities, is
22 miserably behind in their upgrade of their septic
23 systems.

24 So I would recommend to the staff that we
25 actually change the CDO to provide for another reference

0137

1 beach, if that would be possible to do today, or have the

2 staff go back. We could approve this today and the staff
3 could go back and relook at this issue and see if there's
4 a better control site than Leo Carrillo is and make that
5 subject to the E.O.'s approval.

6 DR. NYE: This is L.B. Nye with the TMDL section and
7 I can answer, you at least in part, and that is the
8 reference beach, the reference beach we're using, is a
9 question we've been looking at very closely recently.

10 As you know, it was in a number of our other
11 Bacteria TMDLs that we looked again at the reference
12 beach and there is a lot of new data and studies done by
13 SCWRP and others and we actually have, right now, out for
14 public comment, a series of Basin Plan amendments for
15 five different Bacterial TMDLs, but we looked very
16 closely at the question of reference beach and which one
17 we're using and why and should we change and looked very
18 closely at the question of geo means.

19 Right now, those reconsiderations are scheduled
20 to be before you in June to what we -- I think what we
21 recommend is that we bring all that new analysis and
22 staff recommendations to you in June; and then based on
23 your decision then, may perhaps update the amendment to
24 reflect those decisions, because then we'll have the full
25 public comment on the beaches and the full public comment
0138

1 on the geo means also.

2 MS. GLICKFELD: Could we put language into the permit
3 today which acknowledges that this is going to be subject
4 to revision based on our action in June?

5 MS. MC CHESNEY: Yes, and you could also make that as
6 part of your motion, too, included in that.

7 MS. GLICKFELD: Could you help us with some language
8 on that?

9 MS. MC CHESNEY: Yes. Include in your motion that
10 the cease and desist include a reopener to revise the
11 reference beach as appropriate.

12 MS. GLICKFELD: And I could see that "at the end of
13 this year" if I wanted to. Thank you.

14 DR. NYE: Okay.

15 MS. GLICKFELD: Don't go anywhere 'cause I have
16 questions. One of the things that is clear is there's
17 been an incredible amount of good scientific work done
18 here and I don't think without that scientific work, both
19 by SCWRP and by Heal the Bay and others working together
20 with the City, we would be where we are today. So it's
21 really a great example of science actually making a
22 difference. But what the science really points out is
23 that the pollution is from these leaking pipes going into
24 the groundwater and the groundwater migrating into the
25 ocean. It's not so much the sewer spills that are
0139

1 further away --

2 DR. NYE: Yes.

3 MS. GLICKFELD: -- although those may be having an

4 effect through other means, but it's that.

5 So as they increase -- as they do this massive
6 improvement and surveillance of the -- both the operating
7 of the treatment plant and the replacement of all these
8 leaking lines, the staff report talks about the length of
9 time that it will take for groundwater to clean itself
10 once there's not a continuous source of bacteria leaking
11 into it, but there isn't any kind of regulation in the
12 Cease and Desist Order to require that groundwater reach
13 a certain standard, a health standard or a bacteria
14 standard by a certain time.

15 So it's all of the -- all of the directives are
16 to basically improve the quality of water being
17 discharged at the discharge plant, as opposed to
18 remediating the problem in the groundwater.

19 If you could just explain to me, "Don't worry
20 about that. As soon as we do all of this work, the title
21 and other factors will just clean this water up by
22 itself, it'll go away," then I feel good. Otherwise, I'm
23 asking you why we don't have some kind of a deadline for
24 cleaning up the ground water.

25 DR. NYE: Well, there's a deadline for discharges to
0140

1 groundwater and there's deadlines at the beach where the
2 groundwater is seeping out. It is a little bit --

3 MS. GLICKFELD: I understand it that way, but thank
4 you though.

5 DR. NYE: -- of an unknown of how long is it going to
6 take the bacteria that are living in the groundwater to
7 die without a continual support of, you know, a new
8 leakage. And, you know, there's not, you know, real
9 good "everybody knows it's only two years or everybody
10 knows it only six months" kind of answer I can give you.

11 I think the City of Avalon is very aware of that
12 and has, you know, included in that study that you have a
13 summary of in your package, you know, looked at different
14 techniques to remediate the groundwater if that becomes
15 necessary.

16 MS. GLICKFELD: Is there anything in the monitoring
17 section of the permit -- the Cease and Desist order that
18 would give you information of the quality of the
19 groundwater as a source?

20 DR. NYE: Is there -- no, there's no groundwater
21 monitoring required by the CDO.

22 MS. GLICKFELD: So ten years from now, we wouldn't
23 know, or how we would know whether this water gets
24 cleaned up?

25 DR. NYE: Well, we'll know at the beach, the water
0141

1 that's seeping from it.

2 MS. GLICKFELD: So we're not going to directly
3 monitor the groundwater, but we are going to directly
4 monitor not just at the site where the water is
5 discharging, but along the beach where the water could be

6 seeping from groundwater. So we will know whether water
7 is -- where water quality continues to be impacted there.
8 And if --

9 DR. NYE: Yes.

10 MS. GLICKFELD: -- three years from now, the water is
11 still impacted from there, what would be our action?

12 DR. NYE: Well, the requirement is to meet the TMDL
13 in summer dry weather in four years. So if they're still
14 exceeding in four years, I know that they -- and there's
15 mention of a couple different kinds of study that they
16 might do in the CDO. There's a couple of scientific
17 paths that they might go down to discover maybe is it
18 really the -- is the bacteria pollution in the
19 groundwater still there and still supplying the beach
20 even if the discharge to the groundwater has been turned
21 off? So they have that.

22 MS. GLICKFELD: Well, you know, I would just state my
23 concern would be -- is if we don't know how fast this
24 groundwater will be self-cleaning through tidal exchanges
25 that we should have a period -- we should have something

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1 in the Cease and Desist Order, which has the staff review
2 this issue in a certain period of time and evaluate
3 whether or not we have to do something further to have
4 the City pump and treat the water. You know, I hate to
5 add anything. They're spending a fortune and I'm hoping
6 that it works out that they don't have to do anything --

7 MR. WAGNER: May I speak to that question?

8 MS. GLICKFELD: -- and maybe the City could address
9 what they're planning on doing.

10 DR. NYE: Do you want Charlie to speak to the
11 question?

12 MR. WAGNER: May I speak to the question?

13 MS. GLICKFELD: My question specifically is what
14 happens if the groundwater stays polluted for a longer
15 period of time and there's not enough exchange with the
16 ocean to clean it up?

17 MR. WAGNER: We're going to -- there's two -- we are
18 getting -- we are going to participate or create two
19 science studies that are optional in the CDO, but we're
20 going to do them.

21 One is going to be -- it's going to be conducted
22 by Dr. Stanley Grant from UCI, who's the author of one of
23 your exhibits. Well, first, I think it's a
24 cause-and-effect relationship in our mind. The readings
25 on the beach are a reflection of the groundwater. So if

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1 the readings on the beach stop, we can make an assumption
2 that the groundwater is no longer there; but we're going
3 to do two things to try and get ahead of the curve on
4 that.

5 One is today as we speak, we don't know what
6 kind of a life that bacteria in the ground has today and
7 so we're going to conduct some studies to try and put our

8 arms around that. Even tomorrow or by the end of the
9 summer when we have a completely -- a sewer system with
10 integrity on it, we're going to have this legacy bacteria
11 that's in the ground to deal with. We're going to
12 conduct a study to try and understand, number one, what
13 is the life, expected life, of that bacteria if we're not
14 continuing to contribute to it?

15 The second thing that we're going to do is we're
16 going to -- we did some pilot studies on remediation and
17 we're going to go -- we're going to go further on one of
18 them about doing a certain remediation effort to try and
19 neutralize that legacy bacteria while it's there; so not
20 just waiting for nature to take its course, but to hasten
21 it along.

22 MS. GLICKFELD: So this is very helpful. I just want
23 to know whether or not we can incorporate those things
24 that the City is already planning to do to address this
25 problem into the Cease and Desist Order so that something
0144

1 that five years from now when you're not here and you're
2 not here and you're not here, if there's a problem, we
3 already know what the City's supposed to do.

4 MR. WAGNER: You want to make those voluntary studies
5 mandatory? The City of Avalon will accept it.

6 MS. LUTZ: They're already in the permit, Madelyn, or
7 in the Cease and Desist Order. It's just now they're
8 listed as voluntary. That's the only difference.
9 They're already there.

10 MS. MEHRANIAN: So make it mandatory?

11 MS. DIAMOND: He's suggested it and I think that's a
12 good idea.

13 MS. GLICKFELD: That would be a great solution, if
14 the staff could make that change.

15 MR. WAGNER: Fine.

16 MS. GLICKFELD: And my last thing is about the
17 rolling mean, L.B.

18 DR. NYE: Yes.

19 MS. GLICKFELD: The rolling mean -- is the Ocean
20 Plan -- does the Ocean Plan require that we use the
21 rolling mean?

22 DR. NYE: That is not staff's interpretation of how
23 the Ocean Plan is done.

24 MS. GLICKFELD: So what is your interpretation and
25 why do you think it's not a good idea to use the rolling
0145
1 mean?

2 DR. NYE: Well, actually, what the staff's -- the
3 current recommendation that's out for public comment is a
4 rolling geo mean. For a number of reasons, we really
5 think the rolling is the way to go and, as I said, I
6 think that would be the recommendation we'll be making to
7 you in June.

8 MS. GLICKFELD: So when that change is made, again,
9 that could be incorporated into this?

10 DR. NYE: Yes.

11 MS. GLICKFELD: That's --

12 DR. NYE: And we would want them to get all of our
13 Bacteria TMDLs using the same calculation method.

14 MS. GLICKFELD: Okay. Thank you.

15 I will be happy to make a motion when we finish
16 our discussion.

17 MS. MEHRANIAN: Yes. Board Member Camacho?

18 MS. CAMACHO: I have a question for staff. I'm just
19 curious to understand staff's view on the City of
20 Avalon's request for the preference of three days after
21 rather than the daily retesting, if someone can --

22 DR. NYE: We think the retesting is a good idea and I
23 think that since they have to submit to us a Compliance
24 Plan, that they could suggest a method to comply with
25 that provision, because it is -- it is often not very

0146

1 practical to test the next day because you don't get the
2 results from one day until later in the day and you have
3 to have them sent out.

4 So the way they do it in Santa Monica Bay, for
5 instance, is they sample not the very next day, but the
6 day after and the day after that and they wait a day to
7 see if they need to go out and sample again.

8 So if the City of Avalon were to suggest that,
9 to propose that in their Compliance Plan, I think that
10 the Executive Officer or staff would recommend that that
11 would be a good way to approach it, the same way that
12 they do in Santa Monica Bay.

13 MS. CAMACHO: Okay. That was my concern, is how
14 feasible it is to actually get it organized every day.

15 Thank you.

16 MS. MEHRANIAN: I have one question.

17 When Avalon was making the presentation, there
18 was this item that, you know, they brought up regarding
19 testing and saving and having the savings put towards the
20 work that they're doing right now. I'd like to hear that
21 and I'd like to understand exactly what they're proposing
22 and what does that mean to us, if you could help -- you
23 know either, you know --

24 MR. DIAMOND: That's the --

25 MS. MEHRANIAN: -- I'd like to hear their view and

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1 I'd like to hear your interpretation of it.

2 MR. WAGNER: Our view is the well is not bottomless
3 on the amount of money that we can spend on this problem.
4 We're already spending \$6 million. I would hate to spend
5 \$50,000 on testing which is not going to solve the
6 problem that we came here to solve today. I'd rather
7 spend that on infrastructure improvements.

8 MS. MEHRANIAN: Can you tell me, then, now, your
9 interpretation of that? What does that mean to what your
10 recommendation is, staff?

11 DR. NYE: Well, I think bacterial testing is pretty

12 inexpensive. The biggest part of it is the labor cost,
13 is the cost of sending someone out there to take the
14 sample. Actually, analyzing is pretty inexpensive and it
15 is directly applicable to human health to the people
16 swimming at the beach to know what the conditions are
17 there. So it's very useful information also.

18 MR. WAGNER: But the beach is going to be -- right
19 now, the beach is required to be tested from April until
20 October and we're testing it 52 weeks a year under this
21 CDO. So there's going to be twice as much information
22 available to the public as a result of this CDO.

23 MS. MEHRANIAN: And I have one more question. What
24 is the downside of what was described?

25 DR. NYE: The downside of --

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1 MS. MEHRANIAN: Of what he just described.

2 DR. NYE: Just you don't know how long the
3 exceedences persist necessarily or if there's any period
4 of time where there is an exceedence, if you have a run
5 of weeks, for every week you get it, you don't know if
6 you're going up and down.

7 MS. MEHRANIAN: If we were going to give them certain
8 thresholds, time lines for this testing, and not ask it
9 to be continuous, would that resolve the problem?

10 I'm trying to -- you know, I think it's a real
11 issue what they're bringing up. We want to use the
12 dollars very sufficiently, yet we don't want to, you
13 know, jeopardize the water quality and if something
14 really bad is going to come out of it, I don't want to
15 vote for it; but I want to know if we can help them out
16 with saving that to do it and still, you know, fulfill
17 everybody's goal.

18 MR. UNGER: Chair Mehranian, I was just going to
19 suggest that the protocol that is used after a beach is
20 posted is that it's not, quote, unquote, "unposted" until
21 they get clean samples. So whether that's one day later
22 or three days later, if they were to sample three days
23 later, it would stay posted for those three days. So it
24 seems like it's just a question of the availability of
25 the beach for recreational use. It's not a public health

0149

1 issue.

2 MS. DIAMOND: Can I just ask a question?

3 Are you saying then that if we were to make the
4 change that the City of Avalon is asking for that the
5 beaches could theoretically be closed longer than they
6 have to be? And if that's true, then there's other --
7 that would also deprive them of tourism dollars if the
8 beaches were closed. Am I understanding that correctly,
9 Sam, what you just said?

10 MR. UNGER: Well, posted, not closed. And I don't
11 have anything to say about the tourism dollars, but --

12 MS. DIAMOND: Are you saying they could be closed
13 potentially longer than if they were to do it the way the

14 permit -- the CDO now requires it to be?

15 MR. UNGER: I'm going to let Mr. Wagner speak --

16 MR. WAGNER: The current procedure --

17 MS. DIAMOND: Can you go to the mic, please?

18 MR. WAGNER: I'm sorry.

19 MS. DIAMOND: Thank you.

20 MR. WAGNER: The current process is County of Health
21 tests the bay on Tuesday. If they get a positive result,
22 the signs go up on Wednesday. The signs stay up for
23 seven days until the next testing time. The signs stay
24 up until the next testing time. It could be 7 days, 14
25 days, 21 days until a nonpositive reading is taken place.

0150

1 My position to you is that that sign is going to
2 be up there for every failure. The public will be duly
3 notified and so to retest every day is just financially
4 punitive. It doesn't solve the problem.

5 MS. MEHRANIAN: I think that L.B. gave us that
6 explanation; that if it's not every day and it's once
7 every three days, you still accomplish what we need to
8 accomplish. Meanwhile, they accomplish their savings,
9 cost savings. Am I right?

10 DR. NYE: Yes.

11 MS. SMITH: I was going to add one other thing to the
12 mix. I checked with Renee on what we have for the
13 Santa Monica Beaches TMDL, and we have every other day,
14 every two-day sampling. So it could be consistent with
15 that and it's a little less than what we have now and a
16 little more than what Avalon is asking, but that's
17 another possibility. It's at your discretion.

18 MS. MEHRANIAN: Okay. So could we put that in the
19 Monitoring Program?

20 MS. GLICKFELD: Two times -- every other day.

21 MS. MEHRANIAN: What did you suggest? Every other
22 day or once every three days?

23 MS. SMITH: Once every two days.

24 MS. LUTZ: If I may, as L.B. explained to us, they're
25 going to submit a report, a Monitoring Report or a

0151

1 monitoring schedule, and L.B. and Mr. Unger will agree to
2 that. So I don't know that we need to be so specific
3 today.

4 MS. MEHRANIAN: I agree.

5 MS. LUTZ: I think we should let them do their
6 suggestion and let our staff work as per our standards.
7 That is our procedure.

8 MS. MEHRANIAN: I'm going to go for that. I just
9 want to make sure that they accomplish their cost
10 savings, because it's not a punitive measure, but it's
11 something to really help them with their water quality
12 and once they are -- now that they are in this process,
13 why stop and make them do things that are just spending
14 their dollars?

15 So with that, I think if there's no more

16 questions --

17 MS. LUTZ: I think we're ready.

18 MS. MEHRANIAN: -- I think we're ready.

19 MS. DIAMOND: Is what was just -- what we have just
20 said correct? I guess that's what I'm asking for from
21 staff. You've heard us --

22 MS. SMITH: Ms. Diamond, for clarity, on page 19 of
23 21 in the Order, it's 1825 with the Bates stamp,
24 Provision 31 does specifically say, "If sampling is found
25 to be out of compliance with the single-sample, City

0152

1 shall sample daily the sample sites." So if you wanted
2 to delegate that to Mr. Unger to play with in the
3 Monitoring Plan approval, we could say "or as" --

4 MS. MC CHESNEY: "Directed by the Executive Officer."

5 MS. SMITH: -- "directed by the Executive Officer
6 during Work Plan approval." We could add that in so we
7 could have that option --

8 MS. MEHRANIAN: That's appropriate.

9 MS. SMITH: -- delegated to the Executive Officer.

10 MS. MEHRANIAN: That's true.

11 MS. SMITH: I would suggest that.

12 MS. GLICKFELD: I'd be happy to make a motion.

13 MS. MEHRANIAN: Yes.

14 MS. GLICKFELD: That incorporating the staff
15 recommendation for changes, I would move approval; and
16 then I want to clarify that we are making the groundwater
17 studies and remediation that the City proposes mandatory,
18 as opposed to just voluntary, that we're going to change
19 the language in the Cease and Desist Order to make it
20 mandatory; and that should this Board in the following
21 year make changes to the reference beach or to the method
22 of calculating -- can you give me language?

23 MS. MC CHESNEY: The geometric means.

24 MS. GLICKFELD: -- incorporating the geometric mean
25 as a standard in our other TMDLs, that that would

0153

1 automatically go back to the Executive Officer for change
2 in this case, the rolling geometric mean.

3 MS. MEHRANIAN: Very good.

4 MS. GLICKFELD: Is the language I just gave --

5 MS. LUTZ: And then there's the thing they just
6 suggested.

7 MS. MC CHESNEY: Yeah. She incorporated that.

8 MS. GLICKFELD: The staff recommendation with that
9 incorporation.

10 MS. MC CHESNEY: So can I just clarify? I'll just
11 summarize. So it would be revising Paragraph 31 to say
12 daily -- "sample daily or as approved by the Executive
13 Officer" in their report. Number two would be to revise
14 the two parameters studies to be mandatory instead of --
15 or is it the other way -- mandatory -- and number three
16 would be to reopen the Cease and Desist Order to include
17 the geometric mean and the reference beach upon approval

18 by the Board.

19 MS. GLICKFELD: Well, we wouldn't be approving
20 something more general by the Board. What is it we're
21 approving that's more general that would trigger this?

22 MS. SMITH: Today you would be approving the actual
23 numeric effluent, the standards to be achieved.

24 MS. GLICKFELD: I mean when in June? When L.B. said
25 we'd be looking at the reference beach issue and the way
0154

1 of measuring the geometric mean, what is that called, so
2 that I can put that into language?

3 MS. SMITH: The method of evaluating compliance with
4 the geometric mean.

5 MS. GLICKFELD: Okay.

6 MS. MC CHESNEY: Okay.

7 MS. MEHRANIAN: And second?

8 MS. DIAMOND: I'll second.

9 MS. MEHRANIAN: All in favor.

10 (Whereupon the motion was passed)

11 MS. MEHRANIAN: Mr. Unger, will you please tell us
12 and the audience what happens now. We take a break now
13 and we come back. What happens?

14 MR. UNGER: I think Ms. Fordyce has to announce the
15 Closed Session calendar, number one. We need to break
16 for lunch and do Closed Session, and what I would suggest
17 is that we do the item -- the EAR Account, Number 16,
18 soon after lunch and if we have to truncate the workshop
19 to only discuss one item, we can do that or we just go a
20 little later this afternoon. And Info Item Number 19
21 would then follow the workshop.

22 MS. MEHRANIAN: Say that again.

23 MR. UNGER: We could have the info item follow the
24 workshop. We can do the workshop. We'll try to be as
25 concise and --

0155

1 MS. GLICKFELD: Aren't we required to start the
2 workshop at 1:30?

3 MR. UNGER: No sooner than 1:30.

4 MS. LUTZ: I have a question about that. If the
5 information item is going to follow the workshop, since I
6 leave for the workshop, do I have to stay around for the
7 option of coming back.

8 MR. UNGER: Then we'll do Item 16 and 19 then. We're
9 hoping that the information item can be fairly concise.
10 I'm seeing a nod from Mr. Watson that yes, he will.

11 Yes, thank you, Mr. Watson. So do both items
12 before we open --

13 MS. MEHRANIAN: Can we move that item to the next
14 meeting, the information item?

15 MR. UNGER: Is City of Signal Hill -- can we move the
16 information item to the following Board meeting?

17 MR. WATSON: Yeah. We'd be okay with that.

18 MR. UNGER: Yes.

19 MS. MEHRANIAN: So when we come back, we'll do

20 Item 16.

21 MR. UNGER: And we'll announce that Item 19 is
22 continued and then we'll open the workshop.

23 MS. MEHRANIAN: Wonderful. Great.

24 MS. FORDYCE: I need to announce the Closed Session
25 items.

0156

1 MR. UNGER: Yes, we need to announce the Closed
2 Session items.

3 MS. FORDYCE: During Closed Session, the Board will
4 discuss Items 21.10, subdivision (a) and subdivision (b).
5 (Lunch recess)

6 MS. MEHRANIAN: We're back in session and we have
7 Agenda Item Number 16 and we'll have a staff report.

8 MS. LUTZ: And very quickly.

9 (Whereupon all prospective witnesses were
10 collectively sworn)

11 DR. RONG: Thank you. I hope -- is this on?
12 Thank you. I hope your lunch was as good as mine.

13 Good afternoon, Chair Mehranian and members of
14 the Board. My name is Yue Rong, also known as Y.R. I am
15 the manager of the Regional Board Underground Storage
16 Tank Program. Also present with me today is Mr. Steve
17 Linder, manager of USEPA Region 9 Underground Storage
18 Tank Program, my counterpart at EPA, who will discuss the
19 EPA I-710 Corridor Project in our region.

20 Item 16 is a resolution nominating seven UST
21 cleanup sites for emergency, abandoned, and recalcitrant
22 account funds for the coming fiscal year.

23 Next slide, please.

24 Before I provide more details on the EAR
25 resolution, please allow me to briefly talk about our

0157

1 Regional Board Underground Tank Program. Some of these
2 are resource pictures.

3 They say a picture is worth a thousand words.
4 This slide shows, from the bottom right, counter
5 clock-wise, a leaking UST, removal of the leaking UST,
6 and replacement of the USTs. The Regional Board UST
7 program oversees cleanup of the contaminated soil and
8 groundwater that result from leaking USTs in order to
9 protect groundwater quality and human health.

10 Our Regional Board UST program is a relatively
11 large program. From a nationwide perspective, we are
12 ranked about 10th place in terms of total numbers of
13 leaking UST cases. I checked the data last week and it's
14 around 13 so far. Therefore, our program is bigger than
15 most of the states in the nation. This is because we
16 have more vehicles and more gasoline storage and,
17 therefore, more leaking storage tanks as well.

18 From a statewide perspective, we have more than
19 one-third of the total state cases among all nine
20 regional boards.

21 Next slide.

22 This slide shows the current tally cases of
23 leaking UST cases among all nine regional boards. As you
24 can see, as of last month, we have a total of 1,239
25 cases, which accounts for about 37 percent of the leaking

0158

1 UST cases statewide.

2 Next slide, please.

3 Okay. Let's go back to EAR account. "EAR"
4 stands for emergency, abandoned, and recalcitrant. The
5 acronym will be used throughout this presentation.

6 An emergency site is where immediate action is
7 needed to require to protect human health, safety, and
8 the environment. An abandoned site is where a
9 responsible party cannot be identified or located. A
10 recalcitrant site is where responsible party is either
11 unable or unwilling to take the required corrective
12 action.

13 The EAR account is a State fund used to initiate
14 corrective action at the leaking UST sites that are
15 classified as either emergency sites, abandoned sites, or
16 recalcitrant sites. All of this year's proposed
17 nomination sites are under the recalcitrant category due
18 to the responsible parties' poor economic conditions. I
19 do want to point out that the resolution before you only
20 nominates EAR sites for funding; it does not determine
21 responsible parties for the cleanup part.

22 All this year's nominations are related to the
23 USEPA I-710 Corridor Project and we wanted to highlight
24 our joint effort with EPA on this project, and
25 Steve Linder of USEPA will present more details on this

0159

1 project, which combines the Federal UST program with
2 Environmental Justice and the Brownfield programs.

3 Next slide, please.

4 EAR account is a subaccount under the UST
5 Cleanup Fund. Both the EAR account and the UST Cleanup
6 Fund are state funds administrated by the State Board.
7 However, they are different.

8 EAR account is funds provided directly to the
9 Regional Board or local agencies and the State Board will
10 seek cost recovery, which may include a lien on the
11 property. Funds are not provided to any responsible
12 party. If the Regional Board receives the funds, it may
13 conduct the corrective action itself or enter into
14 contract with the Department of General Services.

15 On the other hand, the UST Cleanup Fund is a
16 reimbursement fund which does not require payback of the
17 funds. Owners and operators must apply for the funds by
18 submitting a claim to the State Board.

19 So how are individual sites nominated for the
20 EAR account? Each year, the State Board surveys the
21 Regional Boards and local agencies to obtain a list of
22 nominated and eligible sites. The State Board thereafter
23 develops an EAR Annual Site List to identify sites

24 eligible to EAR account funding statewide. The State
25 Board generally grants funding in May of each year.

0160

1 Nominations are based on the criteria that the
2 site has to be: One, either an emergency, abandoned, or
3 recalcitrant site; two, a leaking UST site; and three,
4 must have a regulatory directive for cleanup.

5 The EAR account is funded by annual \$5 million
6 appropriation from the UST Cleanup Fund. The EAR account
7 is under-utilized because, one, it's a UST Cleanup Fund
8 existence and, two, the likelihood of a lien on the
9 property.

10 Next slide, please.

11 Okay. If the Regional Board approves the
12 resolution, the next steps are: State Board will
13 consider and approve its Annual Site List; the EAR
14 funding will be dispensed to the Department of General
15 Services; and the next step would be the General Services
16 contractor will perform the work at the site. As a
17 reminder, the property owner or responsible party will
18 not get any portion of the funds. The Regional Board
19 staff will oversee the fieldwork and the direct the work
20 until the site is granted closure.

21 Next slide, please.

22 This year, staff is proposing that Board
23 nominate six new sites for EAR account funding, plus one
24 renewed site that was from last year's nomination. All
25 seven sites are in the USEPA I-710 Corridor Project area.

0161

1 The purpose of this year's nominations are:
2 One, to move these sites forward in the cleanup process;
3 two, collaborate with USEPA Region 9; and three,
4 effectively use available EAR funding.

5 This map shows the seven nominated sites in
6 yellow dots. And as you can see, one is located in
7 Bell Gardens, one is in Lynwood, one is in Compton, and
8 four are in Long Beach.

9 As you can see, the sites are all adjacent to
10 the I-710 Corridor area. Details of each sites are
11 presented in the agenda binder. All seven sites are
12 identified as recalcitrant sites.

13 Next slide.

14 Okay. Staff provided opportunity for the
15 public, property owners, and the responsible parties to
16 review and comment on the resolution of nominated sites.
17 We received one timely comment letter by the deadline and
18 one late comment letter after the deadline.

19 As of yesterday afternoon at 4:00, we received
20 another comment back; and also this morning there is one
21 property owner that showed up. So it will make a total
22 of four that we've received.

23 Next slide, please.

24 Let's talk about comment number one, which as
25 you can see is on pages 16-25 to 16-29. DSY is the

0162

1 current property owner of Sanchez Auto Sales, which
2 alleged it is not a responsible party, but supported
3 funding. Staff response, which you can see in pages
4 16-30 to 16-31, and the purpose of -- our response is the
5 purpose of today's action is to nominate sites for EAR
6 account funding. The resolution does not determine
7 responsible parties. However, I should know that staff
8 believes DSY is appropriately named as a responsible
9 party. Consistent with the State Board precedence,
10 current property owners are generally responsible for
11 cleanup, along with other responsible parties. For this
12 site, DSY is a responsible party because it currently
13 owns the site. However, the former owner, Sanchez, is
14 also a responsible party.

15 Next slide, please.

16 We received comment number two from former G & M
17 Oil Company and their contention is neither G & M Oil
18 Company nor George Pearson is a responsible party.
19 Again, the staff response is -- this response and also
20 the comments aren't in your binder because of the late
21 submittal. The staff's responses are basically the same,
22 and the purpose of today's action is to nominate sites
23 for EAR account funding. The resolution does not
24 determine responsible parties.

25 However, I do want to note that the staff named

0163

1 G & M Oil as a responsible party based on determinations
2 by both the L.A. County Department of Public Works and
3 the State Board's Division of Financial Assistance that
4 G & M Oil was a responsible party and the former
5 landowner. Since receiving the letter, staff have
6 started investigating the facts, but are unable to make a
7 final determination on this issue given the short amount
8 of time. We will continue to investigate this matter
9 further. However, for the purpose of today's action,
10 staff has provided you with a change sheet to address
11 some of the comments. I do believe that's been
12 distributed to you.

13 MS. FORDYCE: It's the yellow.

14 DR. RONG: It's the yellow-colored sheet.

15 The changes are in the Table of Contents and in
16 the pages of 16-1, 16-6, 16-12 and 16-13. The first
17 change is to now refer to the site as the "Juarez
18 Property" site instead of the "Former G & M Oil" site.
19 Second, staff agrees that G & M Oil should not be
20 considered a recalcitrant party since G & M Oil was never
21 issued any directives. Third, as staff continue to
22 investigate whether G & M Oil and/or George Pearson are,
23 in fact, responsible parties, I recommend identifying
24 those entities for the time being as "potentially
25 responsible parties."

0164

1 Next slide, please.

2 Okay. Staff have determined the comments
3 received do not affect intent of the resolution, which is
4 to nominate sites for funding and not to determine the
5 responsible parties for cleanup. Nominating sites for
6 EAR account funding will only do good for the site and
7 for the environment by allowing the cleanup process to
8 proceed.

9 Next slide, please.

10 Okay. Before I conclude my presentation, I
11 would like to invite Steve Linder, USEPA Region 9
12 Underground Storage Tank Program Manager, to provide more
13 information on the EPA I-710 Corridor Initiative.

14 MS. MEHRANIAN: Mr. Linder, before you start, there
15 was 15 minutes allocated for that. Could you do it a
16 little --

17 MR. LINDER: I'll go as fast as I can. I can talk
18 very fast.

19 MS. MEHRANIAN: It's just that we have the workshop
20 after and I don't want people to wait too much longer.

21 MR. LINDER: I'm excited to be here.

22 MS. LUTZ: Don't make the reporter crazy.

23 MR. LINDER: What?

24 MS. LUTZ: Don't make the reporter crazy. Don't talk
25 that fast.

0165

1 MR. LINDER: Okay. I'm Steve Linder. I manage the
2 Underground Storage Tank Program for USEPA Region 9. The
3 UST program is in the Waste Division within USEPA.

4 We're very excited about the proposal to use the
5 EAR account. We feel the EAR account is a very important
6 tool in the tool chest of tools needed to deal with older
7 underground storage sites.

8 We have a study area going. We are calling it
9 the I-710 Corridor. This is a map showing where we're
10 looking. Within this area, there are approximately 500
11 open leaking underground storage tank sites.

12 Next slide, please.

13 So what we formed was a collaborative
14 multi-agency effort to look at accelerating cleanup and
15 improving compliance within this area.

16 Next slide.

17 Why are we involved as EPA? Well, there are
18 national program goals for leaking tank commitments and
19 we actually have commitments to Washington D.C. for
20 cleanups completed for our region. We have a cooperative
21 agreement with the State Board. California receives
22 almost \$6 million a year in federal funding for its UST
23 program and I sit up in Sacramento with Kevin Graves and
24 we negotiate grant agreements on a yearly basis and --
25 looking for target projects and we decided looking at

0166

1 these older cases in the I-710 area was a very important
2 project. So we actually dedicated some of the federal
3 funding to this area.

4 So we have a partnership. We've also been
5 working with Cal EPA.

6 Next slide, please.

7 So why focus on the 710? Well, there are a very
8 large number of older, dormant, leaking underground
9 storage tank cases called "stuck cases" in this area.
10 Out of those 500 cases, the majority of them are over 15
11 years old and some of them close to 20 years old. This
12 is an economically disadvantaged area. There are --
13 we're looking for opportunities to pilot strategies to
14 address the more difficult sites within the state because
15 we did a study statewide looking at the older cases and
16 we heard over and over again that there are a lot of
17 cases out there that just get back-burnered. They're put
18 on a shelf because "they're too hard to deal with;"
19 "We'll wait for later; we have plenty of work to do right
20 now."

21 And we looked at that and said, we need to
22 really make sure that none of these sites get left
23 behind. It's politically unacceptable to have 20-, 30-,
24 40-year old cases, so we need to at least assess the
25 sites and figure out if something needs to be done and
0167

1 look for strategies.

2 This whole effort -- and the Tank Program
3 complements an overall multi-agency effort in this I-710
4 area to look at environmental conditions. There's
5 something called the Southern California Enforcement
6 Collaborative and I've got one slide or two slides
7 forward that shows the EPA website on it, but there's
8 been a lot of effort from the Air Program, the Water
9 Program, our Superfund program in this particular area,
10 looking at ways to improve the environmental conditions.

11 Next slide, please.

12 So this is an example of a stuck site. This is
13 not one that's being nominated for EAR. This is actually
14 a site that we should be out on next week doing an
15 assessment with Federal LUST Trust Fund money and I
16 invite -- on Thursday, I'd invite Board members to come
17 out. We're actually going to do a press availability
18 session, a visual of that as we pull out the old tanks
19 that have never been attested, never been removed. This
20 particular site was destroyed during the L.A. riots 20
21 years ago and it's sat looking like this for the last 20
22 years.

23 There's a lot of these types of sites that look
24 like this in this area. So there's a huge universe of
25 cases. If you look at L.A. County, just the County
0168

1 boundaries, 1774 cases is the count that I got out of
2 GeoTracker just the other day. Compared to the rest of
3 Region 9, the states of -- the states of Arizona, Nevada
4 and Hawaii combined have fewer cases than what are in
5 L.A. County. So that's why we're involved here. That's

6 why we're very interested.

7 So Y.R.'s got a huge caseload. His partner
8 agencies, L.A. County, L.A. City, Long Beach, have a lot
9 of work as well. We're working with all of them, trying
10 to figure out ways to help and directing some of the
11 federal resources in this direction to get some of these
12 cases taken care of.

13 This is just a screen shot from the L.A.
14 Enforcement Collaborative. If you want more information,
15 go to USEPA's website and look at all the work being done
16 in this area.

17 Next slide, please.

18 So once again, the project partners: We're
19 working with the local communities as well. They're very
20 supportive of the work happening in this area.

21 Next slide, please.

22 We're looking at using very -- various different
23 funding tools to try to address these sites, so the EAR
24 is one of the very important tools in the toolbox. As I
25 mentioned before, we're also using Federal Leaking Tank

0169

1 Trust Fund money. We're trying to get sites into the
2 Orphan Site Cleanup Fund where possible, and we're also
3 planning a number of targeted Brownfield assessments on
4 sites. So we're looking at whatever tools we have
5 available, trying those different tools and trying to
6 figure out different ways to basically break loose these
7 stuck cases.

8 Next slide, please.

9 So this just talks about some of the initial
10 pilot sites we're looking. At so EAR is just one of
11 several tools, again, that we're trying to use to try to
12 address the sites within the study area.

13 Next slide, please.

14 And this slide just shows a map of kind of some
15 of the locations of the various different sites so far
16 that we've identified to put some effort into.

17 Next slide, please.

18 And these are just some visuals of types of
19 sites. These are actually ones that have been proposed
20 for EAR. They sit vacant, they're eyesores in the
21 community, and a lot of them have problems that really
22 are unknown right now. We want to move these sites
23 forward. They've been sitting for a long time, in our
24 opinion. The responsible parties have known they're
25 responsible for these sites for a very long time and they

0170

1 haven't done anything and, again, the EAR account is a
2 very good tool to have available for these sites.

3 My understanding is that to use the EAR account
4 on a site doesn't necessarily mean it has to be used. If
5 there are responsible parties or other parties come
6 forward with a different approach, that can be taken as
7 well. It's just getting the sites approved for EAR in

8 advance is an important thing.

9 I look at some of the other sites or other
10 states in my region like Arizona, for example. A third
11 of their cases are actually State lien cases. They have
12 a program similar to the EAR program and they found that
13 to being very, very effective at getting the difficult
14 sites assessed and done.

15 MS. MEHRANIAN: Thank you.

16 DR. RONG: Next slide --

17 MS. FORDYCE: Y.R. has two more slides.

18 DR. RONG: Well, we're finished.

19 The Board options: Adopt the resolution with
20 the change sheet as proposed by staff or modify the
21 resolution as a logical outgrowth of comments, and
22 decline to adopt the resolution.

23 So the next slide will be our recommendation.
24 Of course we recommend that the Board adopt our
25 resolution with the change sheet, as proposed by staff.

0171

1 And Steve and I both are happy to answer any questions
2 you may have.

3 MS. MEHRANIAN: Great. That's it? Thank you.

4 MR. UNGER: Yeah.

5 MS. MEHRANIAN: We have the speaker cards.

6 Rene Juarez.

7 Please note that we have a three-minute timer on
8 each speaker.

9 MS. MOFFETT: Madam Chair, she's coming to interpret
10 for her father.

11 MS. MEHRANIAN: Did you swear in?

12 MR. JUAREZ: (Comments as translated by his daughter)

13 Hello. Good afternoon. His name is Rene
14 Juarez. I'm his daughter. I'm going to be translating.

15 He knows you're very busy. He appreciates the
16 time that you've given him to speak and he's going to try
17 and be as brief as possible.

18 So he's saying he purchased the property in 2002
19 and that G & M had the property for several years and the
20 salesperson, Jerry, who did the contract for G & M stated
21 that they hadn't been requested to do anything with the
22 cleanup phase of the soil. So Jerry informed him that it
23 could be a lot of years prior to him receiving anything
24 from the State saying what the process of cleaning up the
25 soil is. So Jerry informed him because he had low

0172

1 income, he would be able to qualify for grants to remedy
2 the problem. So he didn't -- he wasn't informed as to
3 what the process was or what the expenses would be. All
4 in all, he's applied for grants. He's been denied
5 because --

6 (Interruption in the proceedings)

7 MS. DIAMOND: Could someone get a doctor. Call 911,
8 somebody. Get her some water.

9 MR. JUAREZ: (In English) Okay. I'm want to try for

10 myself.

11 (In Spanish) He would appreciate for this grant
12 to pass because we have been denied other grants and this
13 would make a difference. He would cooperate in every
14 possible way for the processing and cleaning up the soil.

15 (In English) Thank you very much, and I'm sorry.
16 Excuse me.

17 MS. LUTZ: Please feel better.

18 MS. MEHRANIAN: Next speaker, Neill Brower.

19 MR. BROWER: Good afternoon. My name is Neill Brower
20 with Jeffer, Mangels, Butler & Mitchell, and we represent
21 G & M Oil and George Pearson and we understand the
22 purpose here isn't to designate responsible parties, but
23 we want to object to both of our clients being listed as
24 potentially responsible parties on this; and to the
25 extent that any public funds are expended for the 906

0173

1 Rosecrans site and it leads to cost-recovery actions, we
2 would object to cost-recovery actions against our
3 clients.

4 Neither G & M nor George Pearson is a
5 potentially responsible party here. G & M, to start,
6 never owned, operated, leased or held any interest in the
7 property at any time. Their sole action was at the
8 direction of George Pearson, coordinating the removal of
9 the USTs on the site at the time, along with the removal
10 of about 110 tons of affected soils around the USTs. So
11 the only activity they ever took was to mitigate actions
12 at the site.

13 As to Mr. Pearson, he bought the site at a
14 bankruptcy auction, held the property for only a very
15 short period of time and never operated the site, took no
16 action that either caused or exacerbated contamination at
17 the site, and held it for the purpose of reconveyance.
18 He directed G & M to remove the tanks and paid for that
19 removal, as well as the removal of the soils, with his
20 own money.

21 Under similar circumstances, the State Board has
22 held that prior land owners were not considered
23 responsible parties, and an example of that would have
24 been State Water Board Order No. 9213 and here
25 Mr. Pearson, unlike the owner in 9213, actually undertook

0174

1 some activity to address conditions at the site, which
2 the other owner never did. He lost money on the site.
3 He sold to people who represented that they were
4 experienced owners and operators of former gasoline
5 stations who conducted their own diligence and who
6 indemnified Mr. Pearson in connection with the sale.

7 I just want to refer back again to our letters
8 to staff of March 22nd and March 29th, and again I'd like
9 to thank, actually, Dixon Oriola and Jennifer Fordyce for
10 their responsiveness.

11 Thank you very much.

12 MS. MEHRANIAN: Thank you. Next speaker is --

13 MR. JUAREZ: Can I finish what I said?

14 MS. MEHRANIAN: We'll give you -- let's finish with
15 the cards. We'll let you come back because I know you
16 didn't finish.

17 Donna Yamini?

18 MS. YAMINI: Good afternoon, Madam Chair and members
19 of the Board. My name is Donna Yamini. I represent the
20 DSY Eastern Properties, LLC. This is Mr. Elias Donay.
21 He's one of the members of the LLC.

22 We are here to request that the Board nominate
23 the site for funding on the EAR account and we would like
24 to let the record reflect that the DSY has not been
25 responsible for the contamination on the site.

0175

1 In the staff report, it indicates that they are
2 being identified as a potential responsible party and we
3 want to make clear that that is not the case.

4 The contamination occurred sometime in 2004 when
5 the site was owned by Mr. Trinidad Sanchez, who operated
6 Sanchez Auto Sales. At the time, the USTs were removed,
7 so it was a contaminated soil. From what we understand,
8 the Department of Public Works issued a couple of
9 directives in 2006 to Mr. Sanchez. Those directives were
10 not followed through by Mr. Sanchez and we believe that
11 it was at that time, around 2006, that the property was
12 abandoned.

13 In 2002, the property was foreclosed on and DSY
14 purchased the property in February of 2011. So the
15 property really had been out of use and abandoned when my
16 client purchased it. In fact, it was completely gutted.
17 The plumbing was all gutted, it was vandalized, and it
18 was basically a shell of a building that wasn't being
19 used.

20 So we -- at the time of purchasing, we did the
21 research to determine if there would be any funding
22 because DSY basically is owned by four families that
23 pooled their money together to be able to buy an
24 investment property. They invested some money then to be
25 able to build it to lease it out so that it can become a

0176

1 profitable business and they don't have any assets to be
2 able to determine the level of contamination on the
3 property and to be able to do the cleanup. So that's why
4 we are seeking funds through you.

5 Our concern is that if we are forced to cleanup
6 the fund -- the site without any funds, that we won't be
7 able to afford it and the property will be abandoned yet
8 again.

9 I just want to make clear that this client, DSY,
10 has never been issued a directive. It was two prior --
11 two owners ago, and that's why we believe that they are
12 the responsible party and not us. In fact, we tried to
13 reach Mr. Sanchez, wrote him letters, with no response.

14 So allowing DSY to be nominated and get the
15 funds will help them clean up the site and stop the
16 threat to groundwater quality. Thank you so much.

17 MS. MEHRANIAN: Thank you. Steve Zacks?

18 MR. ZACKS: Good afternoon. My name is Steve Zacks.
19 I'm here for the Long Beach Hot Mix Asphalt Plant.
20 Hanson Aggregates West is a named responsible party for
21 this site and Hanson Aggregates West is now a part of
22 Lehigh-Hanson and that's who I work for.

23 Lehigh-Hanson is requesting that this site not
24 be included in the EAR program and the reason for this
25 request is in our written comments.

0177

1 We found out about this Long Beach site being
2 proposed for inclusion in the program on March 14th when
3 another party forwarded us an e-mail they had received
4 from the Water Board, and we got a copy of the case
5 summary for this site prepared by Board staff.

6 The Board had sent a letter to Hanson Aggregates
7 about this site back in April of 2000. Hanson, at that
8 time, responded in May of 2000 and the review of
9 Lehigh-Hanson files did indicate that the 2000 letter is
10 the last correspondence that we received from the Board
11 on this site and that's prior to us contacting Board
12 staff last month.

13 We did send an e-mail on March 16th to Board
14 staff that we were aware of the site's nomination for
15 funding in the EAR program and that we're going to go
16 ahead and investigate the ownership of the site.

17 We did that and our review found that
18 Sully Miller, who's named as another responsible party
19 here, formerly was part of Hanson and in 1999, most of
20 the assets, but not this particular site, were sold by
21 Hanson to an entity that took the name Sully Miller. So
22 when it was determined that Hanson -- Lehigh-Hanson does
23 own this site and we notified Board staff about that, we
24 found out, which was on April 4th. And so we sent that
25 e-mail approximately three weeks after we first heard

0178

1 that we were being included in this for -- or proposed to
2 be included in this EAR program.

3 We believe it's not accurate to find that
4 Lehigh-Hanson has been recalcitrant in view of our
5 response in these last three weeks. We request that the
6 site not be included in the EAR program. In this case,
7 you have an owner who has sent you an e-mail in writing
8 saying we are taking responsibility for this site.
9 Instead, what we'd like to do is meet with your staff to
10 determine what further actions need to be taken for
11 characterizing the release and determining the remedial
12 actions.

13 Thank you.

14 MS. MEHRANIAN: There's one more: Tha Yin.

15 MR. YIN: Good afternoon, Madam Chair and Board

16 members. My name is Tha Yin. I'm a trustee for the
17 property located at 2990 Pacific Avenue in Long Beach.
18 I bought the property about 20 years ago from
19 County of Los Angeles at the tax sale auction. Several
20 years later, I removed all the underground storage tanks
21 and removed I don't know how many hundred tons of dirt
22 and I just want to let you know that I already signed a
23 contract to have the water test done and report to the
24 Water Board. Even though I never sold a drop of gasoline
25 since I bought this property from the County, I am

0179

1 committed to work with the Water Board to close my case.

2 Just a note to let you know that I do not work
3 at the convenience store, the location, since I bought
4 the property and I held three jobs.

5 And the points about the responsible party, that
6 you are the responsible parties for the cleanup, I
7 believe the County of Los Angeles should be also the
8 party because I bought it from the County; but the
9 problem is that the County confiscated a foreclosure from
10 the previous owner who sold gasoline. So I don't know
11 the technicality about this, but the bottom line is that
12 I'm committed to work with the Board to have this case
13 close.

14 Thank you.

15 MS. MEHRANIAN: Sure. We should ask Mr. Juarez to
16 come back, if anybody in the audience could translate.

17 MR. UNGER: Yeah. We do have a Spanish-speaking
18 staff, but not here today.

19 MS. MEHRANIAN: Anyone in the audience that could
20 translate for us for a second?

21 MS. MC CHESNEY: It's okay if Irma does it.

22 MR. UNGER: She prefers not to do it.

23 MS. MEHRANIAN: Adan is coming.

24 MR. JUAREZ: (Comments as translated by Mr. Ortega)

25 I'd like to mention the following: when the

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1 contract was done with the gentleman named Jerry, who was
2 a representative of G & M, he stated that "I have a lot
3 of experience in dealing with gasoline stations and
4 things of this type."

5 I never in my life have had any association with
6 gasoline stations or anything of that sort. When he
7 listed this item, I was neglectful in noticing that he
8 had stipulated these things. That's all I wanted to say.
9 This (indicating) is a copy of the contract.

10 MS. MEHRANIAN: Thank you, Mr. Ortega.

11 Thank you, Mr. Juarez.

12 We're done with the cards.

13 MS. FORDYCE: Can I note two things, because it might
14 help in your conversations with each other.

15 One is I do want to assure you that this
16 resolution in and of itself, and including the attachment
17 with the list of the sites, in no way makes any

18 determination that anyone's a responsible party. Those
19 are done through separate orders and separate directives.
20 So in some of these cases, there have been multiple
21 directives; sometimes there's been one. But this action
22 itself is not determining who's the responsible party.

23 Two is I wanted to just make you aware that on
24 page 16-5, which is page two of the resolution,
25 number 3 -- it's on page 16-5.

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1 MR. UNGER: Bates stamp.

2 MS. FORDYCE: Bates stamp page 16-5, page two of the
3 resolution. So number 3 states that the Executive
4 Officer is authorized to add, delete, or modify the sites
5 identified in Attachment A during the fiscal year as
6 necessary.

7 So as you can tell, we can received one timely
8 comment letter, we received a couple late ones, and we've
9 heard some new stuff today. So in order to really fully
10 evaluate the information we've received, you can
11 certainly modify the list if you want to today. You
12 don't have to because you would be providing the
13 Executive Officer authority to modify the list at a later
14 date.

15 MS. MEHRANIAN: Okay. Board Member Yee, do you want
16 to get us started?

17 MR. YEE: I'll pass.

18 MS. LUTZ: I have a couple of questions. They're
19 really procedural. I mean, I want to -- I'm hoping staff
20 And probably mostly Jennifer can help me understand.

21 When these -- when we make a recommendation, it
22 goes to the State Board and they're going to determine
23 which one of these or all of them receive this funding;
24 correct?

25 DR. RONG: Yes.

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1 MS. LUTZ: So what is the responsibility and the
2 commitment of the person or the entity that is deemed the
3 responsible party?

4 DR. RONG: They are still responsible under the law,
5 which means that if you contaminated the site, you're
6 responsible to clean it up. However, this funding is
7 different than the -- sometimes the cleanup will move so
8 slowly because of many, many reasons; the transfer of the
9 site or the responsible party cannot be identified. Then
10 in these kind of circumstances, the EAR account is the
11 right use because with the EAR account, the State
12 contractors perform the cleanup work. They will put a
13 lien on the property. Therefore, it allows the site to
14 be cleaned up and then the responsible party, if it
15 exists or not exists, we'll sort it out later.

16 MS. LUTZ: Okay. So let's -- in a scenario, let's
17 say I own one of these properties and I may or may not be
18 recalcitrant or whatever and it goes through our process
19 here. It goes up to the State Board. They approve it.

20 They then -- then the agency comes. They clean it up.
21 The cost of the cleanup, we're talking about the
22 total cost of the cleanup or will it or will the money --
23 so I guess it's a two-part. One is, will the funds that
24 they receive be for the total cleanup or just partial of
25 it? And the second thing is, so then you said that

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1 the -- then a lien is placed on the property and I'm
2 assuming that's to pay that money back to the State?

3 DR. RONG: That's correct. For the second question,
4 yes, the answer is correct. The first question is, it
5 depends. We're asking for either 500,000 or 750- --

6 MS. LUTZ: You put a max.

7 DR. RONG: But that's for this year. So we have to
8 see. Go inside and see how bad the situation is. Maybe
9 it will never use that much; maybe that's not enough. If
10 not the case, maybe this case will be renominated next
11 year. There is a ceiling of 1.5 million for one site,
12 funding for even five years or three years, but for this
13 year, it's just a start.

14 MS. LUTZ: So if we put a site in and we say we put
15 \$5,000 (sic) on our request and it goes through, but they
16 start working on it and they find out it's going to take
17 \$250,000 --

18 DR. RONG: Possibly.

19 MS. LUTZ: -- who's responsible for the remainder
20 part and do they start working and max 500- -- 5,000 and
21 then it stays in that state until either we renominate
22 it, it gets more money, or -- I'm just trying to
23 understand the process and how it affects the owners.

24 DR. RONG: Yes. We will renominate them until they
25 use all the 1.5 million. The difficult part is if you

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1 use your 1.5 million. Then that will be a problem.
2 Let's assume you used the 1.5 million and they still need
3 money; it's still not cleaned up. In that case, that
4 would be a very difficult situation.

5 MS. LUTZ: A worry. But we can't nominate and say,
6 "for whatever amount it takes up to 1.5 million to just
7 get it cleaned." We have to give an amount to the State
8 first and then they assess whether that covers it or not?
9 I guess I just don't understand why we can't just do it
10 once.

11 DR. RONG: I understand your question. So you're
12 saying put a lien on a property until I recuperate it and
13 I give you a second chance. No, it doesn't work that
14 way. The total ceiling is 1.5 million and you nominate
15 it this year, next year, and the following year until the
16 maximum is there.

17 When the State decides to put a lien on the
18 property and recuperate that money back, that's another
19 tax. It's not directly related.

20 MS. FORDYCE: Let me also add that from what I
21 understand, the EAR account has about \$5 million

22 annually --

23 MS. LUTZ: For the entire state.

24 MS. FORDYCE: -- statewide, so if you were to give
25 1.5 million to every site, you would easily max out.

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1 MS. LUTZ: Right.

2 MS. FORDYCE: So you have to do -- for some of these
3 sites, you see \$75,000, \$100,000. You do that for this
4 year and then next year they can put it on the next
5 year's list for additional funding.

6 MR. LINDER: Can I add a little bit? I think it may
7 actually clarify because we've actually talked quite a
8 bit with your colleagues up in Region 5, the Sacramento
9 Region, because they're actually using EAR fairly
10 extensively.

11 It's very different than other programs because
12 it's actually State contractors that do the work and the
13 purpose is really a budget. There's a cost cap, a
14 statutory cap, of 1.5 million per site just like the
15 regular State Fund, but there's a \$5 million
16 appropriation every year and what the people in
17 Sacramento that manage this pot of money do is determine
18 a site budget on an annual basis. That's why they're
19 asking for a budget, but the total cap that can be spent
20 on the site is 1.5 million and it is actually typically
21 State contractors through the General Services
22 Administration in Sacramento that do the work.

23 MS. LUTZ: Okay. Having been involved with
24 Brownfields and cleanups and things like that, I'm -- and
25 I don't want to be overly critical of the program, but

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1 \$5,000 gets nothing. It's not going to -- it's not going
2 to get anybody -- any site clean or even the amounts that
3 were hearing, that's one of my main questions.

4 The amounts that we listed are not going to make
5 it to get these site clean, so I still am unclear. If we
6 bring these up to the State and they approve them, how
7 long do we -- and we get to keep recommending them until
8 they actually get the site clean, but it's an ongoing
9 process. So how many years is it going to take to clean
10 one site? I'm just wondering, does it make more sense to
11 say, we have 1.5 million, boom, you get it, and then hit
12 them off this way so we get these cleaned up? I mean, I
13 don't know that we're making much progress in these
14 little increments year after year after year.

15 DR. RONG: Absolutely, I understand your concern.
16 Well, I have seen all the sites. I have seen some sites
17 be cleaned out in six months. I have seen some sites,
18 ten years, still pumping, still pumping. But it's hard
19 to say, but it's worth trying. We have the six sites.
20 We did not nominate 100 sites. We nominated six sites.
21 See what happens.

22 Best-case scenario would be we go there, take a
23 handful of soil samples, and you determine that it's a

24 low risk. Then the site can be closed. Then the site
25 can move on to their right land use. So that's the
0187

1 best-case scenario.

2 The worst-case scenario of course is you see the
3 1.5 and then you're stuck. So yeah, there's two ends of
4 the spectrum, but there are also sites located right in
5 between.

6 MS. LUTZ: So if you've got a property owner and the
7 property owner says, "I do not want to be part of this
8 process," do we force them?

9 DR. RONG: Well, what I forgot to really relay to you
10 in the slides, actually, yes, this is just a nomination
11 resolution. Once we get the money, we do have a decision
12 to make. Well, if the property owner says, "I do it
13 myself. I don't like the lien. I have the money and
14 I'll do it myself," fine. We don't have to use the
15 money. So the money that is being allocated is
16 unnecessary and doesn't have to be used.

17 MS. LUTZ: So what if they don't have the money to do
18 it themselves and they still don't want us to nominate
19 them?

20 DR. RONG: That would be a conflict with our goal.
21 Our goal is to clean up the sites. So we're trying to do
22 cleanup.

23 MS. LUTZ: So we do it in spite of the owner's -- we
24 would do it in spite of their --

25 DR. RONG: Not necessarily, but I think we are going
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1 to have a variety of communications with the owners. The
2 owner's concerns will be that they -- I think after
3 today's resolution, there are at least four sites, the
4 owners showed up yesterday and we're happy to see that.
5 That's sort of a purpose of this resolution as well and
6 then we'll start next week where we can have a
7 communication with them.

8 MS. LUTZ: So if there are --

9 MS. MEHRANIAN: Excuse me. Sam?

10 MS. LUTZ: Oh --

11 MR. UNGER: Sam, if an RP or owner comes to us with
12 some sort of commitment to clean up the site, either
13 voluntarily or, you know, work under a directive under
14 the Health and Safety Code to clean up the site, we could
15 certainly take that into account and honor their wishes
16 to not be nominated through this account. So I think
17 that's the case possibly with one of the owners today.
18 But, again, we got a comment so late that we can't really
19 evaluate that like it is. I think that's why Jennifer
20 put you to page 16-5, so we can continue those
21 discussions and see what people's commitments are to
22 cleaning up their sites.

23 MS. LUTZ: But I would imagine that there are people
24 out there who own sites who would love to have this kind
25 of assistance to help clean it up and so I guess I'm

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1 wondering if we've got owners who are not -- who don't
2 want to do this, how can we make this happen with willing
3 partners and not have this friction?

4 DR. RONG: I'm not sure there is a friction yet,
5 because --

6 MS. LUTZ: I don't know. We just heard four people
7 come up and say, take me out of this; don't make me. So
8 I think that's friction.

9 DR. RONG: At least two sites. I think my
10 understanding is they were implying we're going to do it
11 myself; but in that case, that's money allocated to them
12 that's really not going to hurt them.

13 MR. UNGER: Board Member Lutz, I think one of the
14 owners said they'd like to work with the program. They
15 just had an issue being named a responsible party.
16 Again, that's something we can negotiate on the staff
17 level to move the site forward. Those are the types of
18 issues we can work out. But yes, three of them did
19 say that they -- but we also heard one of them say
20 they're ready to commit.

21 Again, we got this information late. We
22 couldn't really discern if -- we could work through that.
23 If you were to approve this resolution, we could work
24 through those issues and identify the truly recalcitrants
25 and if there are other enforcement issues.

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1 MS. MEHRANIAN: Board Member Munoz, did you want to
2 add something?

3 MS. MUNOZ: Yes. Could you just quickly review the
4 process for me on how you notify a property owner that
5 you've -- this property you've targeted to have cleaned?
6 Do they get a letter? Do they get a visit? What
7 happens?

8 DR. RONG: Yes. There is -- actually, this package
9 is mailed to them so they have an opportunity to comment.
10 Before the package, of course each site has our
11 directive. That's why -- that's a qualification for a
12 nomination. So they must have our directive letter. So
13 if that letter reached them -- if they did not somehow,
14 somehow did not receive it or did not get it, I know
15 there's a package that's sent to them so they're aware of
16 they're being nominated for the process, and then some of
17 them come here saying, "I want out" and, okay, tomorrow,
18 next week when we start communicating with them, "Why do
19 you want out? If you want to take responsibility doing
20 the cleanup, that's fine," then some people still want in
21 and if there's funds that are being allocated, there will
22 be a letter sent to them.

23 MS. MUNOZ: So the property owners who are here, when
24 did they get that letter? Is it two months ago? Two
25 weeks ago?

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1 DR. RONG: I think it's two weeks. We give them two

2 weeks.

3 MS. MUNOZ: Okay.

4 DR. RONG: Ten days.

5 MS. FORDYCE: One was --

6 MS. MUNOZ: A letter like this, number one, if it is
7 two weeks, I'm not sure that is ample time at all to give
8 a property owner --

9 DR. RONG: I agree. I agree. Absolutely I agree
10 because that's -- that part is not really crucial.
11 Crucial is the week after when we start communicating.
12 I'm really glad they came forward so we can start
13 dialoguing.

14 This is a nomination. Nominating your site, it
15 is not necessary you are a bad site or something. It's
16 just I needed to have some allocation money for next year
17 in case I need to use it, and hopefully I won't have to
18 and they come forward and will clean up the environment.
19 That would be fine. So if you're saying, well, it's not
20 enough for me and why we need to negotiate with us, yeah,
21 the door's open.

22 MS. FORDYCE: I think the question was when do they
23 receive notice? They were not notified two weeks ago.
24 They had a two-week comment period. They were actually
25 notified late February.

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1 DR. RONG: The direct letter, a long time ago.

2 MS. FORDYCE: Yes, the packets.

3 MR. UNGER: When do the letters go out to dispatch?

4 DR. RONG: I think two weeks ago.

5 MS. FORDYCE: It was not two weeks ago.

6 DR. RONG: It wasn't?

7 MS. MUNOZ: Well, when you figure out the length was,
8 the point of my question and my concern is the following.
9 We had one or two gentlemen here who came before the
10 Board who did not know how to speak English and I'm sure
11 they don't know how to read English. So when a letter
12 comes to them at their house that would include this, the
13 first communication is, you know, if you don't -- whether
14 it be English, Spanish, or whatever the language is that
15 you have to make sure that they understand what you have
16 sent to them.

17 The people are here because they've gotten a
18 very serious letter from a regulatory agency and they're
19 not sure if you're going to take the property away from
20 them. They're not sure what. People panic and they come
21 here, and it just seems to be a process that could be a
22 little more humane and a process that could be different
23 so that we don't have folks coming very alarmed.

24 These are -- I was told in the very beginning
25 that most of these properties are in underserved

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1 economically depressed areas and so many of the folks who
2 probably own properties had to pool their moneys
3 together, so it's not business as usual is what I'm

4 saying to you. So my concern is treating the public with
5 high regard, high respect, and giving them the
6 opportunity to figure this out, not having to come here
7 to do it, you know. So I'm not sure how we can change
8 the process for that to happen and if this is -- is this
9 the first time we've done this or is this like
10 continuous, every year we do this?

11 DR. RONG: This is the first time we did not take it
12 as a consent item. Before, there was a consent item; we
13 did not discuss. I think I heard your message. Thank
14 you very much for your comments, and I think we are
15 ready -- ready to deal with that.

16 Why I say that is because in our monthly -- I
17 have come together with the USEPA to coordinate with the
18 USEPA. This bilingual thing has been in our discussion,
19 our agenda. I think we can use some of the federal
20 government resources and try to get this language issue
21 to deal with. On our staff, there is many, many
22 bilingual staff as well. Absolutely, that's our concern
23 because --

24 MS. MUNOZ: I don't want you to misunderstand, I
25 don't think this is an important premise. I think it's very

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1 important, especially with the number of tanks and
2 contamination that you've identified. So it is
3 important.

4 What I am addressing is the process and how it's
5 done, how we communicate with members of the public.

6 DR. RONG: With the process, I have to apologize a
7 little bit. The decision has to be made and a decision
8 has to be made by State Board, so that's why we have to
9 bring it to you every April. Every, I think, February,
10 State Board is sending down the solicitation letter. We
11 cannot start earlier. I cannot start last June or last
12 September. So the time is pretty pressing; but, however,
13 I do believe that the communication with the responsible
14 party or current owner, it's not that crucial for this
15 moment. I think it's crucial after this when we're
16 starting the dialoguing with them. How we can resolve
17 these things? If you like the account, fine. If you
18 don't like it, we'll find some other way. That's what's
19 important.

20 MS. MEHRANIAN: I would like to move and then we'll
21 come back again. It's like we're getting stalled.

22 Please.

23 MS. DIAMOND: I guess what I wanted to say is that we
24 have to be -- I have to be brought back, and maybe some
25 of the other Board members, to exactly what it is we're

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1 asking to approve today.

2 I think there is a lot of misunderstanding from
3 people who are here today thinking that if we were to
4 approve this resolution that they would be responsible
5 for doing things that they are very surprised about and

6 don't understand and are scared about. So it seems to me
7 that what we've -- the State Board asked us -- if I'm
8 reading this resolution correctly, the State Board asked
9 the Regional Board to contact the local agencies to
10 identify these very critical sites where there have been
11 abandoned underground storage tanks that are creating
12 significant water quality issues, and then we are today
13 to adopt a resolution requesting these funds from the EAR
14 account to be used for sites. You've recommended seven.

15 So today, are we approving a resolution that
16 would say, these are the seven sites that if we get the
17 money, when we get the money, these would be the sites
18 that the EAR accounts would be for and it has nothing to
19 do with who is responsible? That's not an issue before
20 us today, who the responsible party is.

21 DR. RONG: That's correct. All staff is asking for
22 us to do is to nominate several sites, approve a list for
23 the nominations.

24 MS. DIAMOND: Now, if we approve this list, as I
25 understand it, today and some of these sites don't want

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1 the EAR funds, they want to volunteer, they want to do it
2 in different ways, those sites can be changed even if we
3 approve this resolution today; is that correct?

4 DR. RONG: Yes, that's correct.

5 MS. DIAMOND: So all we're doing today is -- if we
6 pass this is to accept the EAR funding for sites --

7 DR. RONG: That's correct.

8 MS. DIAMOND: -- in this region.

9 DR. RONG: You're nominating it to the State Board,
10 asking State Board to approve it.

11 MS. DIAMOND: Okay.

12 DR. RONG: So later when we work with our counsel to
13 determine who's a recalcitrant, who's responsible, the
14 site may have changed hands many, many times, but that's
15 not crucial to this resolution. The resolution is just
16 to provide a list of sites, and it might be --

17 MS. DIAMOND: Thank you. That's very helpful, and I
18 just wanted to --

19 MS. MEHRANIAN: Questions?

20 MS. DIAMOND: And I think in the future we should
21 always be sure that the people who receive notices --
22 'cause we send it out and we want it to be sent out to
23 everybody that could be involved -- that they understand
24 as well as we what's before us and whether they have
25 reason to be concerned for their own -- it may not help

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1 everybody, but at least it would provide them some
2 comfort that we're not asking them to do anything or
3 requiring anything of them.

4 DR. RONG: I agree. Thank you.

5 MS. MEHRANIAN: Thank you. Please.

6 MS. GLICKFELD: Just a comment, which is I'm going to
7 bring us back to the big picture, which is that we have

8 1200 underground tanks. We are ninth in the nation in
9 terms of these tanks. These cases have been before our
10 Board for decades and we, for a variety of reasons, and
11 part of it is the difficulty of assigning responsibility
12 and part of it is people owning land that they can't use
13 because of problems on it, we need to make some effort to
14 move ahead with these properties as we were told by
15 USEPA.

16 I strongly support the use of the EAR fund
17 because we then can help the landowner who owns the
18 property now by getting his property cleaned up. They
19 benefit because it can go back into use again, the
20 community benefits from going back into use, and
21 hopefully because we're going to put a lien on the
22 property the government money that starts this process
23 comes back so we can use it again. Is that all correct?

24 DR. RONG: Yes. Thank you.

25 MS. GLICKFELD: And I just think that we -- for

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1 whatever reason, you want to be much more careful about
2 how much emphasis gets put on who's responsible, the
3 parties, and making sure that everybody gets notice and
4 understands this process, but knows that they're not
5 required to participate in it. But somebody has to clean
6 these sites up and that's our job. Our job is to get
7 these sites cleaned up, all 1200 of them. That's it.

8 MS. MEHRANIAN: Thank you.

9 DR. RONG: Thank you.

10 MS. MEHRANIAN: Questions? No? Yes.

11 MR. YEE: Yes. I just want to add to that, that if
12 we only do six or seven sites a year, that's going to
13 take us over 200 years to do.

14 MS. MEHRANIAN: I was just thinking about this.

15 MR. UNGER: This isn't our only source of funding to
16 clean up underground storage tanks.

17 MR. YEE: Oh, okay, 'cause if we're seriously
18 interested in water quality, we're going to have to
19 expedite these processes.

20 DR. RONG: To tell you the truth, at the beginning we
21 were discussing with USEPA they wanted to nominate way
22 more than six. I said, "Let's try it the first year and
23 see what's going on." So that's my conservative
24 approach, but next year it may not be six. It may be
25 sixty. I don't know. We'll have to see how that works.

0199

1 MR. YEE: What if we sent out letters to all 1200
2 sites and asked them who would like to participate? You
3 might get some people who immediately come and get on it
4 or all of them not interested.

5 DR. RONG: My understanding, as I indicated in the
6 slides, is they're under-utilized because there are
7 simply no takers. Why? Because there is a USEPA fund
8 that's a reimbursed fund that they can go to and, two,
9 the lien on their property is not that attractive. So

10 we're trying. We're trying. If someone's got the right
11 use for them, great.

12 MS. MEHRANIAN: Anybody else on the Board that has
13 questions?

14 I have one. Regulatory-wise, let's say, as you
15 mentioned, that there's 1200 sites or 1200 sites with
16 tanks. What is our jurisdiction on putting together
17 certain kinds of regulations that no matter what, these
18 should be -- you know, create the list and create the
19 procedure that this should be addressed, as the Water
20 Board? I mean, I'm trying to understand do we have any
21 jurisdiction -- do we have any tools or mechanisms that
22 we can use to make sure that we address or have a process
23 that is kind of you can't go around it, but you have to
24 address it, and what would that be if the answer is
25 "yes"?

0200

1 MS. FORDYCE: I can address that. I think one thing
2 to point out is the 1200 cases are total cases. These
3 are not all -- the 1200 cases, the 1239 figure, are not
4 1239 abandoned, emergency, or recalcitrant sites. It's
5 total sites. So for many of those sites -- and I don't
6 know the percentage.

7 DR. RONG: Most of them qualify for Cleanup Fund.

8 MS. FORDYCE: A lot of them, the responsible parties
9 are doing the work under our directives and there's some
10 where we've issued directives and they're not doing the
11 work because they're abandoned or emergency or
12 recalcitrant and they're not. So to qualify for the EAR
13 account, you have to be qualified. That means you're
14 emergency, abandoned, or recalcitrant. Sites that don't
15 qualify for EAR account might qualify for the UST Cleanup
16 Fund and that's the reimbursement fund that Y.R.
17 mentioned.

18 MS. MEHRANIAN: So the second part of my question is
19 from the ones -- okay. Would you know at least
20 what percent -- what percent that is?

21 MS. FORDYCE: Not at all.

22 MS. MEHRANIAN: Could we come up with that
23 percentage? I mean, could somebody tell us what it is?

24 DR. RONG: I will say 7, 8 or 10 percent, something
25 like that.

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1 MS. MEHRANIAN: Sorry.

2 DR. RONG: 7, 8 or 10 percent, something like that.

3 MS. GLICKFELD: So that would be 120.

4 MS. MEHRANIAN: So let's say it's 120 and you said
5 there's different mechanisms available, funds. Could we
6 like put together some kind of a road map, a master plan
7 of these are the sites and these will be the mechanisms
8 through which we're going to address it in this kind of
9 time line?

10 DR. RONG: It's a little difficult because if there's
11 120 sites, I know them. That will be hard for me to

12 know. Most of them I don't. Just like this, I try to go
13 about --

14 MS. MEHRANIAN: Let's take the ones you know because,
15 as Larry said, if we don't do anything like this, it's
16 going to take 200 years to clean these things and I'm
17 trying to see if we can have a path or a road map.

18 MR. UNGER: Chair Mehranian, what I'd suggest -- we
19 hear what you're saying and what I would suggest is after
20 we get over this action here today, that we sit down
21 after this funding cycle with our Tank --

22 MS. MEHRANIAN: Okay.

23 MR. UNGER: -- Program and we talk about sites which
24 are not being addressed through the normal --

25 MS. MEHRANIAN: Wonderful.

0202

1 MR. UNGER: -- UST Tank Fund to try to come up with a
2 strategy, if you will --

3 MS. MEHRANIAN: Let's do that.

4 MR. UNGER: -- that we can present to you in an
5 information item at some later date. It's not going to
6 be next month.

7 MS. MEHRANIAN: Right, but let's think in that
8 direction.

9 MR. UNGER: Yeah. We can --

10 MS. MEHRANIAN: Wonderful. We'll entertain a motion.

11 MS. DIAMOND: I'll entertain a motion to adopt the
12 Resolution Number RX -- I don't know -- 12-XXX that's
13 before us here.

14 MS. GLICKFELD: Just a point of clarification, that
15 the motion -- I would second it if you just clarify
16 that -- so the audience understands that no one is
17 obligated to take these funds. They are obligated to
18 clean up, but they are not obligated to --

19 MS. DIAMOND: I think we have to adopt the resolution
20 and it says it in there.

21 MS. LUTZ: Fran, is that with the change sheet?

22 MS. DIAMOND: With the change sheet.

23 MS. LUTZ: I'll second that.

24 MS. MEHRANIAN: All in favor?

25 (Whereupon the motion was passed)

0203

1 MS. MEHRANIAN: This concludes the agenda items and
2 we can move to the workshop. I want to apologize for the
3 delays. The items on the agenda took longer and I know
4 that the workshop was noticed at 1:30, so we're like
5 about an hour and a half late and I apologize to the
6 audience and for the ones who are here for the workshop.

7 And Board Member Lutz needs to leave, and Board
8 Member Yee needs to leave at 4:30.

9 MR. UNGER: Well, it's a workshop.

10 MS. GLICKFELD: Are we on break?

11 MS. MEHRANIAN: Do you need a break? Five minutes?

12 MS. GLICKFELD: Five minutes.

13 (Recess)

14 MS. MEHRANIAN: We're back in session. Please take
15 your seats. We are starting with -- we're getting
16 started with our workshop.

17 And, Deb, are you going to start us off?

18 MS. SMITH: Yes. I was going to introduce it.

19 Good afternoon. For the record, my name is
20 Deborah Smith and I am the Chief Deputy Executive Officer
21 here at the Board. I'm here to introduce Item 20, which
22 is a Board workshop on the reissuance of the L.A. County
23 MS4 permit.

24 As you know, staff have been diligently working
25 on the permit and we have been meeting with many

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1 stakeholders on a regular basis in the last few months.

2 The workshop today is focused on two topics:
3 non-storm water discharges and minimum control measures.
4 To facilitate a productive workshop, we have prepared a
5 staff working proposal for each of these topics and sent
6 that out to folks. These proposals represent staff's
7 current thinking on these matters.

8 We are here to hear and consider stakeholder
9 comments and, unlike last month's workshop, which was
10 noticed as a staff workshop, today's workshop is noticed
11 as a Board workshop in which Board members can question
12 staff and stakeholders about the comments.

13 Staff will not be responding conclusively today
14 on any of the comments on the working proposal, but will
15 be glad to clarify any issues for the Board and will
16 consider stakeholder and of course Board comments when we
17 develop a tentative permit for comment.

18 We intend to notice one more workshop to discuss
19 TMDLs, receiving water limitations, and Watershed
20 Management Plans, which is a new concept we've been
21 working on in the last week or so.

22 For today's workshop, staff will be addressing
23 each topic separately with non-storm water discharges
24 kicking it off, and I would mention that I guess we'll
25 start off with that item and sort of see where we are

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1 timewise to see if we can get through the second item,
2 but hopefully we can.

3 So unless there are any other questions, I'm
4 going to turn it over to Renee to kick off the first
5 topic.

6 MS. PURDY: Good afternoon. My name is Renee Purdy
7 and I am the section chief of the Regional Program
8 Section here at the Regional Board. And as Deb said, I
9 am going to be kicking the workshop off with the first
10 topic and then, assuming we get through that, we'll move
11 on to the second one and Ivar will be leading that one
12 off.

13 Before we delve into the two specific topics
14 that we have on our agenda today, though, I wanted to
15 step back just for a moment to look at the bigger picture

16 and put these two detailed working proposals that we are
17 going to discuss today in the context of the full permit
18 and I thought it would be helpful to first show you an
19 outline of the developing L.A. County permit and where
20 the two pieces that we're discussing today fit into that.

21 I've highlighted in bold the two topics for
22 today and I would just also note that we have discussed a
23 number of the other parts of the developing permit,
24 including the Water Quality-Based Effluent Limits, TMDL
25 Provisions and Monitoring Requirements, though as Deb

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1 said, we do plan on having another workshop once we have
2 working proposals for some of these other key components
3 such as the TMDL Provisions, the Receiving Water
4 Limitations, and as she mentioned, the Watershed
5 Management Program aspect of the permit.

6 I've also noted here where each part of the
7 developing permit aligns with the current L.A. County
8 permit and it just indicates which sections and some of
9 you probably are more familiar than others; but just for
10 the sake of the audience as well, this provides kind of
11 an alignment with the existing permit.

12 The next thing that I want to do is I want to
13 place the two topics for today in the context of our
14 decision early on last fall to structure the permit in
15 such a way to allow watershed-based management, to
16 facilitate integrated approaches to addressing discharges
17 from the MS4, and I just want to say, I think at times,
18 it is easy to lose sight of the forest through the trees;
19 and for those of you that have gone through the working
20 proposals, there are a lot of trees in there and so I
21 thought it would be helpful to take a step back and kind
22 of look at how these all fit together and integrate
23 ultimately.

24 So what I wanted to do is just show you the two
25 pieces that we're talking about today, which is the

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1 non-storm water controls and then the -- I'm sorry it's a
2 little bit light -- minimum control measures are two
3 pieces, and you can even see there that there is some
4 integration between these two pieces. The other two
5 pieces that we will be talking about later and we've
6 touched on before are, one, the provisions to address
7 TMDLs and then also the receiving water limitations
8 language in the process for addressing exceedences and
9 receiving water eliminations that aren't otherwise
10 covered by TMDLs.

11 And the thing that I want to point out is that,
12 as you can see, I've made all of these overlapping
13 because there is a lot of overlap among all these various
14 types of strategies, control measures, and BMPs in each
15 of these four areas and what we intend is that once the
16 complete permit is developed, all of these will basically
17 work together within a Watershed Management Program.

18 So I realize that today we're talking about two
19 very detailed proposals kind of in isolation, but I just
20 want to remind people that where we're headed is towards
21 a permit that will integrate all of these types of
22 strategies and control measures in a wholistic way within
23 the concept of a Watershed Management Program, as we
24 discussed last fall.

25 So I just wanted to give you that as an overview
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1 to kind of put this in context, because I know that we
2 really are getting into a lot of the details in the
3 proposals that we put out and I wanted to let people know
4 that we haven't lost sight of the forest through the
5 trees. We're trying to keep that forest in mind and
6 eventually when we have the full tentative proposal out,
7 then I think that will become much more clear.

8 So with that, what I want to do now is move on
9 specifically to the non-storm water discharges, and what
10 I'd like to do first is just start off by giving you some
11 background information on how Congress and EPA
12 anticipated that we would regulate non-storm water
13 discharges through the MS4, through MS4 permits.

14 And just to begin, non-storm water discharges
15 are basically discharges to the MS4, and from the MS4 to
16 the receiving water, that are not composed entirely of
17 storm water.

18 Clean Water Act Section 402(p)(3)(B) -- that's a
19 mouthful -- basically said that MS4 permits must
20 effectively prohibit non-storm water discharges to the
21 MS4. And so one of the questions that you might have is,
22 what does it mean to effectively prohibit these
23 discharges through the MS4?

24 And basically, according to EPA, that means two
25 things. It means either that these non-storm water
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1 discharges to the MS4 should be permitted under a
2 separate NPDES permit, or they should not be allowed into
3 the MS4; and MS4 permittees, according to the 1990
4 rulemaking on the storm water and MS4 permits, are
5 required to have a program in place that will detect and
6 eliminate illicit discharges of non-storm water through
7 the MS4.

8 That said, in 1990, EPA did receive significant
9 comments that some non-storm water discharges that
10 commonly occur in urban environments should be allowed
11 into the MS4 and USEPA agreed in part and clarified that
12 MS4 permits do not have to prohibit certain discharges of
13 non-storm water through the MS4 in all cases. The
14 implementing regulations for the Clean Water Act 402 list
15 types of non-storm water discharges that may be exempt
16 from the effective prohibition as long as they are not
17 sources of pollutants to the MS4 and to receiving waters,
18 and USEPA gave states the authority to include permit
19 conditions that require municipalities to control any of

20 these types of non-storm water discharges through the use
21 of BMPs and/or requiring that they be separately
22 permitted to ensure that they aren't a source of
23 pollutants to receiving waters; and if they are found to
24 be a source of pollutants, then EPA gave states the
25 authority to require that MS4 permittees prohibit those

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1 discharges to the MS4.

2 So in the past, the Regional Boards have
3 generally handled this effective prohibition on non-storm
4 water discharges through the MS4 using a combination of
5 three different approaches: First, by requiring
6 municipalities to implement what we refer to as the
7 Illicit Discharge Detection and Elimination Program as
8 part of its Stormwater Management Program or minimum
9 control measures, which we'll talk about later this
10 afternoon; second, by conditionally authorizing the list
11 of certain common non-storm water discharges that were
12 identified in the federal regulations where they are not
13 otherwise regulated by a separate NPDES permit. And I
14 want to just explain what this conditional authorization
15 means is that they are only authorized, like I said, if
16 they are not a source of pollutants and that conditions
17 may be imposed to ensure that they aren't a source of
18 pollutants to the MS4 and to receiving waters. And then
19 the third approach that the Regional Water Boards have
20 used is by issuing a number of separate general NPDES
21 permits to cover these types of non-storm water
22 discharges.

23 So as we began developing this section of the
24 new L.A. County MS4 permit, one of the things that we did
25 is we evaluated the current program information as well

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1 as monitoring data on dry weather to assess the
2 effectiveness of these existing approaches to controlling
3 non-storm water discharges through the MS4 and then to
4 identify possible modifications to our approaches based
5 on that evaluation.

6 So what we found when we did the evaluation is
7 that, first of all, not too surprisingly, is that there's
8 a widespread presence of persistent dry weather flows or
9 non-storm water discharges that are still occurring
10 despite a relatively extensive screen process that's been
11 happening over the last probably two decades with regard
12 to non-storm water discharges. However, despite the fact
13 that there are these persistent dry weather flows, what
14 we found is that there is a poor understanding of what
15 the sources of those persistent dry weather flows are
16 and, therefore, there have been limited actions to really
17 try to address these persistent dry weather flows to the
18 MS4.

19 One of the solutions, of course, has been the
20 use of low-flow diversions, which has been a very
21 successful approach where the dry weather flow is coming

22 out of the MS4. However, despite this, we do still see a
23 lot of exceedences of water quality standards during dry
24 weather that are likely the result of these persistent
25 dry weather flows, and this is evidenced, of course, by
0212

1 the number of TMDLs that we have that include the dry
2 weather wasteload allocations as well as monitoring data
3 collected under the MS4 permit.

4 So based on this evaluation, we identified the
5 need for a couple things in the new L.A. County MS4
6 permit. Basically, we identified that there needed to be
7 more effective controls on the exempted categories of
8 non-storm water discharges and that these be implemented;
9 that potential impacts from exempted categories needed to
10 be evaluated on a more proactive way; and also, if a
11 non-storm water discharge is identified as a source of
12 pollutants, that appropriate actions needed to be taken
13 to deal with that non-storm water discharge.

14 So now I want to briefly walk through the
15 working proposal that I know you've all had a chance to
16 look through.

17 First of all, with regard to the working
18 proposal, we have included all of the exempted categories
19 of non-storm water discharges that are in the current
20 permit. So those are still included in this working
21 proposal. This list of exempted categories is the same
22 as USEPA's list and it's implementing regulations and
23 these include, among many others, discharges from potable
24 water supplies as well as firefighting flows.

25 Similar to what was done in the Ventura County
0213

1 MS4 permit that was reissued in 2010, staff has proposed
2 a table of specific conditions and BMPs that need to be
3 met for the discharge to be conditionally authorized.
4 In addition, the working proposal explicitly states that
5 the MS4 permittee must be able to ensure that the
6 necessary permits are obtained by the discharger and it
7 also includes a provision to support the MS4 permittees'
8 authority to require the discharger to provide advanced
9 notification, to conduct monitoring, and to implement
10 BMPs to ensure that those authorized discharges are not a
11 source of pollutants to the MS4.

12 We've also included a provision that would
13 require permittees to evaluate monitoring data from the
14 outfall monitoring program that we are proposing and we
15 discussed at the last workshop that many of you listened
16 in on, to assess whether any of these exempted discharges
17 are a source of pollutants and then, if so, we've
18 included a provision that requires permittees to take one
19 of three actions; and those would be to either prohibit
20 the discharge, to impose additional controls and BMPs to
21 basically prevent the discharge of pollutants from that
22 discharge, or to require the discharger to obtain
23 coverage under a separate NPDES permit. And these three

24 actions stem directly from the implementing federal
25 regulations for MS4 permits and are also included in the
0214

1 Ventura County MS4 permit that was recently reissued.

2 One of the significant categories of non-storm
3 water discharges is potable water supply discharges and
4 these are common and frequent discharges and sometimes
5 are very large volume discharges, so I'd like to take a
6 few minutes now to talk about this and how it's addressed
7 in the working proposal that we put out.

8 It is one of the few categories of non-storm water
9 discharges that is often required by state and/or federal
10 regulation and I know that you're going to hear that from
11 some of the water suppliers today.

12 Concerns have been expressed that due to its
13 frequency and the volume of the discharge, that these
14 discharges could cause exceedences of water quality
15 standards in receiving waters for which an MS4 permittee
16 could then be held responsible since the discharge is
17 coming from the MS4.

18 So recognizing that these potable water supply
19 discharges are often required and necessary to maintain
20 reliable water supplies, we've proposed language in the
21 working proposal that if an authorized potable water
22 supply discharge caused an exceedence of a water quality
23 standard, then the MS4 permittee would not be found in
24 violation of the receiving water violations.

25 In order for this provision to be invoked, what
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1 the working proposal would require is that the MS4
2 permittee would need to provide a demonstration based on
3 monitoring data from the non-storm water discharge that
4 the discharge was the cause of the exceedance of the
5 water quality standard.

6 If the discharge was found to have caused an
7 exceedance of a water quality standard, the MS4 permittee
8 would be further obligated to take follow-up actions,
9 including one or more of the following, and these would
10 include: An evaluation of the potential long-term
11 effects of that continued discharge on the receiving
12 water; the identification of alternative discharge
13 pathways to potentially less sensitive receiving waters,
14 and that would be in coordination with the discharger;
15 the imposition of additional controls to reduce the
16 pollutants in that category of discharge or the
17 requirement for the discharger to obtain coverage under a
18 separate NPDES permit, as I've mentioned before.

19 So in conclusion -- and I know this is a quick
20 review, but I want us to mainly leave time for the
21 comments that you're going to hear today -- staff's
22 working proposal basically includes three key elements:
23 One is more specific conditions and BMPs for exempted
24 non-storm water discharges similar to what was included
25 in the Ventura County MS4 permit; more explicit

0216

1 procedures for evaluating exempted discharges and then
2 taking certain actions if they are a source of pollutants
3 to the MS4 receiving waters; and then finally, provisions
4 to address some of the concerns that we heard regarding
5 potable water supply discharges and discharges from
6 firefighting flows.

7 And with that, I am going to wrap up my
8 presentation and now we're going to take public comments
9 on the topic of non-storm water discharges.

10 MS. MEHRANIAN: We will go to the speaker cards?

11 MS. PURDY: Yes, and I indicated on there some have
12 specific time allotments which I --

13 MS. MEHRANIAN: Exactly, and I'm going to announce
14 the time limits.

15 MS. PURDY: Okay. Great.

16 MS. MEHRANIAN: L.A. Permit Group, Heather Maloney
17 John Dettle and Joe Bellomo requested 17 minutes. Do you
18 want to come up? Are you going to be dividing the time
19 between the three of you?

20 MS. MALONEY: We are. We'd like to request, if it is
21 possible, to move our time to the end of the Public
22 Comments --

23 MS. MEHRANIAN: Oh, sure.

24 MS. MALONEY: -- for this particular item.

25 MS. MEHRANIAN: Thank you very much. We'll call you

0217

1 again.

2 Shahram Kharaghani, City of Los Angeles,
3 Sanitation. And you requested five minutes; right?

4 MR. KHARAGHANI: Yes. Good afternoon, Madam Chair
5 and Board members. Shahram Kharaghani, City of
6 Los Angeles. My presentation -- I have a brief
7 presentation on the benefits of watershed planning and
8 management. There is a short PowerPoint, three slides
9 that I'd like to go over.

10 As Renee indicated, there are so many pieces in
11 our Stormwater Permit that they come together in an
12 integrated manner in a Watershed Management Plan and I
13 want to just highlight some of the advantages that that
14 Watershed Management Planning has.

15 Obviously, it's going to focus on the highest
16 priorities that we have in the watershed because the full
17 watershed that the City is discharging to have specific,
18 you know, configuration and specific needs, so the
19 watershed planning focuses on the highest priorities and
20 the highest spots that we have.

21 It is also in alignment with the USEPA's latest
22 guidance regarding sequencing and also prioritization of
23 pollutants within the watershed.

24 It provides for efficient and effective
25 approaches. And by that, everyone is working together in

0218

1 the watershed, irrespective of the boundaries, to make

2 sure that receiving water is going to be helped. It
3 encourages, obviously, coordination and collaboration and
4 it also gives flexibility and tailoring and mass
5 customization of some of the programs that we have in our
6 permit.

7 As you know, as quoted, we have a lot of TMDLs
8 in the different watershed. The watershed planning would
9 help to put them all in one place, as opposed to
10 piecemeal implementation, and TMDLs is an important part
11 of our water quality permit that would help for us to get
12 the water quality standards and objectives that we have.

13 Now, as far as -- so those were the benefits.
14 Those benefits are obviously known to everyone and of
15 course it's the most cost-effective as well as leverages
16 all of the resources that we have.

17 How do we implement that approach within our
18 MS4? This is the approach we would -- we are providing
19 that we would create a section, a separate section called
20 Section 8 of your permit that would have all of these
21 pieces of Watershed Planning in it and that plan would be
22 submitted to the Water Board for the E.O. approval.

23 And a sample and outline of what that Watershed
24 Plan would have is before you. I know this is too small
25 to read all of it; but very briefly, if you look at the

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1 slide in front of you, it would have Watershed Overview
2 that would have all the TMDLs, all the standards within
3 the given watershed. It identifies all the
4 municipalities. It has all the receiving water
5 limitations, wasteload allocations and schedules. All of
6 them would be a part of what we would call Watershed
7 Planning.

8 Section two talks about all the receiving water
9 data that we have: 303(d) listing, policy with the TMDLs
10 and all the TMDLs that we have within a given watershed
11 and it identifies all the potential sources within the
12 watershed, existing TMDLs, the TMDLs that would be
13 coming, the USEPA-adopted TMDLs, and other TMDLs. That
14 would be section two of what we call Watershed
15 Priorities.

16 Section three would have basically all of what
17 we call the monitoring program or minimum control
18 measures that, you know, we have in our current permit.
19 It provides, again, flexibility and tailoring of those
20 minimum control measures within the watershed because
21 some of our watershed -- let's say they have more septic
22 tanks. I would focus to make sure that I would eliminate
23 the septic planning on that watersheds. Some other
24 watersheds, they may have other facilities that would
25 focus our inspection to make sure that they're all good

0220

1 actors. So that's section three of that watershed.

2 Section four, obviously we want to make sure the
3 watershed is monitoring so there would be integrated

4 monitoring and that everybody knows transparency, that
5 all of these sections are coming together, so that
6 watershed would be shared with your staff Regional Board
7 on a periodic basis to make sure our plan that we have is
8 hitting the targets that we have intended for it.

9 And last but not least, once we have the
10 monitoring, we would be reporting on these plans and our
11 progress on the watersheds that we are involved in on a
12 periodic basis.

13 That concludes my presentation

14 MS. MEHRANIAN: Thank you. Mr. Kharaghani, will you
15 give a copy of your PowerPoint to the staff?

16 MR. KHARAGHANI: I would be happy to, yes.

17 MS. MEHRANIAN: Thank you very much. Thanks for your
18 testimony.

19 James Parsegion, Office of the State Fire
20 Marshal.

21 MR. PARSEGION: Good afternoon. I'm James Parsegion
22 from the Office of the State Fire Marshal. I'm the
23 Deputy State Fire Marshal in charge of the automatic
24 extinguishing systems program for our office.

25 As you may be aware, the office is tasked with
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1 promoting and developing ways and means of protecting the
2 life and property of California against fire and panic.
3 To complete this task, Health and Safety Code Section
4 13185 requires the State Fire Marshal to establish a
5 program and control the program to service, test, and
6 maintain all water-based fire suppression systems.

7 Presently, to complete this, the office has
8 adopted NFPA 25, 2002 edition, as our testing
9 requirements. Please remember, these systems have been
10 installed in facilities since the earliest 20th Century
11 and are required to maintain a working order. To do
12 this, periodically they need to have water flowed through
13 the systems. If these systems are not maintained
14 properly, we will have systems failures and have a
15 possibility of loss of life and property.

16 In a proactive attempt to ensure that the water
17 flowed through the systems, the State Fire Marshal
18 establish a task force made up of subject matter experts
19 such as groups such as Public Works departments, private
20 water agencies, staff from the State Water Resource
21 Control Board to municipal utility districts, fire
22 departments, and contractors.

23 This task force met for approximately 18 months
24 and published a set of BMPs called the Water-based Fire
25 Detection Systems Discharge Maintenance Procedures
0222

1 Manual, and I'll provide a copy to you -- okay -- which
2 we hope you will consider adopting by reference for the
3 testing and maintenance of these systems when making your
4 final decision on the L.A. County MS4 permit.

5 In closing, the office will be glad to work with

6 the Los Angeles Regional Water Quality Board to solve
7 this issue. As you are aware, your Regional Board sets
8 up the trend for other Regional Boards in the state and
9 achieving the proper balance between the environment and
10 the fire and life safety of the citizens of California is
11 everyone's goal. Thank you.

12 MS. MEHRANIAN: Thank you.

13 MR. PARSEGION: Do you have any questions?

14 MS. MEHRANIAN: Thank you very much.

15 Kevin Smith, Fire Chief, El Segundo Fire
16 Department.

17 I want to thank you on behalf of the Board for
18 helping the young lady before.

19 MR. SMITH: That's our pleasure and it's our
20 responsibility as well.

21 And beyond that, I'd like to thank the Board for
22 allowing me the opportunity to speak.

23 My name is Kevin Smith. I'm the Fire Chief of
24 the El Segundo Fire Department and I'm here today to
25 represent all of the fire chiefs -- that's 31 of them --

0223

1 within the Los Angeles County area.

2 We are all interested in this matter and we
3 recognize the difficult decisions that you folks have to
4 make and are certainly supportive of clean water; but
5 just as you're mandated to follow rules, so are we. And
6 with that in mind, we have some input into the staff's
7 working proposal. Most of it, I have to say that we
8 agree with and we appreciate staff's working with us to
9 this point and feel that it's been very productive.

10 A couple points to note: One is that we agree
11 with the proposed language for the potable drinking water
12 supply and distribution system releases that apply to
13 public fire hydrant maintenance and fire flow testing,
14 and the reference to the California-Nevada section of the
15 American Water Works Association Best Management
16 Practices for Drinking Water Releases.

17 Additionally, we agree with the draft language
18 regarding discharges associated with emergency
19 firefighting activities.

20 We further agree with table -- I don't know if
21 it's Table X or Table 10, Best Management Practices to
22 Address Discharges From Training Activities Which
23 Simulate Emergency Responses. However, related to that,
24 we would like to confirm with the Regional Board staff
25 that the exemption will be included in the permit

0224

1 language in Sections (a)(iii) and (a)(iv).

2 We further agree with the restrictions placed on
3 washing vehicles and we agree with part of Section
4 (3)(a)(ix), which addressed short-term exceedence for
5 firefighting emergencies. However, we would like to add
6 to that "fire protection system testing and maintenance,
7 as well as training activities."

8 There's one area that we would like to address
9 as well and that follows with Chief Parsegion from the
10 State Fire Marshal's office. We do not agree with there
11 not being any language allowing an exemption from
12 discharges from testing and maintenance of water-based
13 fire protection systems. Basically, these include fire
14 sprinkler systems, fire stand pipe systems, and on-site
15 fire hydrants.

16 We also recommend adopting the California State
17 Fire Marshal's office Water-based Fire Protections
18 Discharge Best Management Practices Manual for Discharges
19 Resulting from Water-based System Testing and
20 Maintenance.

21 And I notice that I'm running out of time. Most
22 of the details that Chief Parsegion addressed are our
23 feelings on that matter as well. Again, I thank you for
24 the partnership and our opportunity to work with you.

25 MS. MEHRANIAN: Thank you. Andy Bill, 24/7 Fire
0225

1 Protection.

2 MR. BILL: Good afternoon and thank you for the time.
3 My name is Andrew Bill. I'm president of 24/7 Fire
4 Protection Services, Incorporated, a California state
5 licensed fire protection contractor. I also represent
6 Fire Sprinkler Contractors Association of Southern
7 California.

8 After reviewing the staff working proposal, we
9 take exception to the Footnote 10, which specifically
10 prohibits the discharge of water from maintenance and the
11 testing of fire protection systems.

12 Water-based fire protection systems, as
13 previously mentioned, are required under statute to be
14 routinely tested. For more than 100 years, the majority
15 of water-based fire protection systems have been
16 constructed with no provisions for on-site water
17 collection or discharge into a sanitary line. The
18 financial burden that would have to be shouldered by
19 property owners to collect discharge water and then
20 transport to a remote location for disposal would be
21 tremendous.

22 Considering the thousands of citizens that are
23 required to be tested minimally in some manner annually,
24 the inability to discharge water into the MS4 could
25 easily result in millions and millions of dollars of

0226
1 unexpected additional costs to L.A. County building and
2 property owners. For these reasons, I urge the committee
3 to adopt California State Fire Marshal's BMPs for water
4 discharge, the fire protection systems; and please keep
5 in mind that the water-based fire protection systems are
6 designed and installed for the continuous protection of
7 human life and property; and without a reasonable plan in
8 place to accommodate routine testing and maintenance, the
9 reliability of these systems will suffer and could result

10 in dire consequences.

11 Thank you for your time.

12 MS. MEHRANIAN: Ray Tahir.

13 MR. UNGER: Sir, do you have any comments to leave,
14 sir? Do you have any comments to leave?

15 MR. BILL: Yes, I do.

16 MR. UNGER: Thank you.

17 MR. TAHIR: Before I begin, I prepared for each one
18 of the Board members a packet containing the PowerPoint
19 presentation that is going to be shown to you in a
20 moment, along with other relevant documents.

21 Good afternoon. My name is Ray Tahir and I
22 represent a number of cities in Los Angeles County.

23 MS. MEHRANIAN: Is this it (indicating)?

24 MR. TAHIR: And I'd like to -- I don't know if I
25 mentioned it earlier. I would like it entered into the

0227

1 public record, please.

2 Once again, I represent a number of cities on
3 storm water matters in Los Angeles County, and I'm
4 looking for my pointer right now. I'll use this one.

5 That's the list of districts, by the way.

6 The proposed non-storm water discharge
7 requirements are excessive given that there is no outfall
8 data from permittee MS4s to characterize non-storm water
9 discharge related issues. The Regional Board does not
10 have federal legal authority to comply with proposed
11 new -- for cities to comply with the proposed new
12 non-storm water discharge requirements.

13 The working non-storm water discharge proposal
14 does not include other pieces that are needed to evaluate
15 their content and impact on permittees, including a
16 definition of a WQBEL. Staff incorrectly uses it
17 interchangeably with a water quality standard.

18 Receiving water limitation language is absent.
19 The question is, is it the same as it is in the current
20 permit or will the next permit contain different
21 language?

22 Outfall monitoring requirements for non-storm
23 water and how it will be used to determine if a non-storm
24 water discharge is a pollutant source requiring
25 prohibition as an illicit discharge or coverage under a

0228

1 separate NPDES permit.

2 I have to disagree with Renee. There is no --
3 there was never any non-storm water discharge outfall
4 monitoring ever conducted. That monitoring was based on
5 receiving monitoring. Federal regulations require
6 outfall monitoring for compliance purposes, not receiving
7 water monitoring.

8 Currently, the staff is proposing to require
9 currently exempted non-storm water discharges to comply
10 with receiving water limitations and WQBELs. If a single
11 outfall monitoring sample reveals an exceedence of a

12 non-storm water discharge detected through outfall
13 monitoring, permittees would to have either, one,
14 prohibit the discharge or, two, require the discharge to
15 be covered under an NPDES permit. That's all federal
16 regulations require.

17 Problem one: One round of outfall monitoring is
18 not enough to determine whether an exceedence or an
19 exempted the non-storm water discharge requires
20 prohibition or coverage under a separate MS4 permit or
21 NPDES permit. There is an inherent difficulty to
22 distinguish non-storm water discharges from an outfall or
23 other sampling point within the MS4 to locate the origin
24 of the non-storm water discharge or source from the time
25 the exceedence is detected.

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1 Nonstormwater discharges generally do not
2 contain pollutants that are likely to exceed water
3 quality standards in receiving water with a possible
4 exception of chlorine and excessive sediment. This is
5 exactly why Congress exempted those discharges.

6 Monitoring of such discharges over the five-year
7 term of the permit is needed to have more datapoints to
8 conclude if such discharges are, in fact, sources of
9 pollutants. Landscape irrigation and residential car
10 washing are examples.

11 Monitoring on a pilot basis should be done for
12 specific non-storm water discharge sources. For example,
13 residential sources for landscaping, overspray and
14 residential car washing.

15 Regional Board should also be aware that
16 non-storm water discharges from cities located upstream
17 of a spreading ground are likely not to cause impairments
18 to a downstream beneficial use, and here is an example:
19 That's the Rio Hondo spreading grounds that is located in
20 Reach 2 of the Rio Hondo River into which about 16 or 17
21 cities discharge. Any non-storm water discharges
22 entering this facility would not cause any problems.

23 Problem two: Regional Board staff proposes to
24 impose additional conditions on already exempt or
25 conditionally exempt discharges. For example: All

0230

1 non-storm water discharge categories are to evaluate
2 alternative means of disposal; for example, sanitary
3 reclamation and reuse.

4 Segregate authorized -- and we're not quite sure
5 what this really means, what "segregation" means -- of
6 non-storm water discharges from potential sources of
7 pollutants to prevent the introduction of pollutants to
8 the MS4 and receiving water. But Regional Board staff
9 has no data to base these increased requirements on.

10 Once again, non-storm water outfall monitoring
11 needs to be done to justify adding conditions; need to do
12 non-storm water discharge outfall monitoring over the
13 five-year term of the permit to see if these conditions

14 are -- these added conditions are justified. In other
15 words, staff is being arbitrary.

16 Problem three: Staff proposes to make a
17 non-storm water discharge exceedance of a water quality
18 standard -- this includes TMDLs -- a receiving water
19 violation. Here's the clip from the working proposal.

20 "If a permittee demonstrates that a
21 specific non-storm water discharge from a
22 potable water supply or distribution system
23 not otherwise regulated by a separate NPDES
24 permit, but required by state or federal
25 statute and/or regulation, caused" -- and

0231

1 the definition here wasn't identified -- "a
2 short-term exceedance of applicable
3 receiving water limitations and/or water
4 quality based effluent limitations during a
5 specific sampling event, the permittee shall
6 not be found in violation of applicable
7 receiving water limitations and/or WQBELs
8 for that sampling event."

9 But here's the deal: The permittee would be in
10 violation if these requirements are not complied with,
11 and there's no federal authority to compel that kind
12 of -- impose that kind of requirement on a permittee.

13 Problem three, continued: Permittees cannot be
14 held responsible if a non-storm water discharge
15 exceedance occurs because the Regional Board doesn't have
16 the authority to compel compliance.

17 Problem four: Staff proposes to mandate that an
18 authorized non-storm water discharge shall not cause or
19 contribute to a violation of an applicable receiving
20 water limitation and/or water quality based effluent
21 limitations.

22 Regional Board doesn't have the legal authority
23 under federal regulations to impose this requirement on
24 permittees which in effect would make a municipality
25 responsible for assuring that non-storm water discharges

0232

1 do not exceed water quality standards. Staff confuses,
2 by the way, WQBELs with the water quality standards.
3 They're two separate issues.

4 Why Regional Board staff cannot impose stringent
5 non-storm water discharge requirements on permittees:

6 Congress, under Section 402(p) of the Clean
7 Water Act, created two sets of standards, one for storm
8 water and another one for non-storm water. Stormwater
9 pollution is to be reduced, not eliminated, from the MS4
10 to the maximum extent practicable through control
11 measures. "From the MS4" and "to the MS4" have two
12 distinct meanings under federal law.

13 Nonstormwater discharges are only to be
14 prohibited to the MS4. The two standards are very
15 different in terms of compliance expectations.

16 California MS4 permits, except Ventura and L.A., and
17 federal regulations use "from the MS4" to mean storm
18 water while "to the MS4" applies only to non-storm water;
19 must be emphasized that the MS4 permit is a storm water
20 permit, not a non-storm water permit. Staff has not made
21 this important distinction.

22 Nonstormwater discharges require a different
23 compliance standard than storm water discharges.
24 Congress intended non-storm water only to be prohibited
25 to the MS4, with the exception of 18 exempted discharges.

0233

1 Potable water, landscape irrigation, and residential car
2 washing are among them.

3 Prohibited non-storm water discharges are known
4 as "illicit discharges." Certain exempted discharges
5 have been conditioned on BMPs. Charitable car washes
6 should prevent wash water from entering catch basins, and
7 that's okay.

8 Regional Board doesn't have legal authority to
9 require permittees to prevent or prohibit non-storm water
10 discharges from exceeding water quality standards in the
11 receiving water or outfall. Congress intended the
12 elimination of nonexempted non-storm water discharges to
13 be achieved through the Illicit Discharge and Connection
14 Detection and Elimination Program by requiring permittees
15 to: Encourage public reporting of discharges through a
16 hotline; respond to reports of illicit discharges; take
17 enforcement action against those who cause illicit
18 discharges; force the removal of illicit connections, a
19 connection through which an illicit discharge passes;
20 establish legal authority to compel sources of illicit
21 discharges and connections to eliminate them; require
22 exempted discharges to be conditioned on BMPs if a
23 municipality determines that they are a source of
24 pollutants or that these and other non-storm water
25 discharges be permitted by the permitting agency, the

0234

1 State Board or Regional Water Control Boards.

2 Regional Board staff is proposing to override
3 Congress's mandate by revising permit language to require
4 each permittee, within its respective jurisdiction,
5 effectively prohibit non-storm water discharges into the
6 MS4 and from the MS4 to receiving waters except where
7 such discharges are either specifically authorized by a
8 separate individual or general NPDES permit or
9 conditionally authorized.

10 Federal regulations only require a prohibition
11 on non-storm water discharges to the MS4, not from it and
12 not to a receiving water.

13 Other Regional Boards in the state abide by this
14 requirement. This includes MS4 permits issued by
15 Santa Ana Regional Board to the counties of Orange, North
16 Orange County, Riverside, and San Bernardino counties;
17 also includes MS4 permits issued by the San Diego

18 Regional Board to South Orange County and San Diego
19 County.

20 Now, you have all this information in this
21 packet; but as you can see, they all say "from the MS4."
22 Up here, it says, "from the MS4 to receiving waters."
23 That's the proposed language, but in the language from
24 the other permits adopted by the other regions, they all
25 say "entering into the MS4," "from their respective MS4."
0235

1 That means the same thing. "From entering the MS4."
2 They all say the same thing, and "MS4" means streets,
3 catch basins, storm drains and any conveyance -- a
4 channel, rather, manmade that operates to convey
5 non-storm water runoff to receiving water.

6 Now, this is also -- this view of the limitation
7 of non-storm water discharge prohibition has also been
8 confirmed by the Office of Chief Counsel.
9 Catherine Hagan of the Office of Chief Counsel wrote to
10 the chairman of the San Diego Regional Board in 2009 the
11 following: MS4 permits shall include a requirement to
12 effectively prohibit non-storm water discharges into the
13 MS4. It doesn't say to -- "from the MS4 and to the
14 receiving water."

15 There are two separate standards required for
16 MS4 permits: one to prohibit non-storm water discharges
17 to the MS4; the other to use controls -- that is BMPs --
18 to reduce pollutants in storm water discharges from the
19 MS4; and from the MS4 is the outfall. That is the end of
20 the line as a point source. MS4 permits are point
21 sources. Cities have no ability -- no legal
22 authority to control discharges to a receiving water.

23 Federal regulations require the MS4 programs to
24 include an element to detect and remove illicit
25 discharges and improper disposal into the storm sewer.
0236

1 "Into the storm sewer," that means the same as MS4; again
2 not from it and not to a receiving water.

3 Prohibiting a non-storm water discharge that
4 causes or contributes to a receiving water exceedance is
5 extra-legal because non-storm water discharges are only
6 prohibited to the MS4 and not into a receiving water and,
7 therefore, should be removed.

8 Prohibiting a non-storm water discharge that
9 exceeds a water quality based effluent limit is not
10 possible because a WQBEL only applies to storm water, not
11 non-storm water.

12 A WQBEL is a BMP, and you can see the document
13 that's included in your packet, or a surrogate parameter.
14 If it is a numeric WQBEL, per USEPA's 2010 guidance
15 memorandum, it is not a water quality standard. This is
16 confirmed in this legal decision that's included in your
17 packet.

18 The bottom line is the Regional Board staff
19 should eliminate the proposed non-storm water revisions

20 that extend the prohibition to "from the MS4" and require
21 nothing else other than prohibiting illicit discharges.
22 However, it is recommended that non-storm water discharge
23 prohibition language be revised to be read as follows:

24 "The permittees shall effectively
25 prohibit non-storm water discharges into the

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1 MS4 and directly into a receiving water."

2 This language is proposed because permittees
3 need the legal authority to prohibit non-storm water
4 discharges from private property that do not enter the
5 MS4, but do enter a receiving water directly through an
6 on-site connection, through a catch basin or other drain.

7 Regional Board staff should not further
8 condition already exempted discharges until the
9 Nonstormwater Discharge Outfall Monitoring Program is
10 performed over the term of the next permit, and delete
11 any reference to non-storm water discharge compliance
12 with receiving water limitations and WQBELs. They are
13 not applicable to non-storm water prohibitions. However,
14 it is recommended that the non-storm water discharge -- I
15 think I already said that.

16 Let me back up here.

17 That language is needed because as you see here
18 (indicating), this is a catch basin and it's directly
19 connected to this outfall. Cities need the legal
20 authority to prohibit those kinds of discharges. That's
21 directly to the receiving water. If it was private
22 property and it went into a catch basin or a storm drain,
23 that would be a different ball game, but this discharge
24 goes directly into receiving water and once again, cities
25 need legal authority to prohibit those discharges.

0238

1 Okay. With respect to minimum control measures,
2 we support L.A. Stormwater Permit's position on these, on
3 this matter. They are the heart of the MS4 program and
4 more time is needed to discuss and revise proposed
5 requirements. Many of these minimum control measures
6 propose additional requirements that are justified by
7 storm water -- that are not justified by storm water
8 monitoring at the outfall. Requiring infiltration for
9 groundwater storage is not a storm water program issue.
10 It is a conservation-related issue and, therefore, should
11 not be reflected in the permit.

12 And how about that? I know I stuttered along
13 the way. It's Renee's fault. I needed the full 25
14 minutes. Anyway, I think I got it all in there. Thank
15 you very much for your patience.

16 MS. MEHRANIAN: Thank you. Thank you, Mr. Tahir.

17 In the interest of time -- first of all, the
18 next speaker is Bart Koch, Metropolitan Water District.
19 But in the interest of time, I'd like to suggest that we
20 shorten the time and please do not go more than -- we
21 want to limit it to three minutes for each.

22 MR. KOCH: Good afternoon, staff and members of the
23 Board. I am Bart Koch, Safety Environmental Services
24 Section Manager for Metropolitan Water District.

25 Metropolitan is a consortium of 26 cities and
0239

1 water districts that provides drinking water from the
2 Colorado River and Northern California to nearly 19
3 million people in parts of Los Angeles, Orange,
4 San Diego, Riverside, San Bernardino, and Ventura
5 Counties.

6 Metropolitan's 5200 square miles of service area
7 include water conveyance and delivery systems that
8 traverse Los Angeles County within the jurisdiction of
9 the Board.

10 As an introduction to my comments, I want to
11 convey to you Metropolitan's mission statement, because
12 it underlies the nature of the comments I will be
13 providing to you today regarding our operations
14 maintenance and discharge needs -- and the mission
15 statement is right above there. It is:

16 "To provide Metropolitan's service area
17 with adequate and reliable supplies of
18 high-quality water to meet present and
19 future needs in an environmentally and
20 economically responsible way."

21 Metropolitan's western region conveyance and
22 distribution's service area lies within the Board's
23 jurisdiction. This portion of the area includes 35
24 pipelines with over 435 linear miles of pipeline, 2500
25 structures such as turn-out structures; 180 service

0240
1 connections, 19 pressure control structures, 8
2 hydroelectric plants and 4 reservoirs; 2 treated water
3 and 2 raw water.

4 To ensure reliable and high-quality water
5 supplies, Metropolitan maintains a proactive
6 refurbishment and replacement program for its facilities,
7 including its pipelines, ranging in age from 21 to 76
8 years. These pipelines, which range from 16 inches to 20
9 and a half feet in diameter, must be dewatered prior to
10 Metropolitan crews conducting inspections and performing
11 preventive or corrective maintenance. These inspections
12 and repairs are essential to prevent pipe failure and
13 subsequent damage from high pressure water release.

14 We typically conduct these dewatering during the
15 wet weather months. Many of these pipelines are very
16 large so the water volumes are considerably greater than
17 can be captured or managed for reuse. Typical dewatering
18 amounts range from 40- to 50 acre-feet to 0.1 to 40
19 acre-feet, and an acre-foot is 325,851 gallons.

20 So we are currently covered under the MS4
21 exception and we appreciate the efforts that we've had.
22 We've had a recent meeting with the Board staff in
23 discussing our concerns and how to provide provisions for

24 our dewatering.

25 And in the interest of time, I thank you for the
0241

1 opportunity to speak today.

2 MS. MEHRANIAN: Thank you very much.

3 Katherine Rubin, Los Angeles Department of Water
4 and Power.

5 MS. RUBIN: Marty Adams --

6 MS. MEHRANIAN: Marty Adams, Los Angeles Department
7 of Water and Power.

8 MR. ADAMS: Thank you very much. My name is
9 Marty Adams. I'm the Director of Water Operations for
10 LADWP and like our friends from Met, we share a lot of
11 similarities. As a matter of fact, I was going to talk
12 about our mission statement, but it's almost what's on
13 the board with a few changes.

14 But I would like to take a second to introduce
15 you to L.A. Water and Power and let you know about what
16 our responsibilities are and how the MS4 permit pertains
17 to that.

18 L.A. Water and Power is the nation's largest
19 municipal utility. We have about four million customers
20 right here in L.A. As opposed to Metropolitan Water
21 District where they are a wholesaler, we get down to much
22 smaller pipes and deal directly with our individual
23 customers. We have over 700,000 service connections over
24 our 470 square-mile service area, and we do buy water
25 from Metropolitan Water District, which comes from the

0242

1 Colorado River and the State Water Project, as well as we
2 operate our own aqueducts from the Owens Valley and
3 Mono Basin and have local groundwater wells that have
4 been the long-term historical supply for Los Angeles.

5 The water system in Los Angeles is very
6 complicated. It's regarded by many as one of the most
7 complicated systems in the country, if not the world. We
8 have over 126 pressure zones, 88 pump stations. We have
9 over 100 tanks and reservoirs, almost all those in the
10 City of L.A. boundaries. We have over 260
11 pressure-regulating stations and over 7,200 miles of
12 pipeline, almost all of that predominantly in the City of
13 L.A., and that pipe flow ranges from 6 inches with small
14 distribution mains up to now 8-foot diameter pipes in the
15 city streets.

16 So as you can imagine, when there's a break in a
17 pipe or a service change in a connection or a valve needs
18 to be fixed or there's a repair, with an 8-foot diameter
19 pipe, no matter how short the shutdown length is, it's a
20 lot of water to deal with. So it's very appropriate that
21 we're covered, appropriately, under the permitting that
22 you're considering today.

23 We do take about 25,000 water samples a year to
24 make sure that we have good, quality water to our
25 customers, performing over 250,000 field and lab tests

0243

1 every year; and water quality is one of the predominant
2 drivers of our business and all the rest of the water
3 purveyors who are here today.

4 As we look at our system, one of the key
5 components for us is flushing of water mains. We have
6 over 8,000 water mains that are considered dead-end mains
7 where water quality could be jeopardized if it's not
8 flushed on a regular basis. So, annually, we try to get
9 to those 8,000 dead end mains. We've gone and done an
10 average of about 5400 gallons per flush of those mains;
11 and when we do those flushing operations, we do follow
12 the best management practices. We have our own
13 guidelines that are consistent with the American Water
14 Works Association guidelines, and all those guidelines
15 and practices have been worked out with your staff to
16 make sure that we are doing the proper things we need to
17 to dechlorinate the water, to make sure it's possible to
18 sweep the water away, so that's being done as well, and
19 then we're taking every precaution to make sure that the
20 environment is protected.

21 We do also have to drain tanks and reservoirs on
22 occasion. Most notably, a lot of folks might remember
23 Silver Lake Reservoir was drained of almost 600 million
24 gallons. That was a mammoth undertaking in response --
25 I'll hurry -- to a water quality issue in the city of

0244

1 Los Angeles and we worked very closely with your staff
2 for successful resolution of that and we are -- it's very
3 important to us that we protect water quality not only
4 for the drinking water, but also for the discharge water
5 quality at all times.

6 We've had -- as was mentioned, we have had
7 recent meetings with your staff on the MS4 permit. We
8 think that there are -- that the discharges we have are
9 appropriate. Under the MS4 permit, there's also
10 discussions of possibly a permit, particularly dealing
11 with the drinking water industry. We think that that is
12 another way to go that may be advantageous in the
13 future --

14 MS. MEHRANIAN: Can you please wrap up, because your
15 time is up?

16 MR. ADAMS: Most importantly, we do think that what
17 we've had in the MS4 permit and the exceptions given to
18 the drinking water and the regular work we do is
19 appreciated and is appropriate, and we appreciate your
20 time today. Thank you.

21 MS. MEHRANIAN: Katherine Rubin.

22 MS. RUBIN: I'll pass.

23 MS. MEHRANIAN: Jason Wen, City of Downey.

24 MR. WEN: Good afternoon, Madam Chair and members of
25 the Board and staff. Thanks for the opportunity to come

0245

1 in here. My name is Jason Wen. I'm from the City of

2 Downey. I can tell you I am 100 percent representing
3 myself; probably only 50 percent about the City because I
4 didn't talk to my boss about the presentation.

5 I just want to share with you real life.
6 Something always needs a title for a presentation and,
7 you know, I put a couple of slides up. It's like a look
8 at the real word and share that with you.

9 For the last ten years, I am a superintendent of
10 the City of Downey. I'm in charge of water operations,
11 the treatment of water. So also recently, I'm in charge
12 a little bit of MS4. Now I'm the representative of a
13 midsize city on both sides.

14 Next, slide. Oh, I can do it here.

15 Real life: This is a picture taken two weeks
16 ago. This is the water we're dealing with. This hydrant
17 got hit. You know, basically, citywide, we have over
18 1800 fire hydrants. So the reason I say that is because
19 a lot of the discharge from our drinking water system is
20 from the hydrants, so we're talking about a lot of water.

21 As a scientist, you know, you're trained to
22 solve the problem; you look at the issue. I'll give you
23 one example here, but it's just a matter of time here.

24 The drinking water stands for the copper. The
25 drinking water is standing at what we call the action

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1 level. The copper is at 1300 micrograms per liter. So
2 we sample about 50 sites every three years. That's part
3 of our monitoring. If we have TMDL wet weather standing
4 at roughly for 11 to 17 micrograms per liter, so if we
5 flush every three years, we're talking about 1800 per
6 every three years. So standard-wise, the TMDL wants it
7 118 times lower. This is a real problem. Sampling
8 frequency is 3600 percent more. Costs? I cannot figure
9 it out yet.

10 I steal this slide from the website everybody
11 knows. This is from the summer and we're talking a
12 little bit of costs. This is the facility treating
13 chromium in Glendale that they're starting. If you look,
14 this is about a 500 GPM facility. This is fixed. If you
15 want to treat any water, the copper is similar thing as
16 the chromium and other matters. I understand it's a very
17 advanced treatment process. This is not easily potable.

18 The cost roughly is about 500 to 600 per
19 acre-foot for the treatment process. We are only talking
20 for this kind of matters. Like I had the slide before,
21 the City of Downey, our water cost total is roughly \$600
22 per acre-foot. It's one of the lowest in the area. If
23 you're talking about -- I don't know that, technically,
24 you have a potable system if the fixed system is still
25 double or triple the costs. So a Baker's tank may not be

0247

1 a good solution because the largest Baker's tank we have
2 is about 20,000 gallons. You can lie out the Baker's
3 tanks for 10 to 20 minutes of flushing.

4 Summary? I don't really don't have it. I don't
5 understand one thing. I'm laughing inside as our
6 preacher for our drinking water system. I know I don't
7 have a fighting chance for myself. But, again, I really
8 think we're dealing with the real world and we support
9 the BMPs. We support it, but it creates a lot of legal
10 fights. That's my concern.

11 MS. MEHRANIAN: Thank you.

12 Gary Hildebrand, followed by David Kimbrough.

13 MR. HILDEBRAND: Good afternoon, Madam Chair, Board
14 members. My name is Gary Hildebrand and I'm here on
15 behalf of the L.A. County Flood Control District this
16 afternoon. I have a tough act to follow here.

17 In any case, to keep my comments brief, I just
18 have a few general concerns regarding the non-storm water
19 discharges I'd like to present to you today. We are
20 going to be looking at this in more detail, providing
21 some detailed comments to Sam and his staff, and we will
22 be meeting with them to go over these in more detail.

23 We appreciate the efforts of Sam and his staff.
24 We have had a very amenable meeting with them and we look
25 forward to continuing that relationship.

0248

1 We're pleased to see that all the storm water
2 exempt categories are still continuing to the permit.
3 There are some additional requirements that are being
4 imposed in this particular section and some additional
5 specificity in some cases I think is warranted; in other
6 case, I think there's some specificity that is not quite
7 what we're looking for.

8 In many cases, you need to take a look at the
9 issue that these are exempt discharges, discharges that
10 are being looked at as not having any real environmental
11 effect. So with that particular issue, I think we need
12 to keep that in mind when looking at the additional
13 requirements that are being imposed on permittees as part
14 of this aspect of the program. Some of the additional
15 monitoring, data collection inspection that is being
16 required is rather burdensome for the permittees and
17 those are some of the issues we need to discuss with Sam
18 and his staff.

19 Obviously, illicit discharges need to be
20 eliminated and there's a separate program that deals with
21 those and that's something that we've clearly supported
22 and we've had a very extensive program over the years at
23 the District that's very aggressively looked at our
24 system and dealt with our illicit discharges, and that's
25 something we plan to continue.

0249

1 One particular discharge category that has come
2 up over the past permit term that has been an issue to
3 the District is discharges associated with the EPA's
4 Superfund Cleanup Programs. These are discharges from
5 contaminated groundwater sites that are managed by EPA;

6 and as part of the remedy for those sites that has been
7 pursued by EPA, it does involve the discharge of
8 partially treated or untreated contaminated water into
9 the MS4, and that causes an obvious heartburn to the
10 permittees when these are discharges that under our MS4
11 permit don't meet the exempt category, obviously, and
12 don't meet water quality standards.

13 So we have had discussions with EPA, the
14 Regional Board, and these are ongoing discussions that
15 we're hoping to resolve as part of the process, but we
16 have been placed in a position under the current permit
17 where EPA has been advocating these discharges and has
18 been looking for us to accept discharges from superfund
19 remedy sites. So this is an issue that we do need to
20 further deal with with the Board staff.

21 So with that, thank you.

22 MS. MEHRANIAN: Thank you. Tatiana Gaur,
23 Santa Monica Baykeeper.

24 MR. KIMBROUGH: I thought they called me next. You
25 said Gary Hildebrand and David Kimbrough.

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1 MS. MEHRANIAN: Go ahead.

2 MR. KIMBROUGH: Members of the Board, staff, and
3 guests, my name is David Kimbrough I am the Water Quality
4 Manager for the Pasadena Water and Power Department.
5 However, I am here today speaking not just for Pasadena
6 Water and Power, but for the Association of California
7 Water Agencies, the California-Nevada Section of the
8 American Water Works Association, and the California
9 Water Association.

10 Together, these three groups represent the vast
11 majority of community water systems in the state and
12 Los Angeles County. These three groups would like to
13 thank the Board for the opportunity to jointly address
14 the Board on the issue of non-storm water discharges from
15 clean water systems.

16 First, I want to let the Board know that while
17 this presentation is a collaborative effort, the approach
18 reflects the view of many member agencies within the L.A.
19 region, although there are some members who may pursue
20 other solutions as they feel appropriate.

21 We hope the Board reviews these proposals
22 carefully and above all recognizes the importance of
23 community water systems being able to discharge to meet
24 public health requirements.

25 Why do community water systems discharge? Clean

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1 water systems are legally obliged to discharge on a
2 regular basis to comply with state regulations, to
3 protect public health, and protect the physical integrity
4 of our infrastructure.

5 Community water systems are regulated under
6 Title 22, which sets up the conditions under which we can
7 operate and can be found in statute and regulation and

8 individual permits.

9 Typically, community water systems have two
10 parts. We have a source, which is commonly a well or a
11 lake or some sort of source like that, and then a
12 distribution system which delivers our water to our
13 customers. In Los Angeles County, the vast majority of
14 clean water systems use wells as at least one of their
15 sources of water. The water may be in storage tanks,
16 pipes, or other contained and pressurized facilities and
17 may be discharged from any of these facilities.
18 Sometimes wells need treatment. That's -- for the most
19 part, they don't.

20 A large -- although a large amount of water does
21 come from surface water such as lakes and rivers, only a
22 small number of community processes actually treat this
23 water. Most of them simply buy it from other water
24 providers such as Metropolitan Water District.

25 This is a small selection of the regulations
0252

1 that cover us, state regulations. I'm not going to read
2 this, but you get the idea that there's a lot of
3 regulations; and a lot of the regulations actually spell
4 out flushing requirements. We are required to have
5 equipment that flushes. Minimum velocities are
6 established. We are -- our employees are required to be
7 trained in flushing and flushing requires discharge.

8 This is a typical flushing operation. This is a
9 fire hydrant being opened. There is a hose and a
10 diffuser and a dechlorinator. This reduces the velocity
11 and it reduces the energy so there's no scouring or
12 undercutting of the pavement. It reduces the sediment
13 generation.

14 Water quality: Discharges from community water
15 sources are generally of very high quality as compared to
16 other discharges.

17 EPA and Water Research Foundation did an
18 extensive study and it's summarized -- our quality of
19 water represented very minor threat to public health and
20 compliance with Clean Water Act.

21 Community water systems are legally obliged to
22 discharge. Now, why is this a problem? Community water
23 systems are coming into conflict with MS4 permittees and
24 the proposed language creates a condition where MS4
25 permittees need to minimize their discharges to comply

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1 with the MS4 permit. This puts them in a position where
2 they have to adopt a zero discharge policy. We're
3 included in that discharge. That's their only safe
4 harbor if there is an exceedence.

5 This is sort of a visual summarization of this.
6 There is MS4 requirements on the MS4 permittees. They're
7 looking to minimize discharges of nonstormwaters. We
8 have to discharge; therefore, we are, by nature, in
9 conflict with the MS4 operators. That puts them in

10 conflict with the Regional Board and the MS4 permit.

11 The most difficult component of this is the
12 TMDLs. Right now, there are only a few number of TMDLs
13 in the MS4 permit. In a few more years, there will be
14 over 30 of them. This will create a condition where
15 almost all of L.A. County will be in some sort of --
16 under pressure to achieve a zero non-storm water
17 discharge policy. Conflicts between clean water systems
18 and permittees are bound to occur.

19 In fact, we are already seeing this occurring.
20 Some permittees are fining community water systems for
21 routine discharges. They're being banned from discharge
22 and required to get NPDES permits and waste discharges
23 requirements which declare our waters to be a waste.
24 Declaring our waters to be a waste only creates legal
25 problems for us and this will only get worse in the

0254

1 future.

2 The solution to avoid this is to get some sort
3 of regulatory relief. We are proposing a collaborative
4 approach similar to what's being proposed in the permit
5 where MS4 permittees, the Regional Board, and the
6 community water system all work together. We're using
7 enhanced best management practices to allow MS4
8 permittees to comply, and this is the language -- this is
9 the sort of language we'd like to see where there's a
10 category of legally mandated discharges and those
11 discharges, like the language that's in the proposed
12 language from Board staff, would set -- would allow MS4
13 permittees not to be in violation of the permit if the
14 cause of the permit -- if the exceedence was from one of
15 our discharges.

16 This would create a cooperative rather than a
17 conflicting environment where each of the parties receive
18 some regulatory relief, but in exchange, takes on
19 additional responsibilities. Community water systems
20 would take on additional responsibilities of enhanced
21 best management practices. There would be a memorandum
22 of understanding of some sort of legal agreement between
23 the community water systems and MS4 operators to enforce
24 force that, and that's my presentation.

25 Thank you very much.

0255

1 MS. MEHRANIAN: Thank you. Tatiana Gaur,
2 Santa Monica Baykeeper, and then we have the L.A. Permit
3 Group. And because they represent over 40 cities, I
4 believe, we're going to give them ten minutes. So,
5 please.

6 MS. GARY: Good afternoon, Board members.
7 Tatiana Gaur, staff attorney of Santa Monica Baykeeper.
8 We originally requested, I believe, half an hour which
9 was trimmed and I just want to know, at this point, how
10 many minutes I have at this time for my presentation
11 together with Heal the Bay and NRDC.

12 MS. SMITH: They asked for eight minutes for the
13 non-storm water and I think the remainder for MCM.

14 MR. UNGER: We were going to give them ten; right?

15 MS. MEHRANIAN: I'm sorry.

16 MR. UNGER: We were going to give them ten.

17 MS. MEHRANIAN: Ten for L.A. Permit Group.

18 MR. UNGER: And then for --

19 MS. MEHRANIAN: And you're representing now
20 Santa Monica Baykeeper and other groups?

21 MS. GAUR: We're doing a combined presentation, so
22 it's just --

23 MR. UNGER: She wants to know who you're combining
24 with.

25 MS. GAUR: NRDC and Heal the Bay.

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1 MS. MEHRANIAN: Because the card didn't say that.
2 Okay. Go ahead.

3 MS. GAUR: So I'm just going to speak to storm water
4 discharges. And as staff observed in earlier
5 presentations, stated, the same non-storm water
6 discharges to and from the MS4 continue, violations of
7 water quality standards and TMDLs continue, and Regional
8 Board staff itself has observed the MS4 permittees'
9 efforts to eliminate storm water discharges have failed
10 and there's little done to identify the sources and
11 characteristics of non-storm water discharges that
12 continue to impair waters and harm aquatic life and
13 endanger public health.

14 There's plenty of monitoring data which is
15 collected pursuant to the MS4 permit that show that
16 non-storm water exceedences continue to this day caused
17 by non-storm water discharges.

18 So clearly, despite the discharge prohibition in
19 the current permit which requires permittees to
20 effectively prohibit non-storm water discharges,
21 violations go on and so the new MS4 permit must contain
22 clear, easy to apply and enforce requirements to once for
23 all deal with this problem and the resulting exceedences
24 of TMDLs and water quality standards. Without strict
25 regulation of non-storm water discharges, there's no

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1 guarantee that the permittees will comply with TMDLs that
2 have -- when we have so many TMDLs currently that
3 regulate dry weather discharges.

4 We support staff's work on clarifying the
5 definitions of non-storm water and storm water as stated
6 in the proposal. Overall, though, the working proposal
7 is very complicated and convoluted, difficult to follow,
8 likely difficult to apply and implement; and the way it's
9 written, it's also hard to determine how the public can
10 ascertain if permittees are actually complying with the
11 permit requirements and with the mandate to effectively
12 prohibit non-storm water discharges.

13 We will be submitting detailed comment, but a

14 few of the major issues are as follows: We are
15 specifically concerned about the great increase in
16 exceptions to -- or exemptions to non- -- to the
17 prohibition on non-storm water discharges. So in the
18 last permit, I counted 12 exceptions. Currently, there's
19 about 25. And at the same time, staff has concluded that
20 non-storm water discharges continue and violations of
21 water quality standards in dry weather continue.

22 So in light of this and the data, what the data
23 shows us, rather than increasing the exceptions, they
24 should actually be limiting the exceptions. And there's
25 some of them that make sense and are truly de minimus,

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1 but there's plenty of others for which there are studies
2 that show that they are a source of pollution, and they
3 should be regulated and enforced against by permittees.

4 For example, landscape irrigation was found
5 already by the Region 9 in the Orange County MS4 permit
6 to be a source of pollution and that's no longer part of
7 the list of exempted non-storm water discharges. We
8 believe we're no different. Our region is no different
9 in that respect and landscape irrigation should be
10 excluded, should be regulated, should not be allowed.
11 It's not just a matter of water quality. It's also a
12 matter of water conservation, water supply.

13 Some of the other exceptions -- and I'm not
14 going to go in all the detail that you will see in our
15 letter -- should be further limited. Like, for example,
16 dewatering of decorative fountains is on the list of
17 exceptions. Street and sidewalk wash waters could also
18 be further limited.

19 Another significant issue in staff's proposal
20 for us is the lack of real transparent mechanisms to
21 determine if the condition you've authorized and exempt
22 amounts of discharge do, in fact, contribute to
23 violations of water quality standards. There's no
24 meaningful way at this point. So the language proposed
25 by staff should be strengthened further.

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1 And finally, the exceptions and part three
2 (a)(xiii) and (iv) 9, there's no legal authority for
3 that. That's the exemption that was discussed for
4 short-term exceedences of applicable receiving water
5 limitations. Those should be regulated. If there's any
6 anticipated discharge, that should either obtain an NPDES
7 permit or be otherwise regulated.

8 I will conclude. The rest of my time is for my
9 colleagues.

10 MS. MEHRANIAN: Thank you.

11 MR. UNGER: I think we can move on.

12 MS. MEHRANIAN: You're sharing the time? Are you
13 going to speak?

14 MS. GAUR: No. I'm fine.

15 MS. MEHRANIAN: Nobody else?

16 MR. UNGER: Next speaker.

17 MS. MEHRANIAN: L.A. Permit Group, Heather Maloney,
18 John Dettle, Joe Bellomo. They have ten minutes.

19 MS. MALONEY: Good afternoon, Madam Chair and Board
20 members. My name is Heather Maloney, chair of the L.A.
21 Permit Group.

22 First off, I want to thank you for the
23 opportunity to provide comments and thank your staff for
24 all of their work that they've done in reviewing our
25 comments and responding to questions that we've had along

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1 the way, especially as related to the different permit
2 provisions.

3 We recognize that this permit has been a long
4 time coming with the goal of improving water quality and
5 we want to reassure you that we do share this common goal
6 and have been achieving actively working with staff to
7 develop a permit that allows these goals to be
8 accomplished in the most strategic and efficient way.

9 With this in mind, the L.A. Permit Group has
10 been actively working since January 2011 to develop
11 comments and constructive feedback regarding development
12 of the L.A. MS4 permit and we look forward to the
13 continued partnership throughout this process.

14 Just for reference, these are the 61
15 municipalities that are voting agencies within the L.A.
16 Permit Group. We do work with a number of other
17 stakeholders; however, these are the 61 voting agencies
18 with which we represent their consensus today.

19 So some our overall themes that we want to just
20 make sure our point of view is understood going into this
21 process be -- and, again, your staff has been great
22 working with us and discussing these as well, but
23 throughout this process, staff proposals have identified
24 several increased standards that permittees will be
25 required to meet; and in general, the L.A. Permit Group

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1 has been advocating for permit provisions that will allow
2 us to work towards increased water quality while allowing
3 us to prioritize scarce local resources towards efforts
4 that will have the largest impact to the improved water
5 quality.

6 In order to achieve further water quality
7 improvements, this process needs to set clear goals while
8 allowing flexibility with the programs and BMPs
9 implemented. The way to accomplish this is through
10 integrated planning and monitoring. The strategy has
11 been presented by the L.A. Permit Group as it will allow
12 permittees to look at the larger picture and develop
13 programs and BMPs based on addressing multiple
14 pollutants. In doing so, local resources can be
15 concentrated on the highest priorities. This is the best
16 and most efficient way of working toward the water
17 quality goals.

18 And then we do have a number of detailed
19 comments that we were planning to preview today, but
20 we'll go through them very quickly, but we will have
21 detailed comments in a comment letter that we'll be
22 submitting over the next two weeks, per the deadlines
23 that the staff has set up.

24 So I'll have John Bellomo come up and share some
25 comments specifically related to the non-storm water
0262

1 discharges.

2 MR. BELLOMO: Good afternoon. We met with the
3 community water systems and the fire departments, you
4 know --

5 MS. MEHRANIAN: Yes. Will you please mention your
6 name. State your name for the record.

7 MR. BELLOMO: Joe Bellomo. We met with a group of --
8 the L.A. Permit Group met with community water systems
9 and fire departments and again with these groups and
10 Regional Board staff in trying to hash out how -- you
11 know, the best way forward with potable water discharge,
12 the current situation and where we're going into the
13 future with this new permit and any conditions that are
14 to be set on that, on the potable water discharges.

15 The issue's going to become more problematic as
16 we go forward if there's no regulatory relief model
17 that's workable. And in the current staff's proposal,
18 the L.A. Permit Group is finding the regulatory relief
19 model as it's defined currently as one that we cannot
20 accept. It puts too much responsibility -- it is
21 transferring too much responsibility onto the permittee
22 without a clearly defined problem or need.

23 The burden of proof is still too high. The
24 ability -- the responsibility of the permittee -- the
25 responsibility approved that it's a potable water
0263

1 discharge source is the permittee's responsibility in
2 this permit, as it's defined, not the discharger's, and
3 there's a cost associated, a very large cost associated
4 with that investigation.

5 We're looking for the potable water and fire
6 discharges to be exempt in the permit and we should have
7 regulatory relief for any discharges associated with
8 potable water and firefighting activities that cause or
9 contribute to an exceedence.

10 We're going through, you know, again off the
11 potable water discharges and getting into some of the
12 other categories. In the current permit, there's
13 category, A, B, and C and this -- what we see changing is
14 additional NPDES permits being recognized as part of the
15 process, that a lot of that responsibility is being
16 transferred onto the permittee. So there's a permit
17 issued by the Regional Board, but the responsibility to
18 do enforcement and supervision of that permit is put on
19 the permittee. So then we see a lot of the natural flow;

20 you know, categories being a further condition which we
21 are not necessarily -- we don't necessarily agree with
22 several points and in our written comments, we'll further
23 address those issues. And again, further conditioning on
24 the fire fighting activities, and I'll show you a couple
25 of categories in category C where -- discharges in

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1 category C where we do find agreement with staff on the
2 condition of those.

3 So natural springs, this is a perfect example of
4 something that should be unconditionally exempt. It's a
5 natural flow.

6 A flow from riparian habitats and wetlands:
7 again, something that should be further exempt
8 unconditionally.

9 I'm thinking of the Malibu Lagoon. Every time
10 it breaches, there's not going to be a permit issued for
11 that, but are we responsible for the discharge from that
12 lagoon?

13 Stream -- diversion of stream flows: We're
14 asking if there is a permit issued for this type of
15 activity, that we get -- one of the conditions that's
16 spelled out in the NPDES permit is that we get prior
17 notification.

18 Dewatering of lakes, we're going to default to
19 our written comments on that one. There's still some
20 consideration of what that really entails.

21 Rising groundwater: This is one that should
22 also be unconditionally exempt.

23 And then conditions for -- this condition should
24 be removed. There is plant checking spaces also in place
25 already to regulate this type of discharge and where it

0265

1 would be plumbed.

2 Air-conditioning condensate: the condition
3 should be removed.

4 And reclaimed and potable landscape irrigation
5 flow: We're in general agreement with staff on the
6 conditions proposed for this type -- these types of
7 discharges.

8 We're asking for noncommercial car washing by
9 residents and nonprofit organizations to be
10 unconditionally exempt.

11 And that concludes the nonstorm water discharge
12 portion. Thank you.

13 (Whereupon Mr. Yee exited the proceedings)

14 MS. MEHRANIAN: Thank you. This is it for the
15 speakers. I think we have one more presentation by
16 staff. Am I right?

17 MR. UNGER: Yes. We have one more presentation by
18 staff, basically on the minimum control measures, and
19 there are a series of cards there as well.

20 MS. MEHRANIAN: Sure. Shall we start? Are we going
21 to comment on this, what we had, or --

22 MR. UNGER: It's a Board workshop. You're more than
23 happy to comment or question at this point or at the end,
24 whatever you choose. It's the Board's pleasure.

25 MS. MEHRANIAN: Do you want Board questions and
0266

1 comments now or at the end? Now? Okay.

2 Board Member Camacho, you want to start?

3 MS. CAMACHO: No.

4 MS. MEHRANIAN: No? Who wants to start? Would you
5 want to start, Board Member Glickfeld?

6 MS. GLICKFELD: I want to thank everybody. I see how
7 complicated these issues are and I see, on one hand, that
8 there's a lot of disagreement, but I think that the word
9 that I understand -- the positive part that I'm seeing is
10 that there is a willingness of the community water
11 systems and the permittees and the staff to work together
12 on some of these issues.

13 The discussion seems to be about whether or not
14 water that's relatively pure coming out of the ground or
15 out of a hydrant or out of a part of the water system
16 should be considered as exempt or not exempt, and I guess
17 what my concern is is where does that water -- the water
18 that's being discharged and used, there's legitimate
19 reasons to do these things, but the water gets discharged
20 into the street or into other passageways and into
21 conveyances where they pick up pollutants; and if there's
22 a common ground that we can find with the permittees and
23 the municipal water organizations that, yeah, they admit
24 that they have to do these things and we have to admit
25 they have to do these things, but they can think about

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1 how and where they discharge it and how we prevent it
2 from getting polluted before it gets into the municipal
3 storm drains, I think that would be really helpful and
4 I'm hoping that staff would work really hard to do that.

5 That was it. Okay.

6 So I just think -- you know, the one issue that
7 some of the -- that I think runs through this that is of
8 concern to me, and it's going to come up in the next
9 section as well, is where we have authority over our
10 permitting topic and we're transferring enforcement
11 responsibilities to the permittees. I just think that's
12 wrong. I think we should not be doing that. We should
13 be asking them to help us with it.

14 I like the idea that we're asking for our
15 permittees to be involved in enforcement task forces with
16 us in other sections of this proposal, but I think we
17 have to -- we cannot just delegate our enforcement
18 authority for our own permits or our own responsibilities
19 to our permittees. That's not right to do that.

20 So I think those are my -- a couple of my
21 comments. I really want to see -- I see that there's a
22 lot that the permit -- the L.A. Permit Group would like
23 to see exempted, but I couldn't support that unless

24 there's some way to ensure that those waters that they
25 think should be exempted -- I can be assured that they're
0268

1 not going to get polluted before they get into the
2 system.

3 One of the areas that I'm really concerned about
4 are our own permits that require -- our own permits that
5 require groundwater that's pumped out of underground
6 garages, because underground garages impact high
7 groundwater. The groundwater's polluted and then that
8 goes into the storm drain system or we -- worst of all,
9 where we have a -- where we have a cleanup requirement if
10 pollutant groundwater, we pump it, we treat it, and then
11 we put it into the storm drain system.

12 This is all wasted water. It's not our job.
13 It's the State Water Board's job to deal with water
14 supply and water conservation measures, but we all have
15 to work -- wake up to the fact that there may be ways in
16 which we can both avoid water quality problems and
17 conserve water.

18 So I've asked our staff to start looking at ways
19 when people have to pump water, can we find out --
20 especially in construction, can we use it on-site? Can
21 we allocate it for toilet use? Can we allocate it to
22 landscape use? Can it be used nearby? We should be
23 doing everything we can to keep that water from going
24 into the storm drain.

25 And I know that this seems like a huge problem
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1 to some of you, but I think that we have to do what we
2 can in realistic situations where we have some control,
3 which we don't have on the fire hazard and we don't have
4 over necessary maintenance of our water. We have to do
5 those things. But when we have control over what we're
6 doing when we're pumping out groundwater, we should be
7 doing something useful with the water.

8 So those are my comments.

9 MS. DIAMOND: I just have a couple. I wanted staff
10 to think about how if, in fact, this permit is
11 complicated as one of the -- too complicated for some of
12 the dischargers and some of the NGOs to be able to figure
13 out some of the requirements. That was said I think by
14 the speaker from the Baykeeper.

15 At the same time, the exemptions have been
16 increased and landscape irrigation is no longer an
17 exemption, and I want to know what does that mean in
18 terms of, you know, if there is pesticide or fertilizers
19 that are used? Is there anything we should be concerned
20 about in terms of that impacting our water?

21 And, also, I wanted to know are the
22 responsibility -- is this permit -- is there anything in
23 this part of the permit that is not as -- other than the
24 exemptions, that removes responsibility from the
25 permittees that might be considered backsliding? I just

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1 want to make sure that that's not an issue. I don't
2 disagree with having more exemptions, but I just want to
3 know whether we should be concerned about that.

4 And, also, in terms of reuse, what Board Member
5 Glickfeld said, I completely concur with in terms of our
6 being able to increase the amount of local supply of
7 water. Is there -- are there incentives in here for
8 reuse and do the permittees get credit for establishing
9 reuse so that we are saving water and also, at the same
10 time, they are incentivized and given credit for doing
11 that?

12 MS. MEHRANIAN: Thank you.

13 Board Member Munoz, anything you want to add?

14 MS. MUNOZ: One of the words that I heard constantly
15 today was collaboration, working together, partnership,
16 and I think that's wonderful and I'm wondering if there's
17 been any collaboration between, like, the L.A. City group
18 and the environmental organizations; and if there has
19 been, on what points has there been partnership,
20 collaboration, or conversations with each other?

21 MS. PURDY: I don't know if that's something that you
22 want me to answer. It's probably better for the city or
23 the environmental group.

24 MS. MEHRANIAN: Can we ask the L.A. Permit Group?

25 MS. MUNOZ: And Santa Monica Baykeeper, some of the

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1 folks that addressed us today. I believe that that's
2 something that's been missing in some of these
3 conversations, because when I think the collaboration, I
4 think of bringing all the parties together that are
5 impacted by policy that's going to be voted on and it
6 seems to me that that would be a good start, if that
7 hasn't happened yet, or Heal the Bay. I see Heal the Bay
8 is here as well.

9 MS. MALONEY: To address your question on
10 collaboration, at this point, our collaboration really
11 has focused on collaboration between permittees; however,
12 as I've mentioned in each of our presentations throughout
13 the different workshops, that we are engaging with other
14 stakeholders quite actively throughout this process.

15 The couple environmental groups that you did
16 mention have not been actively engaged in our process;
17 however, several other environmental groups have,
18 specifically ones -- there's been some that are out in
19 the San Gabriel Valley that have been very active
20 partners coming in and, you know, offering assistance.

21 One specific example of that is the Watershed
22 Council for Health which actually helped us develop the
23 proposal for the Integrated Monitoring Program and wrote
24 a grant on behalf of the cities to actually promote that
25 program and to provide some funding for that effort. We

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1 have been working on it.

2 We realize that more collaboration does need to
3 happen. We're just not quite there in all of our steps.
4 So did that address your question?

5 MS. MUNOZ: Yes.

6 MS. MEHRANIAN: Would you want to add something?

7 MS. JAMES: Good afternoon. Kirsten James with Heal
8 the Bay.

9 Definitely all of us in the environmental
10 community are open to collaboration. We've had initial
11 conversations with several cities, including the City of
12 L.A., the City of Santa Monica, and we definitely have
13 our door open. As we get the language and start to have
14 more specific concerns, we definitely will be
15 collaborating at a greater level.

16 MS. GAUR: I would say the same from us. We haven't
17 really collaborated as much as we would like to or
18 should, but we're open to collaboration and we do work
19 with City of L.A. on various issues, especially storm
20 water, pollution, and trash. So I hope that answers your
21 question.

22 MS. MUNOZ: So in --

23 MS. CAMACHO: In that process, the collaboration,
24 what can we do -- maybe directing this to the staff -- in
25 order to see that happen? That's great that doors are

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1 open. I love that there's some discussion, but is there
2 a way to have further discussion? I know Mr. Tahir's
3 group, he represents a lot of municipalities as well and
4 so I'm just trying to understand how can we -- if staff
5 can be of assistance or -- I'm not sure, but get all of
6 those discussions and kind of thinking outside the box on
7 how we can achieve what we all want to achieve, but in a
8 way that's actually going to create requirements that
9 actually can be met?

10 MS. PURDY: I would just say -- and, Sam, if you want
11 to jump in, you can. But we have been having numerous
12 conversations and meetings with many, many of the
13 permittees and interested parties, including the
14 environmental organizations, L.A. Permit Group, City of
15 L.A., County of L.A., the water suppliers, and I think
16 that one thing we may be able to do is in some of these
17 meetings now that we have some working proposals perhaps
18 suggest that we -- rather than meeting with one group at
19 a time that we perhaps invite, you know, the L.A. Permit
20 Group and the environmental community to come in and meet
21 with us jointly on some of these issues.

22 MS. MEHRANIAN: Thank you.

23 Anything else?

24 I just want to add one thing, that I just want
25 to go on the record that the reason that the Board

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1 extended the MS4 permit deadline was to have these
2 workshops, because as you all heard, the issues are very
3 complicated and when you hear different stakeholders, the

4 environmental community, the L.A. Permit Group, you come
5 to see things from the different angles. And although at
6 the end of the day, it's water quality -- building
7 consensus becomes an important thing. By "building
8 consensus," I don't mean diluting the issues, but bending
9 some of the rules to make new rules where the water
10 quality still prevails. So that's what we had.

11 I know that there is one more presentation and
12 some cards. How long -- how much longer do we have the
13 room? I want us to be cognizant of time.

14 MR. UNGER: I haven't heard specifically for today.
15 Typically, we've used the time until about 6:30.

16 MS. MEHRANIAN: So let's --

17 MR. UNGER: I think our court reporter might need a
18 quick break.

19 MS. MEHRANIAN: Do you need a break? Five minutes?
20 So it's 5:00 now.

21 MR. UNGER: And I think what we're going to do, just
22 for everyone, is we're going to limit people to three
23 minutes unless you're representing a larger group, in
24 which case it will be ten minutes, and I think we can
25 probably make the 6:30.

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1 (Recess)

2 MS. MEHRANIAN: We're getting started. We have one
3 hour. We have a presentation for ten minutes and then
4 we'll have the speaker cards.

5 MR. UNGER: And just right before that presentation,
6 we're going to have two minutes from Renee because one of
7 our Board members asked -- essentially stated that
8 there's a bit of -- see if we can encapsulate the
9 previous hour and a half in a sentence or two and so what
10 the issues are. So Renee's going to try to do that.

11 MS. MEHRANIAN: Deb, can I get the speaker cards?

12 MS. SMITH: On your chair.

13 MR. UNGER: And so with that, we'll start with Renee
14 and go to Ivar, and Ivar will be ten minutes.

15 MS. MEHRANIAN: Great.

16 MS. PURDY: Thank you so much. And I don't know if
17 I'll be able to encapsulate everything we heard in the
18 last hour and a half, but I want to touch on some of what
19 I think I heard as some of the key issues and concerns,
20 the first being that we definitely heard that the working
21 proposal seems to impose many new conditions on the
22 previously unconditionally exempted discharges and I
23 think we've heard that from a number of groups and
24 concerns, that this was going to be particularly
25 burdensome on the permittees.

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1 And the one thing that I just want to make clear
2 is, first of all, EPA did not say that these should be
3 unconditionally exempted. There was a concern by EPA
4 that these could be a source of pollutants and,
5 therefore, that municipalities needed to have the ability

6 to impose controls on these discharges. So what we've
7 done is basically gone and looked at many of the BMP
8 manuals, some of which you heard referenced today, and
9 we've looked through those and incorporated BMPs, that in
10 many cases, have been imposed by these non-storm water
11 dischargers themselves for their discharges, and we've
12 put those BMPs and those conditions into this permit.
13 And I do want to reiterate again that that is very
14 similar to what we did in the Ventura County MS4 permit
15 just two years ago, I guess it is now.

16 So that's one thing I wanted to mention.

17 The other thing I did hear concern about on the
18 other side is that it seems as though we've expanded the
19 categories of exempted discharges, and I think the
20 confusion there is just that what we've tried to do is
21 list them out very exactly as they were listed out by EPA
22 in the Stormwater Rulemaking, and so they were somewhat
23 grouped before. There is some redundancy in the list so
24 it says "landscape irrigation and lawn watering." So
25 there are some places where clearly there's a little

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1 redundancy, which I think is largely the result of just
2 how comments came to EPA in 1990, but we tried to stay
3 true to what is in the implementing regulations in terms
4 of the list. So it looks, I think, a little longer than
5 it's been before; but, in fact, there hasn't really been
6 an expansion of new categories that we're adding in.

7 So I just wanted to make that clear as well on
8 the other side of things, that this is basically the list
9 that has been in the permit from 2001. It's the list
10 that's in the Ventura permit and there hasn't been an
11 expansion of that.

12 So I think that's all I'm going to touch on for
13 now unless anybody else wants to -- oh, actually, sorry.

14 There was one other thing I wanted to mention,
15 which is I heard several of you indicate that you really
16 wanted to see if there's a way to provide incentives or
17 even requirements to look into opportunities for making
18 sure that this water, particularly potable water, isn't
19 wasted and that it's reused, captured in some way,
20 reinfiltrated; and one of the conditions we did put in
21 the working proposal for all of these types of discharges
22 is to consider ways in which the water could be captured
23 or reused or infiltrated. So perhaps we can do a better
24 job of that in the next iteration of the proposal, but we
25 also were thinking about that in trying to see if there

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1 were conditions we could put on these non-storm water
2 discharges so that perhaps they can be beneficially used
3 instead of just discharged.

4 And with that, I'm going to turn it over to
5 Ivar.

6 MR. RIDGEWAY: Good afternoon, Chair Mehranian, Board
7 Members, permittees, and stakeholders. I'm Ivar

8 Ridgeway, Unit Chief of the Stormwater Permitting unit,
9 and I'd like to briefly describe some of the requirements
10 for the minimum control measures. I will also go over
11 some of the areas where those measures differ
12 significantly from what's in the current L.A. MS4 permit
13 and for those provisions derived from the Ventura County
14 MS4 permit where they differ from that current
15 Ventura County MS4 permit as well.

16 I'd like to point out the customization language
17 that lies within the General Requirements section.
18 Customization of all or any of the minimum control
19 measures is allowable within the permit on an individual
20 jurisdiction scale, on a watershed scale, or a countywide
21 scale.

22 As I mentioned earlier, just as with the other
23 minimum control measures, permittees will have option to
24 customize their public education program and choose at
25 what scale they want to implement the program.

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1 For the public information and participation
2 minimum measure, staff will require permittees to conduct
3 a storm water pollution prevention advertising campaign
4 and distribute storm water pollution prevention materials
5 to such entities such as automotive parts stores and home
6 improvement centers. In addition, staff are requiring
7 that permittees develop and implement, or continue the
8 implementation of a watershed-wide reporting hotline
9 which will serve as the general public reporting contact
10 for reporting illicit discharges/dumping. Permittees can
11 also choose to establish their own hotline if preferred.

12 Though there is some overlap between the state
13 General Industrial Permit and the industrial/commercial
14 control measure, the intent of the industrial/commercial
15 program is to reduce/prevent pollutants discharging into
16 the MS4 system from selected industrial/commercial
17 facilities. The draft permit will continue to relieve
18 permittees of their required inspection obligation if
19 Regional Board staff has inspected a facility within the
20 previous two years. The inspection frequency required is
21 identical to what is in the current L.A. MS4 permit and
22 the current Ventura MS4 permit, two inspections within a
23 five-year period unless a different frequency is proposed
24 by permittees with appropriate justification. The BMP
25 implementation references the 2003 California Stormwater

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1 Quality Association Manual, but the more recent version
2 can be used by permittees as well.

3 For the new development and redevelopment
4 minimum measure, staff are incorporating an LID design
5 storm similar to the current Ventura MS4 permit and
6 current L.A. MS4 SUSMP sizing. Designated new
7 development and redevelopment projects would retain
8 on-site the storm water runoff volume resulting from the
9 85th percentile, 24-hour storm or the three-quarter inch

10 24-hour storm, whichever volume is greater. When a
11 permittee finds that the project applicant has
12 demonstrated technical infeasibility to retain storm
13 water on-site, staff is requiring permittees to require
14 off-site mitigation. The project categories are
15 identical to the current Ventura MS4 permit. The minimum
16 control measure customization language will allow
17 municipalities with a robust LID ordinance to implement
18 their own local requirements.

19 For the storm water management options, the
20 preferred option is the on-site retention of the runoff
21 generated from the LID design storm and off-site regional
22 groundwater replenishment projects which provide equal or
23 greater benefit to surface water in the same sub
24 watershed. Off-site regional groundwater replenishment
25 projects must demonstrate an equal benefit to groundwater

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1 recharge that could not be achieved on-site.

2 Second tier to these strategies are the off-site
3 infiltration or bioretention of the difference in flow
4 that was unable to be retained on-site and also the
5 retrofit of existing developments with similar land uses
6 or pollutant loadings which address flow which was not
7 retained on-site. Retrofit projects are allowed to use
8 infiltration BMPs, bioretention BMPs, rainfall harvesting
9 or biofiltration BMPs to address the required runoff
10 volume.

11 The least preferred option is the use of
12 biofiltration BMPs sized to treat one and a half times
13 the storm water runoff which could not be retained
14 on-site.

15 While the current L.A. MS4 permit does not
16 contain LID requirements, the differences between the
17 requirements in the draft minimum control measure and the
18 current Ventura County MS4 permit are designated new
19 development and redevelopment projects are required to
20 either retain the 85th percentile, 24-hour storm or the
21 three-quarter inch storm, whichever is greater, whereas
22 the default for the L.A. is the three-quarter inch storm.

23 Biofiltrations have specific design
24 requirements. They have to be designed to accommodate
25 design storm flow with a surface loading no greater than

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1 five inches per hour and with a volume equal to
2 75 percent of the required LID runoff volume. The
3 monitoring of treatment BMPs is required in the draft
4 with the number of samples required based on permittee
5 model change results. The draft offers increased
6 compliance options, including the allowance of
7 groundwater replenishment projects and retrofit projects
8 to satisfy low impact development requirements.

9 Hydromodification requirements apply to the
10 natural drainage areas and require one of the following
11 options: Either the on-site retention of the volume of

12 runoff resulting from the 95th percentile, 24-hour
13 storm -- and this is for sites less than 50 acres -- or
14 the volume of runoff generated from the two-year, 24-hour
15 storm, and that's for sites greater than 50 acres.
16 Another compliance option is the implementation of BMPs
17 to result in the matching of pre- and post-development
18 runoff flow. The third option is the demonstration of an
19 erosion potential of 1, based on a Hydromodification
20 Analysis Study, and the equation for that is derived from
21 the current Ventura MS4 permit. Hydrologic modeling is
22 required to demonstrate the matching of the pre- and
23 post-development flows for those sites greater than
24 50 acres.

25 While the current L.A. MS4 permit has very
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1 limited requirements mostly considering of a study, the
2 proposed hydromodification requirements were taken from
3 the current Ventura MS4 permit.

4 Staff intend to allow permittees to utilize
5 findings from the recent SMC SCWRP hydromodification
6 study to develop alternate hydromodification studies.

7 For the development construction minimum
8 measure, it's virtually identical to the Ventura MS4
9 permit. Staff require an electronic inventory of grading
10 permits, encroachment permits, and building and
11 construction permits. Prior to issuing a grading or
12 building permit, an Erosion and Sediment Control Plan
13 must be submitted for permittee approval. The Erosion
14 and Sediment Control Plan basically contains the element
15 of a Stormwater Pollution Prevention Plan. Controls for
16 various construction activities are derived from the
17 CASQA handbook or the CalTrans BMP handbook. BMP
18 implementation is tailored to the risk imposed by the
19 project.

20 While the construction requirements differ from
21 the L.A. MS4 permit, the requirements are very similar to
22 those in the current Ventura MS4 permit. Staff require,
23 as I mentioned before, the electronic inventory of the
24 grading permits. No local SWPPP requirement was in the
25 staff's requirements, but the Erosion and Sediment

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1 Control Plan can be -- I'm sorry. Erosion and Sediment
2 Control Plan must be submitted for a committee approval
3 prior to land disturbance and a State SWPPP required
4 under the general construction permit could be
5 substituted for that Erosion and Sediment Control Plan.
6 BMPs implementation, as I said before, is based on the
7 size of the project.

8 For example, larger sites are required to
9 implement concrete washouts and stabilize entrances and
10 exits. Watched generally, BMPs don't apply to the
11 smaller projects. Permittee inspection frequency is
12 based on project size and threat to water quality.

13 For the illicit connection/illicit discharges

14 minimum measures, staff are proposing permittees develop
15 and implement protocols for investigating and eliminating
16 illicit connections and discharges. Identification of
17 those illicit priority areas for work on eliminating
18 illicit connections would be based on the non-storm water
19 monitoring of the outfalls. This is in contrast to the
20 requirements in the current L.A. MS4 permit where
21 screening was required for all pipes of a given size.

22 And I'm going to wrap this up really quick with
23 the last one.

24 The public agency activities is basically very
25 similar to what's in the current L.A. MS4 permit. Staff

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1 are continuing to require permittees to do such permittee
2 activities such as catch basin cleaning, open channel
3 maintenance, and street sweeping. And the real change
4 for the public agency activities program is the
5 implementation of prescriptive BMPs from the CalTrans
6 manual.

7 So that concludes my presentation; just a little
8 bit over.

9 MS. MEHRANIAN: Thank you.

10 Should we move on to the speaker cards?

11 Holly Schroeder, Building Industry Association.

12 MS. SCHROEDER: Good afternoon, members of the Board.

13 Holly Schroeder with the Building Industry Association.

14 We represent members of the home building industry, all
15 trades associated with home ownership.

16 As you heard from Ivar, the staff proposal is
17 drawing heavily from the Ventura MS4 permit and I know we
18 worked really hard on that over a long time; but in any
19 case, I guess I would disagree a little with what Ivar
20 said. I think it goes beyond what's in the L.A. permit
21 and it does make some pretty significant structural
22 changes and I think that's concerning, because in L.A.
23 County you're talking about a very urbanized area,
24 different types of development, different types of
25 development patterns, and you need to have some

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1 flexibility in order to do that, and they've brought in a
2 lot of specific requirements into the permit that were in
3 the Technical Guidance Manual in the Ventura permit.

4 And I think it's really important that -- I know
5 they've expressed a lot of interest about, you know,
6 reuse and water supply issues and these are requirements
7 that will apply to new and redevelopment which, in the
8 housing industry, is less than a quarter percent of the
9 land in a year that's developed in L.A. County. So we're
10 talking about really incremental changes here, so it's
11 very important that we keep the ultimate standard of the
12 Clean Water Act in mind, which is the MEP standard and
13 there's really no mention of MEP or protocol and
14 balancing anywhere in the staff proposal at this point.

15 We think that the detailed nature of some of

16 these requirements is better placed in a Technical
17 Guidance Manual and there's no allowance for that in the
18 staff proposal, and we would ask that you allow for that.

19 This whole field of low impact development is
20 rapidly evolving and the technologies are changing and we
21 think you ought to have the flexibility to make
22 site-specific conditions to do the best type of low
23 impact development that is possible.

24 The grandfathering language is also
25 significantly different than that which was in Ventura

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1 and is very problematic because it's going to force
2 costly redesign of projects that are already in the
3 pipeline and it's most effective to do LID if you're
4 doing it early in the design phase.

5 The proposal also has references to numeric
6 levels and benchmarks which seems to be disregarding
7 recent court cases and the national trends around the use
8 of numerics.

9 So we think there's some -- a lot of room for us
10 to work with staff. We heard your comments earlier about
11 collaboration. We think that even though we are not a
12 direct permittee, the requirements that are in here are
13 so strict and so specific, they directly affect industry.
14 We think that industry needs to be at the table and we
15 would be happy to continue those discussions with you.

16 Thank you for your time.

17 MS. MEHRANIAN: Thank you.

18 Tatiana Gaur, followed by Richard Watson.

19 MR. GARRISON: Good evening, members of the Board and
20 Board staff. My name is Noah Garrison. I'm with the
21 National Resources Defense Council. We had split time
22 with Baykeeper and with Heal the Bay, so if you don't
23 mind, I'll take up the speaking at this point.

24 I just want to say, in response to comments made
25 earlier about collaborative process, in fact, many of the

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1 sort of founding principles that are in the Ventura
2 permit that are forming the basis now for the Los Angeles
3 permit were worked out in an almost excruciating, I would
4 say, two-year-long-negotiation between the permittee
5 cities in Ventura County and Heal the Bay and NRDC and
6 that was a fantastic and intense process, but
7 unfortunately, we don't really face the same
8 circumstances here.

9 Many of the new Board members, in particular,
10 may not be aware that there's a very long history of
11 litigation associated with the Los Angeles permit. When
12 the permit was adopted in 2001, many of the cities,
13 certainly not all, but many of the permittee cities and
14 the County sued over that permit. They have since sued
15 over TMDLs that were adopted, TMDLs being implemented
16 into the permit, sued over Basin Plan Amendments that are
17 incorporated as water quality standards. There's a

18 fairly acrimonious and unfortunately not collaborative
19 environment that's been created here and we certainly
20 hoped that would change, but it does not really ferment
21 collaboration between the parties and it's unfortunate.

22 That being the case, I just wanted to give a
23 little bit of background history on the permit here, but
24 I do want to talk about a couple of the different
25 provisions and I'll try to be very brief tonight. I'm

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1 certain the Board and many of us I know have had a long
2 day.

3 I'd like to start with the project performance
4 criteria. We absolutely support the incorporation of a
5 requirement to retain on-site the 85th percentile storm
6 or the three-quarter inch storm, whichever is greater and
7 we support that as being an on-site requirement.

8 One of the interesting provisions in this permit
9 is the allowance to perform off-site mitigation if you're
10 going to increase groundwater recharge and I think NRDC
11 strongly supports use of storm water capture as a means
12 of increasing the water supply in the area, but with
13 that, there are two concerns we would raise here.

14 First is, the permit makes no actual mention of
15 water supply as the end result or end goal of this
16 off-site provision. It only says "to increase
17 groundwater recharge" and there are, within our region,
18 many areas where you could certainly increase groundwater
19 recharge, but it will not result in an increase in water
20 supply or increase in use of the water, either for
21 contamination, the physical characterization of an
22 aquifer, any number of other reasons. So for that
23 provision, if we really are going to allow off-site
24 mitigation, it should absolutely be to increase water
25 supply and that should be a goal that the Board is

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1 putting forward.

2 Second is that while certainly taking water from
3 a site and conveying it elsewhere to recharge it into the
4 ground and you're actually retaining the same parcel of
5 water, just in a different location, doesn't really
6 present any water quality concerns; but if you are
7 shifting to an entirely different location in the
8 watershed or sub watershed, it's very difficult to make
9 any kind of comparison of the water quality benefit you
10 may be getting. You have to have a complete sort of
11 faith that you are actually capturing the same pollutant
12 loading, reducing the same amount of pollutant to the
13 same waterbodies, and it's very difficult to do at a
14 different location. You have different development
15 types, different pollutants of concern, a whole host of
16 different issues, and so -- I'll try to be quick here,
17 but we would be concerned that for anything that allows
18 for shifting it to an entirely different location, that
19 it has to involve some sort of treatment and additional

20 pollutant load requirements to make sure that you
21 actually are achieving equivalent pollutant load
22 reduction.

23 Second (sic), we continue to have concerns over
24 use of biofiltration to substitute for on-site retention.
25 At a minimum, the Ventura principle should be followed,

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1 which is 1.5 times the volume of water, but it also, like
2 the Ventura permit, would have to include provision to
3 achieve equivalent water pollutant load reduction, which
4 means that if you are using biofiltration on that
5 1.5 time volume of storm water, you also have to be sure
6 it's achieving the same pollutant load reduction and that
7 is not in the L.A. permit currently.

8 What it basically means is you would have to
9 biofilter a larger volume of water to make sure you
10 achieve the same pollutant load reduction and that's not
11 currently in the permit. We'd like to see that put in.

12 I also question why biofiltration would be
13 allowed for off-site retrofits. If you were going
14 off-site to deal with a technical and feasibility issue,
15 retention should be the standard and biofiltration should
16 not be an option that's allowed.

17 I'm going to sort of skip quickly.

18 Finally, there is a local ordinance provision
19 that allows for the Executive Officer to determine that a
20 local ordinance that may already be in effect is the
21 equivalent in terms of water quality protection or
22 meeting the minimum control measures as what will be in
23 the L.A. MS4 permit and I would submit that that is the
24 core value or core principles that will be in the permit
25 with regard to cleaning up and treating storm water or

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1 retaining storm water and that is this Board's
2 responsibility to determine whether those provisions meet
3 MEP. It should not be left to the discretion of the
4 Executive Officer, who certainly can be involved in the
5 discussion, but that's a determination that this Board
6 has to make through a public process. If there is a
7 local ordinance out there that people feel is equivalent
8 in terms of the protection for water quality, the Board
9 has to be the one to make that determination. It can't
10 be just left to the Board staff.

11 With that, I'd like to turn it over to
12 Kirsten James. Thank you for taking the time to hear us
13 late in the evening.

14 MS. JAMES: Good evening. Kirsten James with Heal
15 the Bay.

16 I just wanted to touch on briefly the idea of
17 retrofit. And as Noah talked about, we greatly support
18 the requirements for retaining and capturing water
19 on-site during the new and redevelopment process, you
20 know, with some strengthening points that Noah mentioned,
21 but we really need to move beyond this. Those are

22 appropriate, those are necessary requirements, but we
23 need to take the extra step and go into the realm of
24 retrofit of existing properties because as it is now, the
25 rate of new and redevelopment just isn't great enough to

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1 get us to where we need to be with water quality
2 standards attainment. So we need to go that extra step.

3 We've seen this in other MS4s that have gone and
4 been adopted throughout the state, so we really need to
5 take that extra step here as well.

6 Staff has proposed a few requirements that
7 basically make it optional, so the permit proposal right
8 now sets up a process for identifying potential retrofit
9 process projects and prioritizing those projects, but we
10 have no guarantee that any of those projects will
11 actually take place during the life of this permit, which
12 could be ten-plus years as we see with the current
13 permit. So we really need to take that the extra mile.

14 What we've -- we'll be submitting more detailed
15 comments on this, but what we suggest is that you
16 actually take those prioritized projects and require that
17 the permittee create a retrofit program, and specifically
18 this program would be designed to treat a specified
19 volume of storm water within a subdrainage, and they
20 would be doing this using these identified projects that
21 are prioritized.

22 Through this process, they would prioritize
23 on-site retention because that is, you know, the
24 integrated water approach; but these projects need to be
25 specified that they'll actually be completed. We can't

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1 give that as an option.

2 So another idea is to have a pilot program where
3 you would implement at least five pilot project retrofit
4 projects within a sub watershed and the permittee would
5 need to demonstrate that this helps to reduce reliance on
6 potable water and that it, in fact, is infiltrating or
7 capturing a specified volume of water.

8 Another idea is to take the green streets to a
9 new level and to require that over a certain threshold,
10 street projects need to be retrofit to infiltrate water.

11 So these are ideas that we really encourage
12 staff to go forward with and take to the next level in
13 order to really, truly get us to where we need to be with
14 water quality standards attainment.

15 Thank you.

16 MS. MEHRANIAN: Thank you. Richard Watson, City of
17 Signal Hill, followed by Mark Grey, Construction Industry
18 Coalition on Water Quality.

19 MR. WATSON: Chair Mehranian, members of the Board,
20 My name is Richard Watson and I am representing today the
21 City of Signal Hill. I will just make a few general
22 comments on the minimum control measures and our written
23 submittal will include more detailed written comments on

24 these measures and on the non-storm water discharge
25 prohibitions.

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1 First, I'd like to suggest that the definition
2 section needs to contain definitions of several other
3 terms used in the staff working proposal.

4 Second, the permit should specify -- should
5 specifically recognize true source control and
6 operational source control in the definitions and
7 elsewhere in the permit. True source control needs to be
8 recognized because it's much more efficient and
9 cost-effective to remove pollutants at their true sources
10 than to try to remove them at end of pipe.

11 Next, I have two general comments about the
12 working proposal: First, it's extremely prescriptive and
13 it would be far better for design details to be spelled
14 out in a Technical Guidance Document, as was done in
15 Ventura County. The guidance document could be more
16 easily -- in fact, much more easily corrected, if need
17 be, than the permit could. And if the Board decides to
18 keep the detailed prescriptive language, I remember that
19 the Board members and staff very carefully review the
20 language to avoid unintended consequences.

21 Second, portions of the working proposal are
22 overly broad and could easily lead to unintended and
23 costly consequences. For instance, the public activities
24 program requirements on page 52 contain language
25 requiring permittees to prepare an inventory of existing

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1 development for retrofitting opportunities. One of the
2 areas to be addressed is, quote, "areas of existing
3 development that generate pollutants subject to a TMDL
4 for the receiving water." This could be almost
5 everywhere depending on how the term "generate" is
6 defined. Does it include atmospheric deposition, over
7 which permittees have absolutely no legal authority?

8 Two additional specific areas that I think
9 should be carefully reviewed: One is the local ordinance
10 equivalence provision just mentioned. The other is the
11 new development and redevelopment projects options table.
12 The first one appears to be a good idea, but
13 operationally needs further refinement. The options
14 table should be divided into two tables, one for existing
15 development and one for new development.

16 Before closing, I'd like to support the comments
17 of the Building Industry Association, particularly those
18 concerning MEP, the balancing requirements of the Water
19 Code, as well as their comments on biofiltration and the
20 minimum infiltration rate.

21 Lastly, I ask that you really give serious
22 consideration to the comments of all permittees 'cause
23 it's the permittees who have experience in design,
24 construction, operation, and maintenance of BMPs.

25 Thank you.

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1 MS. MEHRANIAN: Thank you.
2 Mark Grey, Construction Industry Coalition on
3 Water Quality.

4 MR. GREY: Good evening, members of the Board, Chair
5 Mehranian. My name is Mark Grey. I'm the technical
6 director for the Construction Industry Coalition on Water
7 Quality. I represent six large trade associations in
8 Southern California. They're a management and union
9 contractor workforce. Combined, we build much of
10 Southern California, so this permit directly affects our
11 membership. I've got some brief comments to you today.

12 Ivar presented the minimum control measures and
13 I just want to say in my view, in our view, they're
14 completely different than what we find in Ventura and
15 I've got really -- in the Ventura permit, and I think
16 that should be our baseline to work with.

17 And as others have pointed out, we spent two
18 long years. We spent some very late evenings coming to a
19 collaborative, cooperative approach on that and I'd like
20 to see us use that and build on that and the staff
21 proposal turns that upside down and turns it on its head
22 and pours it all out on the ground. I want to make three
23 points today.

24 The staff proposal tries to redefine what is LID
25 and what is not in order to manage a project storm water

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1 quality design volume. The proposal moves away from some
2 very important engineering design elements that are
3 intended to provide margins of safety; and I won't go
4 into those in detail today, but they're very important.
5 Third, the proposal offers a new LID BMP decision
6 selection process that's unlike anything that we see in
7 California right now in MS4 permits and certainly unlike
8 the Ventura permit.

9 The permit limits modern storm water management
10 technology that is considered low impact development,
11 specifically biofiltration. So when you read our comment
12 letter, when you read the summarization of that, please
13 note that and I'll be very descriptive in the nature and
14 how it changes that, especially the definition section
15 that parses bioretention and biofiltration. I'll provide
16 a lot of detail on that and why it's unnecessary to parse
17 that out.

18 The LID infiltration design criteria, of which
19 we are highly supportive, in general -- infiltration in
20 general is the least-cost option available to us in LID,
21 but the design criteria removes margins of safety for
22 designers. It really removes those margins of safety
23 for -- and I won't go into detail -- such as a 24-hour
24 drawdown, which is a drawdown criteria. I'm getting into
25 the weeds and the details. That's way too short given

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1 the back-to-back-to-back nature of the storm systems.

2 The selection process and use of preferred
3 medium and least options that's on page 25 and 26 of the
4 staff proposal is simply unworkable and unhelpful and
5 there's an established hierarchy to selecting LID BMPs
6 that we see in the Ventura permit, that we see elsewhere
7 in California. So when you read our comment letter and
8 the summarization of that, I'll be focusing and honing in
9 on that and please accept those comments.

10 In conclusion and very important, there's no
11 mention of economic feasibility anywhere within the
12 selection process for LID BMP implementation. Economics,
13 as we all know now, are a very important part of the
14 decision-making process and we need to explicitly
15 recognize that. And I'll say one thing in leaving, and
16 that is this permit does lack a Technical Guidance Manual
17 and I would highly recommend including that. We could
18 remove some of the detail that's in the staff proposal
19 about biofiltration design, bioretention design, and
20 include a technical manual. And as Rich Watson just
21 pointed out, we have differences in redevelopment and new
22 development. A Technical Guidance Manual is the perfect
23 place for that where we can give designers,
24 engineers/designers the kind of help they need to design
25 these progressive new storm water management solutions.

0300

1 So I appreciate the time and I hope you'll read
2 and reflect on our comments that we'll be submitting.

3 Thank you very much.

4 MS. MEHRANIAN: Thank you, Mr. Grey.

5 Michael Blum, Malibu Surfing Association,
6 followed by Steve Mejia.

7 MR. GARRISON: Mr. Blum unfortunately had to leave.

8 MS. MEHRANIAN: Steve Mejia?

9 Ray Tahir?

10 MR. TAHIR: I think you guys owe me one or two
11 minutes.

12 MR. UNGER: No. One.

13 MS. MEHRANIAN: You have one.

14 MR. TAHIR: Well, it was 20. It was supposed to be
15 part of the other presentation which got truncated.

16 Look, I'm sure as all of you know by now, this
17 is very, very complicated stuff. These minimum control
18 measures effectively form the basis of the MS4 permit
19 program. You can't talk about it within the space of an
20 hour and a half. When we discussed the 2001 permit --
21 Fran, you remember this -- I mean, we discussed it over a
22 year. You know, there's a lot of bugs in this proposal
23 that need to be worked out and they can be worked out.

24 What I need to suggest to you right now is if
25 it's not broken at this point, let's not try to fix it.

0301

1 We have not characterized pollution problems within each
2 of the watersheds and sub watersheds. We have to do that
3 first through outfall monitoring, not through receiving

4 water monitoring. That tells you absolutely nothing. So
5 let's do that first.

6 If we have to do -- you know, if we have to
7 engage in draconian measures, certainly we'll do that to
8 protect water quality. We just don't know at that
9 juncture. So we're following the ready, fire, aim
10 approach and that's entirely wrong.

11 I know NRDC is into water conservation. They
12 wrote an excellent book, "A Cadillac Desert," but we have
13 a storm water permit, not a water conservation or a
14 groundwater recharge permit. If we need to do that, if
15 the State needs to do that, they need to do that through
16 separate legislation. We can't do it through the MS4
17 permit. Thank you very much.

18 MS. MEHRANIAN: Frank Wu, County of L.A.?

19 MR. WU: Hi, Madam Chair, Board members. My name is
20 Frank Wu and I'm representing County of L.A. today and I
21 have three comments today and -- but before I get into
22 them, I'll just say that, like you heard before, the
23 County has been the meeting with Regional Board staff,
24 Sam and his staff, for the last few months and we'll
25 continue to meet with them. We've had a good working

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1 relationship, and so next week we'd like to meet with
2 them more to talk about the details of our comments. We
3 will be submitting written comments on the proposal next
4 week, but today I would just like to point out three
5 things.

6 It's really one comment on the permit approach,
7 I would be asking you to think back to Renee's
8 presentation, actually. I was glad she had that slide
9 with the four circles, the four overlapping circles,
10 reminding everybody that this is just one part of the
11 permit. And I know you've heard a lot of details about
12 LID and retrofitting, so I want to keep you -- make sure
13 you keep in mind that this is just one part of the permit
14 and another major part that's coming -- and I hope we
15 have a workshop on this eventually -- is the TMDLs.
16 There are going to be almost 30 TMDLs that are going to
17 be incorporated into this permit and the County believes
18 that the right approach really is to keep the minimum
19 control measures to a manageable size and keep it as
20 simple and as straightforward as possible, because I
21 think TMDLs is really where you'll get your bang for the
22 buck. That's where we're targeting specific pollutants.

23 So our main recommendation is let's keep that
24 idea in mind and let the minimum control measures do
25 their jobs, which is source control, but let's not go too

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1 much in that direction, and give the TMDLs a chance to
2 work.

3 And so -- but beyond that main comment, my other
4 two comments are basically just examples of why we think
5 the minimum control measure program is a little bit too

6 extensive. For example, the LID program, L.A. County
7 already has a program that we've been implementing for
8 the last two years or so and that program was endorsed by
9 stakeholders; and based on my initial review, this permit
10 would require us to revise our ordinance. We don't think
11 that's really necessary. We believe this program is a
12 good one, but we'll talk about the details with your
13 staff next week and I won't go into those problems that
14 we see with the proposal today because I think you've
15 heard them already.

16 And this is just another example: the retrofit.
17 You heard Heal the Bay talk about retrofit being a
18 priority and the County's not necessarily opposed to
19 that, but what we're saying is give the TMDLs a chance to
20 work and if we find that, in trying to comply with TMDLs,
21 if we find that retrofitting is a tool that we can use,
22 then we'll do that. But give the permittees the
23 flexibility to choose our tools in the toolbox. Don't
24 prescribe too many tools to us because we have a finite
25 amount of resources.

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1 So to wrap up, again, keep the minimum control
2 measures simple. You've heard many times today that it's
3 very complicated and very extensive. So we'll work with
4 staff next week to try to work out the details.

5 Thank you.

6 MS. MEHRANIAN: Sure. Thanks.

7 MR. WU: Oh, I wanted to just say one thing I didn't
8 have on the slide. You talked about collaboration. The
9 topic has come up with meetings with Sam and his staff
10 and the County, we've mentioned there, too, and we'll say
11 it here again that we are open to meeting with any
12 stakeholder who are interested to try to work out these
13 issues before the permit actually comes to you.

14 Thank you.

15 MS. MEHRANIAN: Thank you. We have L.A. Permit
16 Group, the last speaker, Heather Maloney, Joe Bellomo and
17 John Dettle.

18 MS. MALONEY: We do have a couple of slides.

19 Just before we get into our planned slides, I
20 just wanted to thank the Board again for hosting this
21 workshop and this is really helpful. This whole process
22 of the public workshops is I think -- you've mentioned
23 that it is very helpful for you. It's very helpful for
24 us as well to hear what other stakeholders have to say
25 and to hear your responses back to that. It's been very

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1 helpful and we'll continue to take that into mind and
2 discuss topics with your staff.

3 The staff working proposals regarding the
4 minimum control measures allows for options to customize
5 based on watershed needs and the L.A. Permit Group is
6 very supportive of this approach, as it will support the
7 proposed integrated planning and monitoring programs that

8 we've proposed at previous workshops. Monitoring results
9 and sound science are needed to determine the most
10 effective and efficient approach to addressing the TMDLs
11 and other pollutants. The integrated planning and
12 monitoring programs will provide additional information
13 needed to establish the best course of action needed to
14 achieve these water quality goals, and as that goes with
15 what the County said in their presentation.

16 Without this ability for the planning and
17 monitoring programs to provide a feedback loop, which is
18 necessary for that iterative approach, scarce local
19 resources will not be used in the most efficient manner.

20 And back to this idea of workshops, you know,
21 collaboration really is the way to head off any or
22 prevent any litigation, by building stakeholder support
23 of the process and stakeholder support of the permit as
24 well; and by that, hopefully we can all gain consensus,
25 which I think you have -- the direction is heading in a

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1 good way and we'd be able to create a lot of buy-in for
2 not only the process, but also the permit language
3 itself.

4 So specifically in regards to the minimum
5 control measures, first, we feel that local resources are
6 directed to a number of health, safety, and
7 quality-of-life factors that all require clean water.
8 However, they should not be forced to experience an
9 impairment for the sake of clean water. Rather, all
10 these factors, health, safety, quality-of-life, and clean
11 water need to be developed in balance with each other.
12 This requires a strategic process that will take time to
13 get it right. We urge you to develop the permit
14 conditions based on be a reasonable time frame and
15 balance with the existing economy and other health,
16 safety, regulatory, and quality-of-life factors that
17 local agencies are responsible for. And this idea is
18 reflected back in that integrated TMDL planning,
19 integrated monitoring and that feedback loop which is
20 really represented in that slide that Renee showed at the
21 beginning of the presentation with the different circles.
22 Really having that integrated wholistic program kind of
23 encapsulates all these ideas.

24 I'm going to hand it off to Joe Bellomo, who is
25 going to give more specific comments regarding the

0307

1 minimum control measures.

2 MR. BELLOMO: Joe Bellomo, for the record.

3 We had no significant issues with the public
4 information and participation program. That's not to say
5 that there aren't any, but we're limiting it to major
6 issues at this point. Our written comments for all the
7 sections in the MCMs will provide greater detail on the,
8 you know, more insignificant, I guess, issue that we
9 might have.

10 The Industrial/Commercial Facilities Program:
11 again, a lot of the responsibilities is transferred on to
12 the municipalities, and that's a major issue for us.

13 The Planning and Land Development Program: The
14 threshold of 1,000 square -- of 10,000 square feet of
15 impervious surface for roadway construction is really too
16 low. We support the green streets guidance as proposed
17 in the staff working proposal, but we recommend that you
18 increase the threshold for streets.

19 MS. GLICKFELD: Excuse me. Could I ask for
20 clarification? Could you explain what the threshold is
21 and --

22 MR. BELLOMO: Oh, threshold, anything greater than --
23 equal to or greater than 10,000 square feet of impervious
24 surface for -- you know, the requirement's right there --
25 streets, roads, highways, freeways and so on and so

0308

1 forth, would need to implement green street guidance or
2 BMPs, more or less, to the practical extent practicable.

3 And, again, what we're saying here is that we're
4 in support of the green streets guidance, but the
5 threshold is really too low and that would incorporate
6 things like, you know, intersection modifications and
7 such like that.

8 The good thing about going at the end is you can
9 reference previous slides. So I think a lot of this
10 stuff that BIA, Holly Schroeder, had indicated in her
11 presentation is very applicable and we support that. So
12 I think I can skip over some of this.

13 The one thing I wanted to say on the
14 biofiltration, the 1.5 is punitive. It reduces our
15 ability to explore other options or encourage if it is
16 appropriate. And the one thing we were trying to get at
17 at the last staff-level workshop was the difference
18 between a large project and a very small project and the
19 example we're giving here is a denuded hillside such as a
20 community park or a backyard patio. The tracking system
21 that's being proposed in the staff working proposal would
22 capture -- is intended to capture everything. We don't
23 know if it needs to. We believe it doesn't need to go
24 there, and prior issuance of grading permits needs to
25 be -- has to have an approved Sediment -- Erosion and

0309

1 Sediment Control Plan.

2 Some of this stuff that we had talked about last
3 month is still applicable to here. The Erosion and
4 Sediment Control Plan, as is written into the staff
5 working proposal, applies to all projects and we're again
6 asking for the threshold to be set at 1 -- or at an acre
7 or greater, such as what the general construction permit
8 requires. It was never intended for small construction
9 sites.

10 The inspection process is overburdensome for
11 municipalities. The staff working proposal requires it

12 at five different stages during the construction process.
13 We really feel that it should be limited to grading and
14 land development and then the final stabilization.

15 I'm just skipping through some of this in the
16 interest of time, and I think we've said most of this in
17 our last presentation.

18 Okay. So moving on to the Public Agency
19 Activities Program: Our major issues there are six of
20 them up here -- five. Sorry. The first one is the
21 difference between contract cities and large cities.
22 That's lost inside the requirements in the staff working
23 proposal. I think there's a few suggestions that we'll
24 be providing in written comments that will help address
25 this issue of contract versus large cities, but one

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1 example is for corporation yards. A contract city will
2 outsource a lot of their activities, maintenance
3 activities, to a private entity; but the way the permit
4 or the way the staff working proposal is written, it
5 would put the onus on the permittee outsourcing that
6 activity to go in and require retrofits of that private
7 development or the private facility. So we feel that
8 there should -- that's not appropriate and the
9 responsibility of the permittee and the retrofits that
10 are appropriate for that type of facility should be done
11 through the development review process.

12 We're asking for staff to provide for the
13 inventory sections -- there's been several references to
14 that. We're asking for the NAICS and SICs for clarity on
15 which facilities are applicable to that section.

16 We're asking to remove the Existing Development
17 for Retrofitting Opportunities. That section is pretty
18 problematic and, again, our written comments will discuss
19 why.

20 Additional Trash Management Practices: That
21 requirement, we're asking to again to be removed. That
22 undermines the point of a trash TMDL. If a reach was
23 found not to be impaired for trash, then why are we, you
24 know, requiring retrofits, and there's not sufficient
25 off-ramps to suggest alternate options.

0311

1 So, for example, in the city of
2 Westlake Village, there is three primary sections.
3 Two-thirds of that city is not applicable to a trash TMDL
4 because there's no impairment, but we do a lot of
5 alternate activities such as daily drive-bys and pick up
6 trash in the gutters, so on and so forth. There's a lot
7 of different programs that we do. But then the upper
8 one-third is subjected to a trash TMDL because it drains
9 to an alternate water body. So we're putting in a BMP,
10 our structural retrofits on the catch basin inlets.
11 That's at the cost of \$150,000 for a third of the city.
12 We're going to have to duplicate that for the other
13 two-thirds.

14 And then the last point there, the infiltration
15 of sanitary sewer to the MS4 as preventive maintenance,
16 we're asking that section to be removed because SSO
17 regulations will already adjust that.

18 The L.A. Permit Group requests the proposed
19 Nonstormwater Outfall Monitoring Program to be a part of
20 the Integrated Watershed Monitoring Program. There is
21 ample dry weather monitoring in the TMDLs to address the
22 Nonstormwater Outfall-Based Monitoring Programs. We ask
23 for a definition of "outfall" for clarity. Outfall, for
24 the purpose of Nonstormwater Outfall Based Monitoring
25 Program, should be defined as major outfalls 30 inches or

0312

1 greater, pursuant to Clean Water Act 40 CFR 122.26.

2 So the major themes that we wanted to capture
3 here is that, again, provide the requirement and allow
4 the permittees flexibility maybe through alternate plans
5 that weren't discussed today, you know, to implement the
6 objective; and we're asking for the necessary time to
7 comply with the requirements. That wasn't really spelled
8 out in this staff working proposal. I guess that detail
9 will come later, but we'd ask that you take into
10 consideration the time that some of these requirements
11 will take, that they're subjected to a budgeting process
12 as far as contracting agreements and stakeholder
13 involvement.

14 Requirements should be based on clear nexus to
15 water quality benefits. Infiltration is a water supply
16 benefit, not a water quality benefit, and we ask you to
17 consider the cost to comply.

18 Thank you.

19 MS. MEHRANIAN: Thank you. This was the last card.
20 I think we can have a little bit of time for Board
21 members to question, comments.

22 MS. GLICKFELD: Is it possible that the staff may
23 want to respond to some of the testimony and help us a
24 little bit? Is that possible, Madam Chair?

25 MS. MEHRANIAN: Sure. And I had a question of --

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1 overall, I thought there was a lot that was said by
2 different stakeholders, environmental community. The
3 staff made a presentation and it's very important to
4 somehow synthesize this information because we've heard a
5 lot and somehow we are wanting to understand in our mind,
6 or I am -- I don't want to speak on everybody's behalf --
7 that we moved to the issue. We moved from point A to
8 point B; we summarized the issues that have been agreed
9 on, and issues that are still standing and somehow
10 conceptualize them and -- so that we can move to the next
11 level of -- or next step or next place. So I don't know.

12 The time's not here now. I know that it
13 requires work, but I just would want to get your reaction
14 to this comment and also anything else that you have to
15 say right now.

16 MS. PURDY: Well, this is Renee Purdy again, and the
17 one thing that I wanted to point out, and there might be
18 other things that Ivar would like to add, but one thing
19 that we did hear in some of the comments that were just
20 provided on the minimum control measures were some things
21 about simplifying, allowing flexibility to customize
22 those given limited resources, and I just want to
23 emphasize again -- and a couple people mentioned that
24 diagram that I put up in the beginning of my
25 presentation -- that that is really our intention.

0314

1 Sometimes there is a downside to putting some
2 working proposals out because you don't get to see the
3 whole before you see some of the detailed parts, and one
4 of the things that we very much intend to do, as Ivar
5 mentioned as well, is allow permittees the option and the
6 flexibility to tailor some of these measures to address
7 their watershed priorities.

8 So I saw one slide where there was MCMs plus
9 TMDLs, but they're really not additive. Many of the
10 requirements under the MCMs, the minimum control
11 measures, can be used to achieve TMDLs. There'll be a
12 significant amount of overlap between those. So I just
13 wanted to -- I think that's a good thing to point out at
14 the end of the day here, that there is a very significant
15 part of the permit that you haven't had the chance to see
16 yet, which is the part that will really bring this all
17 together that we're referring to as the Watershed
18 Management Programs that will give permittees the option
19 to really look at all of these requirements and
20 prioritize, sequence things, customize things to address
21 their priorities in the most cost-effective way and in a
22 coordinated way on a watershed basis. So that's one
23 thing I wanted to say.

24 The other thing that I did want to say with
25 regard to the minimum control measures is that there were

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1 some comments made about some of the minimum control
2 measures and that maybe they shouldn't be included.
3 These control measures are all, again, stemming directly
4 from EPA's storm water regulations and the elements that
5 EPA stipulated should be in a Municipalities Management
6 Program.

7 So I think that's -- those are the two
8 big-picture things that I want to leave you with.

9 I don't know if Ivar would like to add anything
10 specific.

11 MR. RIDGEWAY: Hi. Ivar Ridgeway, Stormwater
12 Permitting Unit again.

13 Just two things I'd like to point out about the
14 minimum control measures in particular, the low impact
15 development requirement.

16 When we heard comments about it compared to
17 Ventura, the Technical Guidance Manual is almost an inch

18 and a half, two inches thick and took a year to approve
19 and quite a bit of the specificity that people are
20 complaining about now, it's in -- the difference between
21 the Ventura permit and what staff have put in the
22 proposal is that that Technical Guidance Manual in
23 Ventura contains the specificity, and just this time
24 around we're putting that up-front. So it's -- you see
25 it at the beginning. People see it as part of the permit

0316

1 process.

2 Another issue for the Ventura I'd like to point
3 out, too, is that for off-site mitigation, there was a
4 requirement that's not in the staff's L.A. MS4 permit,
5 this draft. There is a requirement for an infected and
6 impervious area and if you trip the threshold there in
7 Ventura, that off-site mitigation wasn't done on a
8 one-to-one. You have to do that off-site mitigation at
9 one and a half times the volume that wasn't required
10 off-site. To me, I see a lot of similarities with
11 Ventura. It is different, but at the core of it, I think
12 at the flexibility it seems very similar to me.

13 MR. UNGER: Can I add one thing to what Ivar is
14 saying? I think I'd like to put this in the context of
15 essentially just the length and number of requirements
16 that are in this section of the permit, you know.

17 So what you've heard really is there's a lot of
18 commonality and there's a lot of things you didn't hear
19 at all in terms of there was a lot of agreement to what's
20 in there. These requirements have been in place for ten
21 years in L.A., if not longer, these types of
22 requirements; and the changes that we're making are
23 relatively minor with the overall -- if you put it in the
24 context of the overall, I guess, number of requirements
25 that are in this section of the permit.

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1 I think some things that I heard from a
2 big-picture standpoint that we really need to be very
3 sensitive to is sort of this issue of shifting
4 responsibility. I think we have to look at what we've
5 done in terms of that. I think that's been very helpful
6 to hear that for staff today. It is one issue.

7 Another issue, too, which we didn't really have
8 much in the Ventura permit is the fact that some cities
9 here have their own yards. Others are contract cities
10 and things like that.

11 I think, from a big-picture standpoint, there
12 were some very good comments that were made, I think.
13 But overall, I mean, I think we have a pretty strong
14 basis from which to work at this point. I don't know if
15 I've missed anything from the big-picture standpoint, but
16 I think we're going to go back and we're going to look at
17 those requirements. Of course, the LID requirements as
18 well. There's a huge difference of opinion there I think
19 between some of the commentators there.

20 So those are the three things I think that we
21 really need to look back at what we have right now in our
22 permit. We're going to need to get the detailed comments
23 of course and look at things, but we have to look through
24 those filters, if you will, contract city versus large
25 city, and this transfer of responsibility, I think, is

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1 sort of a big issue as well.

2 MS. MEHRANIAN: Go ahead.

3 MR. UNGER: I don't know if that helps.

4 MS. CAMACHO: No. You just answered or just
5 responded to two of the questions or comments I was going
6 to make, so I'm good. Thank you.

7 MS. GLICKFELD: Well, I want to thank everybody. I
8 still think, you know, we can't make play dates for you,
9 but you really do need to sit down and talk to each other
10 and, you know, I'm going to be very frank. There's
11 some -- there's a good deal of cynicism here and maybe
12 I'm being very Pollyanna-ish.

13 This permit has gone to court over and over and
14 over again and it's been very controversial and there's a
15 long history of people litigating this not only on
16 this -- on the Board's side, but on the stakeholders'
17 side.

18 So I am hoping that by extending the time that
19 we did for this permit, not only for us to hear about
20 this, but for you to have a chance to talk to us, that
21 really, it became completely evident to me that there's
22 no way, even if we held workshops from early in the
23 morning until midnight, would we be able, in this forum,
24 to fix the problems that you're asking to be fixed. You
25 have to fix them together, not only you with our staff,

0319

1 but you with each other.

2 I'm convinced that we can't come up with the
3 really best solutions for you that the stakeholders and
4 the environmental community, in the development community
5 and the industrial community, in the County, the County
6 Flood District and the cities need to be interacting
7 together with our staff and we can't make that happen.
8 We can just suggest it's a really good idea for it to
9 happen.

10 So with that, I wanted to just raise some issues
11 with you. You don't have to -- and some of them are
12 questions that I don't really need to have answered, but
13 I'd like to have all of you sort of think about them,
14 which is something -- this is my first permit in L.A.
15 County. So I actually can't -- when I'm looking at what
16 you're drafting, I can't see what was already in there
17 the last round versus what's in there now, but it just
18 seems to me that what we're trying to do is work off
19 amending the existing permit when we haven't really in
20 any way gotten a "buy" into an overall concept of how
21 we're regulating and how all these pieces fit together.

22 And so I heard Renee say that we'll get there, but I hope
23 we don't get too buried in the details before we realize
24 what the whole piece looks like and how it provides the
25 flexibility that we need.

0320

1 I don't understand why industrial controls are
2 in here when we already have industrial NPDES permits. I
3 don't understand what the industrial permittees have to
4 do with that when we already have that in our regulatory
5 system.

6 And I think, Sam, you're right. You heard right
7 when you heard I don't know why in the world the
8 permittees would have to take over the enforcement of
9 those permits. Those are our permits.

10 Same thing, I don't understand why we have a
11 separate Development and Construction Program. There may
12 be good reasons for it, but I don't understand why we
13 have that when we already have a Construction Permit
14 Program at the Board.

15 So I think that we have to really be able to
16 explain to each other and explain to the stakeholders why
17 we're doing what we're doing here and not just assume
18 that we're adding something incremental on to the prior
19 permit, because we're all looking at -- I'm looking at
20 this. The only person that's looking at this up here as
21 a historical thing is Fran and the rest of us are, you
22 could consider, brand-new and I would guess a lot of the
23 people out there are brand new, too.

24 So here I'm going to get very controversial.
25 I'm concerned that, first of all, we don't have a

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1 principal permittee here -- I really wish the Flood
2 Control District and County Public Works was the
3 principal permittee -- and that there are a lot of
4 databases, plans, hydromodification plans, erosion
5 control plans, monitoring.

6 There's tons of stuff here and I'm worried about
7 the 35,000-and-under cities and how they're going to do
8 this. Yeah, you can put them into watershed groups; but
9 if they're in watershed groups of all small cities, who's
10 going to be -- who's going to organize this stuff for
11 them? Who's going to provide the support for them?

12 And I would hope that you could engage with the
13 County. If they're not going to be the principal
14 permittee, maybe they could take on the role of being the
15 database holder and the database creator and develop a
16 Lakewood plan of databases for the County of Los Angeles.
17 I hope that would be an option open to us because I just
18 see it as being incredibly problematic that for all the
19 soft paperwork that we're creating here, there is no
20 single group that can come together.

21 Who knows? Maybe it's the L.A. Permit Group
22 that's going to do that, but I'm very concerned about
23 trying to find the economies of scales with the number of

24 different permits that we have here.

25 I'm not completely sold that LID is the be all
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1 and end all that the environmental community and the
2 staff seem to think it is. We have a county that is --
3 especially in the southeast end of the county, it's very
4 developed. It's very slow development. You could have a
5 street that's ten miles long or a mile long with a
6 thousand houses along it and have very little turnover in
7 that. So if we completely rely on LID, a lot of nothing
8 is going to happen except a lot of ordinances. So I want
9 to know why there isn't a way to make LID one option in
10 areas that really will be seeing a lot of development in
11 a nondevelopment, and then have a focused -- green street
12 focus be an option for cities to pick where they're not
13 going to see that and they have to figure out the
14 financing for that or where they provide retrofits, they
15 provide rain barrels in the areas that they're not going
16 to be doing a lot of development.

17 So I think we need to provide a host of
18 different opportunities for cities that are very
19 different. Some of them are at the top of the watershed;
20 they can do source control. Some of them are at the
21 bottom of the watershed and they couldn't do that. Some
22 cities are going to infiltrate where it's going to be
23 possible to add to the water supply. Some cities don't
24 have the possibility of infiltrating. Others infiltrate
25 to someplace it's going to take a hundred years to get

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1 into the groundwater basin.

2 So I think we have to be able to somehow capture
3 that variability.

4 I really appreciate, Ivar, that you're trying to
5 make the LID stuff transparent by pulling the stuff from
6 the Technical Manual into the permit, but it's so
7 detailed and so prescriptive that once we get it all
8 there, can we put it back into a Technical Manual
9 afterwards? So good, let's talk about it now so that
10 it's all open, but I don't think all that detail belongs
11 in the permit.

12 So I think that those cover my main comments. I
13 really want to see -- you know, trying to figure out how
14 we can do what the cities are talking about in terms of
15 incorporating the storm water outfall monitoring into the
16 watershed monitoring network, let's figure out how to do
17 all the monitoring in one sense. I'd like to hear what
18 you have to say about Shahram's proposal for a
19 conceptual concept of how this permit ought to work and I
20 would hope the cities and the County would also look at
21 that as a way to organize the permit. I think it's an
22 example. It may not be the only example, but it would
23 really help to have that kind of a high-level
24 understanding of how this permit is going to work. It
25 might be something that people could actually gain

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1 consensus on.

2 So those are my comments.

3 MR. UNGER: May I just respond to the very last one,
4 which is the probably the highest level detail of all the
5 comments heard today, that you'll be hearing about it at
6 the next workshop in terms of what we plan to do there.

7 MS. GLICKFELD: Great.

8 MR. UNGER: We have a lot of ideas and we've been
9 meeting with Shahram regularly.

10 MS. SMITH: I also wanted to take the opportunity to
11 mention very slightly, because we don't have much time,
12 but our retrofitting incentive that we have in the permit
13 is exactly for the some of the stuff that you talked
14 about to incentivize green streets.

15 MS. GLICKFELD: But they have to do the LID as a
16 basis and it may not -- I'm questioning, and I might be
17 wrong. I'm questioning whether LID is going to be very
18 helpful for all of these cities and whether or not they
19 might want to be able to take another route. Maybe the
20 idea is to treat and infiltrate the water in the street
21 as opposed to on the site. I know that is heretical and
22 I'm going to get hate mail on this, but I just think that
23 that's something we ought to think about.

24 MS. SMITH: That's what we're thinking about, too.

25 MS. DIAMOND: I'm not going to take a lot of time.

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1 Having sat through the other permit ten years
2 ago, I do have a historical perspective and the
3 perspective that I bring to it is that what we're -- what
4 I see coming forward and what I'm looking for is that we
5 are moving to the next level, as I think the Clean Water
6 Act envisions; that when we go to the next permit five
7 years ago, it was supposed to be a new permit, but here
8 we are at ten years, that we certainly should be going to
9 the next level; and I think I've seen a lot of good work
10 that indicates to me that we are and a lot of good
11 comments to me today that indicates that there are some
12 misunderstandings or there are maybe some things that we
13 need to look at, wrinkles to make sure that this is going
14 to work and that people are going to be able to take it
15 to the next limit.

16 But I want to get back to what we talked about
17 before. That was the idea of water reuse and there was
18 some people today that talked about this isn't a -- this
19 is a Stormwater Permit; it's not a Groundwater Permit.
20 But to take it to the next level, the State policy
21 already envisions that groundwater and -- that water
22 supply and water quality are -- there's a nexus and that
23 they're integrated. We're talking about an integrated
24 water approach. Our water has to be integrated because
25 we can't afford, down here in Southern California, to

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1 have separate groundwater thinking and separate storm

2 water thinking.

3 Most of the water we have here in our region is
4 storm water and urban runoff and so -- and we can't
5 afford to get more water. It costs more than twice as
6 much as our own local supplies if it's -- if our own
7 local supply obviously is very contam- -- some of it's
8 very contaminated.

9 So we need to be able to do what we can to
10 infiltrate our storm water, our rainwater, to harvest our
11 rainwater and to acknowledge, in this permit, the
12 interconnection between storm water and groundwater.
13 This is how we've operated, actually, with our TMDLs and
14 at this Regional Board. And as I said, it's State Board
15 policy and we need to continue to move in that direction
16 as much as possible because we can't afford to think of
17 it. We do have one water. We don't have separate
18 groundwater, separate storm water. It's all integrated
19 and I just want to acknowledge that that's where we've
20 been going and that's where we need to continue to go as
21 we reuse and acknowledge the interconnection of this
22 integrated water that we have here.

23 MS. MEHRANIAN: Thank you.

24 MS. MUNOZ: I think what I need to do is to find out
25 what worked on the last permit that we approved, what

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1 could be better, and what definitely did not work and how
2 we can improve on it, unless that already happened and I
3 was asleep at the wheel. But it just seems to me that --
4 I really agreed with what my colleague Madelyn said
5 about, you know, the cities are different, they have
6 different resources, if you're on top of the watershed or
7 the bottom of the watershed, issues that beach cities
8 have versus inland cities. I know many cities were or
9 still may be on the brink of bankruptcy. You know, how
10 do we handle that, those financial things? And what
11 educational programs do we put together as a whole?

12 I still do believe -- you're talking about
13 someone who has been in many wars and battles regarding
14 environmental inequity and racism and whatnot, but I've
15 had many opportunities to sit down with those people who
16 caused all that to try to find out what common goals we
17 have so we can make things better.

18 And so as Madelyn stated, I do want to strongly
19 encourage the staff to figure out how you can get all the
20 parties together to figure out some of the answers to
21 some of the dilemmas that we have before us, because it
22 would make our jobs a lot easier. I mean, a lot of it is
23 up to you to figure out what you have in common because I
24 think if you sat down at the table, you can figure out
25 certain things that you'd have in common and from there,

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1 hopefully start working in a more partnership,
2 collaborative manner.

3 MS. MEHRANIAN: Thank you. I just had one little

4 comment that at the end of the hearing, I am at a point
5 where I do think that although there is a lot in common,
6 there's a lot that has to be worked out.

7 I'm a little concerned with how we're all going
8 to come together. I'm a little concerned. There is
9 differences of methodology of how we're doing this and I
10 was hoping that, you know, we could move this from here
11 to another step where there is maybe a few local and a
12 few regional solutions that can help us, you know, bring
13 this together. Maybe there is, but today after hearing
14 all this, although I see a lot of common ground, I do see
15 that, you know, on certain issues we are far apart and
16 the cities have their unique situations and it needs to
17 be worked out.

18 I just see that there's a lot more work that
19 needs to be done for us to do this in a way that it
20 really helps the water quality and it's not something
21 that we come together, we develop, and then, you know, we
22 have a lawsuit filed against it and it gets hung up and
23 nothing ever gets implemented, which is -- that's the
24 frustration that I see happens over and over again. We
25 can work out the best permits, but if it's not going to
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1 be implemented and it's not going to have a smooth, you
2 know, way of getting done, it's going to be a problem.

3 So I encourage and I encourage all the parties
4 to pinpoint the most important things that they think
5 creates the difference and try to bring things a little
6 closer, and let's agree on things that are common and
7 really work towards the differences of methodology and an
8 overall view of the world.

9 So that's what I -- I don't know if I resolved
10 anything or made it a little harder, but I do see that
11 and I do have a little bit of concern.

12 Anything else? It's 6:30.

13 MR. UNGER: I think we're done.

14 MS. GLICKFELD: Congratulate everyone who stayed.

15 MS. MEHRANIAN: Yes. Thank you.

16 Okay. We're adjourned then.

17 (Proceedings concluded at 6:35 p.m.)
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April 12, 2012

Renee Purdy
Regional Programs Section
LA Regional Water Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Via email: rpurdy@waterboards.ca.gov; iridgeway@waterboards.ca.gov

Re: Staff Working Proposal on LA County MS4 Permit (Minimum Control Measures)

Dear Ms. Purdy,

On behalf of Heal the Bay, I submit the following comments and questions regarding the Staff Working Proposal on LA County MS4 Permit (Minimum Control Measures) dated March 21, 2012 ("Staff Proposal"). We appreciate the opportunity to provide comments.

Planning and Land Development Program

Applicability

- The Staff Proposal sets thresholds of 5,000 and 10,000 square feet, depending on the type of development, for new and redevelopment projects that would be included under the Planning and Land Development Program requirements. We urge the Regional Board to modify this threshold to include smaller projects. The City of Los Angeles recently adopted a Low Impact Development Ordinance that establishes that the creation, addition or replacement of **500 square feet** or more triggers requirements. In order to meet the stated purpose of this section and significantly improve water quality, the Regional Board should include all development and redevelopment projects 500 square feet or more.
- The Staff Proposal states that streets, roads, highways and freeway construction of 10,000 square feet or more of impervious surfaces must follow the USEPA Green Streets guidance. In addition, we urge the Regional Board to establish a trigger for when road and alley projects are required to implement post-construction BMPs. Perhaps a certain monetary threshold could trigger this requirement. As an example, the City of Santa Monica recently adopted a Low Impact Development Ordinance that includes the following:



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“Any municipal street, road and alley re-construction project of \$500,000 or more of construction costs, excluding repaving projects of existing roads, shall implement post-construction BMPs for green transportation infrastructure.”

- The Staff Proposal specifies that Newhall Ranch Project Phases I and II will be subject to WDR requirements (yet to be adopted) and not MS4 requirements. Instead the Regional Board should ensure that all phases of the Newhall development meet, *at a minimum*, the MS4’s Planning and Land Development Program requirements, BMP performance criteria requirements and Hydromodification Control Criteria. The WDRs should include requirements that are as strict as the MS4, if not greater.

Performance Criteria

- We strongly support the proposal to require the project to retain on-site the entire Stormwater Quality Design Volume (.75 inch rain event or 85th percentile, whichever is greater), with a prioritization for infiltration, bioretention and/or rainfall harvest and use. This requirement has proven feasible and is consistent with recent local LID ordinances.

We urge the Regional Board to eliminate biofiltration (BMPs with underdrains) as an option for compliance with the Program. Biofiltration does not provide the same water quality and water supply benefits as traditional LID strategies (infiltration, capture for use). If the Regional Board does move forward with the option of biofiltration in cases of infeasibility, it is critical that a multiplier (minimum of 1.5) be used for the treated volume. If the permittee cannot demonstrate that equivalent pollution reduction is met with this volume of water, then a larger multiplier should be required to obtain the same water quality benefit. Blanket claims that biofiltration practices that treat 1.5 times the amount of stormwater volume required to be retained onsite will, as a matter of course, achieve equivalent pollutant load reduction are unfounded. If biofiltration is pursued, the adequate volume to achieve equivalent pollutant load reduction should be determined on a site-by-site basis with proper analysis conducted by a registered professional engineer, geologist, architect, and/or landscape architect.

- Why is biofiltration allowed under retrofit scenarios? If this off-ramp is pursued, traditional LID strategies should be employed.
- The Staff Proposal allows for regional groundwater replenishment opportunities in lieu of onsite requirements, when such a project has been determined to provide an opportunity to replenish groundwater supplies equivalent to or greater than the SWQD and provide equivalent water quality benefits. (Page 25). We strongly support stormwater capture and groundwater replenishment projects. However as this is a water quality permit, the Regional Board must maintain as a top priority that water quality is being improved to the MEP. Once a project is developed, the chances that a retrofit will occur at a later point are very slim. In other words, the potential water quality benefit at this site will not be realized. This is a downside to allowing for alternative groundwater replenishment



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projects. The Regional Board must be certain that the water quality benefit of the proposed project would provide equal or greater water quality benefit.

- Appropriately, the Staff Proposal requires justification for utilizing alternative compliance measures to replenish groundwater at an offsite location. (Page 27). The Staff Proposal should also specify that any offsite project proposal should not be already planned for this purpose. In other words, the Permit should be driving *new* water quality improvement and groundwater recharge possibilities.
- We support the proposal that requires permittees establish local ordinances that address requirements for harvested rainwater, in order to facilitate more projects to move forward. The ordinances should consider both indoor and outdoor non-potable uses. We urge the Regional Board to also consider the applicability of the recently adopted County of Los Angeles Public Health *Guidelines for Harvesting Rainwater, Stormwater, & Urban Runoff for Outdoor Non-Potable Uses, September 2011*.
- The Table on page 25 should clarify that any volume of water (up to the Stormwater Quality Design Volume) that is feasible to be retained on-site should be retained on-site. In other words if any percentage of the SQDV is deemed feasible for on-site retention, then this volume should be retained onsite while the remaining volume is handled in an alternative project. This is somewhat unclear under the “Medium Preferred Options.”
- The Staff Proposal provides the opportunity to consider offsite locations outside of the HUC-12 but within the HUC-10 if there are no opportunities within the HUC-12 or if greater pollutant reductions and/or groundwater replenishment can be achieved at the location within the HUC-10 (Page 28). In order to improve water quality in the reach that is impacted by the project, it is important to keep any offsite project in the same sub-watershed. If the project proponent proposes to do a project within the HUC-10 instead, the Regional Board should require that a 1.5 multiplier be used for the volumes retained. In no case should biofiltration be an option if the project proponent does a project outside of the HUC-12.

Water Quality Mitigation Criteria

- We strongly support the proposal to require treatment of stormwater runoff from the project site, even in cases where offsite projects are pursued. (Page 30). The Staff Proposal should specify that the SQDV be treated.
- The Staff Proposal includes “benchmarks” that are applicable to the new development treatment BMPs. How did staff develop these numbers? We support the concept of BMP performance standards; however, the proposed benchmarks are way too high. As a point of comparison, it is useful to look at the Treatment BMP Performance Standards that were included in the Ventura County MS4 Permit. The TSS range for the actual performance of BMPs (median) is 10-27 mg/l. However, the proposed benchmark is 100



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mg/l. In fact, all of the proposed benchmarks are much greater than the ranges for actual BMP performance. This large difference is not justified.

We support the inclusion of performance standards for additional parameters such as pyrethroids, bacteria and trash.

How does the Regional Board plan to include BMP performance standards for all BMPs implemented to comply with provisions of the permit? As you know, BMP performance standards are included in the Ventura MS4.

Hydromodification Control Criteria

- The Staff Proposal calls for maintaining the project's "pre-project" stormwater runoff flow rates and duration. Instead the Regional Board should require the "pre-development" runoff flow rates and duration, as the existing development may be contributing to hydromodification.

Implementation

- The Staff Proposal includes a "Local Ordinance Equivalence" provision to grandfather in those municipalities with existing LID ordinances. As proposed, the Executive Officer would determine equivalency. This provision is concerning since the LID requirements are a core program under the MS4 and contain a quantitative requirement (retain 100% of the SQDV). It is critical that existing ordinances implement that same or more stringent quantitative requirement and lead to the same water quality benefits.
- We strongly support the proposal to require an operation and maintenance plan and verification of ongoing maintenance provisions for LID practices, Treatment Control BMPs, and Hydromodification Control BMPs. (Page 38). We also strongly support a tracking, inspection and enforcement program for Post-Construction BMPs.

Retrofit

- Although retention and/or capture BMPs are required for new and redevelopment, the current rate of redevelopment will not address water quality problems in a timely manner. Retrofit is necessary to address storm water discharges from existing development that may cause or contribute to a condition of pollution or a violation of water quality standards.
- We strongly support including retrofit requirements in the permit; however, staff's proposal needs to establish retrofit project requirements for the permittees. Appropriately, the proposed retrofit section requires an identification and ranking of potential retrofit projects. However simply asking the permittees to "consider" the results of the ranking in their reasonable assurance programs and off-site mitigation projects



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does not move the ball forward sufficiently on retrofit. Under the current provisions, we could potentially see no retrofit projects happen during this permit cycle.

Specifically, the Regional Board should require that the permittees design a program that treats a specified design storm volume generated in each subdrainage using identified retrofit projects or regional BMPs. Onsite retention should be prioritized over treat and release BMPs for this program.

In addition the Regional Board should require the permittees create a pilot retrofit program that implements at least 5 retrofit projects in each watershed. The permittees should provide project specifications and demonstrate that 1) the project reduces reliance on potable water demand and 2) the project infiltrates or captures for reuse a minimum specified volume storm water. The permittees should conduct appropriate monitoring of these projects to document the water quality benefits achieved.

Miscellaneous

- The inspection schedules require a frequency that is within the “5-year term of the Order.” (Page 11). As this permit is more than five years overdue, the Regional Board should ensure that inspections continue even if the permit is administratively extended.
- The Staff Proposal requires that industrial operators discharging to ESAs implement additional pollutant-specific controls. (Page 18). The Regional Board should also include these additional requirements for discharges draining to 303(d) listed waterbodies.
- Page 27 states that seasonal high groundwater within 5 to 10 feet of the surface may lead to technical infeasibility. Instead this should be within 10 feet or more.

Thank you for your consideration of these comments. Please let me know if you have any questions.

Sincerely,

Kirsten James
Director of Water Quality



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

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April 12, 2012

IN REPLY PLEASE
REFER TO FILE: WM-9

Ms. Renee Purdy, Chief
California Regional Water Quality
Control Board – Los Angeles Region
Regional Programs Section
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Dear Ms. Purdy:

COUNTY OF LOS ANGELES COMMENTS STAFF WORKING PROPOSAL ON MINIMUM CONTROL MEASURES

On behalf of the County of Los Angeles, thank you for the opportunity to comment on the draft working proposal for Minimum Control Measures released on March 21, 2012. Enclosed are our comments for your review and consideration.

If you have any questions, please contact me at (626) 458-4300 or ghildeb@dpw.lacounty.gov or your staff may contact Ms. Angela George at (626) 458-4325 or ageorge@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works

GARY HILDEBRAND
Assistant Deputy Director
Watershed Management Division

AT:jtz

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Enc.

cc: Chief Executive Office (Dorothea Park)
County Counsel (Judith Fries)

County of Los Angeles Comments
 Staff Working Proposal on Minimum Control Measures

General			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1	Need definitions of terms used throughout the permit language	VI.C.1.c [page 2-3]	<p>The staff working proposal includes a limited set of definitions focused on the Planning and Land Development Program. There are various terms used through the remaining programs that are unclear or vague and need to be clearly defined.</p> <p><u>County Recommendation</u> Include definitions for terms used in all six programs. Specifically, include definitions for "outfall" (per 40 CFR 122.26), "construction" (same as in current permit definition, including that it does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility). "Progressive Enforcement Policy" is discussed in the Industrial/Commercial Facilities Program (pg. 18), but the term is used throughout the working proposal. Please clarify how the Progressive Enforcement Policy is intended to be used. Finally, delete the definition for Effective Impervious Area (EIA) as it is not used within the working proposal.</p>
2	Regulatory responsibility	General	<p>Parts of the minimum control measures appear to require permittees to undertake actions that should be the responsibility of the State Water Board or Regional Board. For example, VI.C.7.d.i. & ii., or Part VI.C.7.d.ii.(b) No Exposure Verification should be done by State Water Board or Regional Board staff, because it is the State Water Board that issues certificates of no exposure.</p>

County of Los Angeles Comments
 Staff Working Proposal on Minimum Control Measures

General			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
3	Significant increase in requirements	General	<p>Based on our review, implementation of the proposed minimum control measures program would be significantly more labor and resource intensive than that for the current LA County MS4 Permit and the Ventura County MS4 Permit. At the same time, it is not clear in many instances what water quality improvement would result from implementing the requirements. For example, the proposal requires an detailed inventory of public facilities that would be very resource intensive; however, the intent of this exercise is not clear or how the information would be used.</p> <p>Based on discussions with staff, it appears that some of this is a matter of language interpretation. We would welcome additional meetings with staff to fully understand staff's intent behind the requirements and to assist in crafting language that more clearly reflects staff's intent.</p>

County of Los Angeles Comments
 Staff Working Proposal on Minimum Control Measures

Legal Authority			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1	Quality of stormwater discharged	VI.C.2.a.i [page 4]	<p>The phrase "and control the quality of stormwater discharged from industrial and construction sites" is vague and extraneous.</p> <p><u>County Recommendation</u> Delete this phrase and keep the rest of the sentence. The sentence should read as follows: "Control the contribution of pollutants to its MS4 from stormwater discharges associated with industrial and construction activity."</p>
2	Interagency Agreements	VI.C.2.vii & viii [page 4]	<p>Requiring Permittees to enter into agreements with other agencies is not feasible since Permittees cannot require each other to sign such agreements or agree to take on liability as part of such agreements. Further, "shared MS4" may not be the most suitable language for these items.</p> <p><u>County Recommendation</u> Delete parts vii. and viii. We'd also welcome a meeting to discuss this (and other) issues. Replace the words "shared MS4" with "interconnected MS4".</p>
3	Structural BMPs	VI.C.2.a.xi and xii. [pages 4 - 5]	<p>These sections appear to make permittees responsible for making sure that not only public but also private structural BMPs are operable and maintained. Permittees' role with the operation and maintenance of private post-construction BMPs should be limited to high risk industrial and commercial facilities only. See comment 30 in the Planning and Land Development Program.</p>

County of Los Angeles Comments
 Staff Working Proposal on Minimum Control Measures

Fiscal Resources			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1	Budget line items	VI.C.3.b.ii [page 5]	<p>The intent of this section is not clear. Also, the phrase “budget line items” is vague and should be clarified or replaced. Depending on how the language is interpreted, this requirement can be potentially very problematic for permittees such as the County of LA whose budget is very complex.</p> <p><u>County Recommendation</u> Clarify the intent of this section. Replace “budget line items” with “program area”.</p>
2	Exercise full authority	VI.C.3.a [page 5]	<p>This section requires each Permittee to “exercise its full authority to secure the fiscal resources necessary to meet all requirements of this Order.” The phrase "exercise its full authority" is vague and should be clarified.</p> <p>Every municipality has a budget which must balance various needs including public health and safety. If a municipality determines that it cannot fully fund all aspects of the Permit’s requirements (and seeks relief from the RWQCB from those aspects), could it be found in violation of the Permit for not having exercised its full authority?</p>

County of Los Angeles Comments
 Staff Working Proposal on Minimum Control Measures

Public Information and Participation Program			
Comment #	Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
1	PIPP Implementation	VI.C.6.a.i. [page 6]	<p>This section requires that a PIPP must be implemented “that includes, but is not limited to, the requirements listed in this part.” (emphasis supplied.) This is problematic language, because it purports to state that a PIPP must include unspecified additional requirements that could be found wanting by the RWQCB or a court.</p> <p><u>County Recommendation</u> Modify to read “Each Permittee shall implement a Public Information and Participation Program (PIPP) that includes, but is not limited to <u>at a minimum</u>, the requirements listed in this part.”</p>
2	PIPP Implementation	VI.C.6.b.i.(1) [page 6]	<p>The County of Los Angeles recognizes the cost-effectiveness in participating in a collaborative and coordinated PIPP program, and supports a regional PIPP program as one of the options; however, the County does not have plans to sponsor a countywide PIPP.</p> <p><u>County Recommendation</u> Modify to read “By jointly implementing a regional PIPP program”</p>
3	Residential Outreach	VI.C.6.d.i [page 7]	<p>Same as comment 2.</p> <p><u>County Recommendation</u> Modify to read “Working in conjunction with a regional, watershed-wide, or individual PIPP...”</p>
4	Residential Outreach	VI.C.6.d.i.(3) [page 8]	<p>Same as comment 1.</p> <p><u>County Recommendation</u> Modify to read “Distribute activity specific stormwater pollution prevention public education materials to, but is not limited to <u>at a minimum</u>, the following points of purchase:”</p>

County of Los Angeles Comments
 Staff Working Proposal on Minimum Control Measures

Public Information and Participation Program			
Comment #	Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
5	Develop and Implement Program – Timeline	N/A	<p>If permittees choose to jointly participate in a regional or watershed-wide PIPP, this will take a minimum of 6 months to one year to set up by the time legal agreements and any contracts are developed, adopted and signed. The timeline must acknowledge the time it will take to form partnerships and coordinated multi-permittee programs. Implementation within the first permit year is too aggressive.</p> <p><u>County Recommendation</u> Allow permittees 18 months to develop and implement regional or watershed-wide PIPP.</p>

County of Los Angeles Comments
Staff Working Proposal on Minimum Control Measures

Industrial / Commercial Facilities Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
1	Track Critical Sources - Minimum fields of information	VI.C.7.b.ii.(6) [page 10]	<p>It is not clear what is meant by description of economic activities performed and principal products used.</p> <p><u>County Recommendation</u> Please clarify the intent of this language.</p>
2	Inspect Critical Sources	VI.C.7.d.i. [page 11-16]	<p>The working proposal limits the applicable BMPs to those from the CASQA handbook as listed in the tables. Provide flexibility to use other equivalent BMPs.</p> <p><u>County Recommendation</u> Revise to: "At each facility, inspectors shall verify that the operator is implementing the source control BMPs listed in Tables [TBD] and [TBD] <u>or other equivalent BMPs</u> for the corresponding facility type..."</p>
3	Progressive Enforcement	VI.C.7.e.iii.(1) [page 18]	<p>The current MS4 Permit requires follow up inspections to be conducted within 4 weeks of the initial inspection, whereas the working proposal required they be completed within 2 weeks. Four weeks is necessary due to the vast number of facilities required to be inspected by the County.</p> <p><u>County Recommendation</u> Revise to <u>4 weeks</u>.</p>
4	Investigation of complaints transmitted by Regional Board Staff	VI.C.7.f.iii. (footnote) [page 19]	<p><u>County Recommendation</u> Allow the initial investigation, including the site visit, to occur within four <u>five</u> business days.</p>

County of Los Angeles Comments
Staff Working Proposal on Minimum Control Measures

Planning and Land Development Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
Draft Permit VI.C.8 (pages 20-40)			
1	Existing ordinances	NA	Permittees that have adopted LID ordinances and corresponding technical documents should be allowed to implement those existing requirements.
2	Reference for drain time (72 hrs) to control vectors is not consistent with current State guidance	Page 21, 8.a.i(6)	Permit should reference current DHS BMP Vector Manual and 96 hr drain time recommendation. See: http://westnile.ca.gov/resources.php
3	Inconsistent criteria for projects subject to post construction BMP requirements.	Page 21, 8.b.i(1)	This provision establishes the scope of development projects subject to post construction controls. The criteria are inconsistent as sometimes the criterion is based on impervious area and other times it's based on surface area. Impervious area is a more accurate surrogate to use for establishing project eligibility and relevant to water quality issues.
4	Inappropriate terminology for project descriptions.	Page 21, 8.b.i(1)	The terms "industrial parks" and "commercial strip malls" are inconsistent with terminology normally used to describe development projects and will create confusion between the project developer and Permittees. Revise to read "industrial projects" and "commercial projects" to provide Permittees with flexibility to include broader coverage.
5	Freeways are covered under the Caltrans MS4 Permit.	Page 21, 8.b.i(1)(g)	County does not construct freeways and has no control over the Caltrans project development process. Delete the word 'freeways'
6	Clarification of redevelopment projects subject to post construction BMPs.	Page 22, 8.b.i(1)(i)	This provision needs to be clarified to remove ambiguity and confusion for the Permittees. Suggest that the term "Redevelopment projects in subject categories" be modified to read "Redevelopment projects in categories 'a through h' above"
7	SWQDv criteria	Page 24, 8.c.i(2)	This provision requires the permittees to select the most stringent SWQDv standard between two standards, a 0.75-inch 24-hour rain event and the 85th percentile 24-hour rain event. Clarify that <i>rainfall depth</i> for the 85th percentile 24-hour rain event is to be determined based on the isohyetal map prepared by the County of Los Angeles. If more than 0.75-inch, this rainfall depth is to be used to determine the SWQDv.

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Planning and Land Development Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
8	Reference to 72 hrs is inconsistent with current state guidance	Page 24, 8.c.i)(6)	See Comment No. 2
9	Use of green roofs is not practical on all buildings	Page 24, 8.c.i)(7)	There are a variety of issues to be considered when assessing the viability of green roofs. The structure type (wood frame is not a practical application), and building use are primary factors. Further, green roofs in the LA area will need irrigation. A water budget study and building type study should be performed to determine design guidelines prior to mandating large scale use.
10	Unnecessary BMP analysis	Page 24, 8.c.i)(7) and (8)	Provisions 7 and 8 imply that all projects must analyze green roofs and rain water harvests systems. Projects should only be required to provide this type of analysis if they cannot infiltrate in another fashion. Then they should analyze green roofs and rainwater harvest systems before moving into other alternatives such as biofiltration. Also it is not practical to analyze green roof systems at the tentative development phase of a project. This type of system requires detailed structural building plans and would have to be designed and reviewed at a building permit stage of development.

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Planning and Land Development Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
11	California Plumbing Code	Page 25 8.c.iii (8)	Current California Plumbing Code (CPC) adopted by the Building Standards Commission (BSC) is based on the 2009 Uniform Plumbing Code published by IAPMO, not the National Standard Plumbing Code published by PHCC. Also, Building Standards law dictate that no local jurisdiction can lesson any requirement adopted by the BSC. The CPC requires that all plumbing fixtures within the building be served by potable water (601.1 of the CPC). Potable water is defined as water that is satisfactory for drinking, culinary, or domestic purposes that meet the requirements of the California Department of Public Health (218.0 of the CPC). The exception to this is in the case of Non-Potable water systems in Non-Residential buildings, utilizing recycled water (treated to tertiary standards and meets statewide standards of California Department of Public Health) may be used for flushing urinals, water closets, and trap primers for floor drains and floor sinks (1613A.0 of the CPC). In order to introduce such an ordinance at the local level, the BSC would first need to adopt statewide building standards allowing for rainwater re-use systems within the building for the above listed purposes.
12	Alternative compliance process is difficult to follow and will be nearly impossible to administer.	Page 25, 26 and 27, 8.c.ii	The alternative compliance process provided in this working proposal is very complex and convoluted and will be difficult to administer consistently. Please streamline the process and simplify and clarify the language.
13	Impediments to regional groundwater replenishment projects	Pages 25 and 26	If the intent of the permit is allow offsite groundwater replenishment projects as equivalent to on-site retention then the requirement to treat all runoff before it goes to an offsite project is detrimental and unwarranted. As currently structured the project proponent must treat the runoff to a high standard (i.e. water quality objectives) before it can be used for offsite groundwater recharge projects. This will severely limit this "equivalent" alternative. Furthermore the regional groundwater replenishment projects should be limited to private projects unless the Permittee opts to develop public projects. Private projects are acceptable as long as mitigation was completed prior to project occupancy. (i.e. no cash in lieu funds, or project lists)

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Planning and Land Development Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
14	Inconsistency in the alternative compliance table	Page 25 and 26	The Medium Preferred Options presented in the table are unclear and confusing as currently presented. There also appears to be some overlap within the Medium Preferred Options and with the Most Preferred offsite regional groundwater recharge option (actually the two options appear to be exactly the same). The table could benefit from streamlining and simplification. Suggest that the medium preferred options be merged into one option and replaced with language similar to that utilized within the Ventura County NPDES MS4 Permit (R4-2010-0108): "Regardless of the methods through which Permittees allow project applicants to implement alternative compliance measures, the result must be at least the same level of water quality protection..." Or, staff may consider replacing the table with a flow chart.
15	Amendment of site soils to improve infiltration properties is not practical in the vast majority of cases. This is not a realistic alternative	Page 27, 8.c.ii(2)(a)	Site soils that have poor infiltration characteristics can not be amended to improve those characteristics for concentrated infiltration BMPs such as bioretention since lower strata soils will still impede infiltration. Eliminate as an alternative.
16	Definition of "smart growth and infill development"	Page 27, 8.c.ii(2)(f)	These terms need to be clearly defined otherwise there will be considerable confusion as to what qualifies as smart growth (e.g. walking trails)
17	If retention is used offsite, then on-site treatment should be waived	Page 27, 8.c.iii	A project that is retaining runoff at an offsite location in the same watershed should not have to also install treatment controls on-site since full treatment will be provided resulting in equal environmental benefit.
18	Equivalent SWQDv criteria	Page 28, 8.c.iii.(1)(c)	See Comment 7.
19	Off site projects - permittee discretion.	Page 28, 8.c.iii.(2) and (3)	Allow Permittees the discretion to chose whether they want to develop an offsite program alternative.

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Planning and Land Development Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
20	Definition of watershed and subwatershed	Page 28, 8.c.iii.(3)(b)	The Basin Plan (appendix 2) uses the terms "hydrologic unit, hydrologic area, and hydrologic subareas" not HUC-12 or HUC-10. Clarification should be provided to reconcile the different terms. We suggest that the permit use the "hydrologic area" is equivalent to HUC-12 hydrologic area.
21	Indicates that Permittees will oversee the construction of offsite projects for private development - risk to Permittee is unacceptable	Page 29, 8.c.iii(3)(f)	The Permittee cannot be expected to develop a program where the MS4 is responsible for ensuring completion of an offsite mitigation project. The bid climate, unforeseen site conditions and other events that impact construction costs place too much risk on the Permittee to ensure private development mitigation. Private developers may be able to secure an offsite location, but initial and long-term agreements will likely make this a rare case. This type of offsite mitigation is generally not feasible, and should not be relied upon as a viable alternative. Accordingly, the options listed in the Table on page 25 - 26 should be equivalent - not a hierarchy.
22	Time frame for third party petition.	Page 29, 8.c.iii(3)(g)	The schedule for third party petition of offsite projects or EO approval should not be open ended but limited to 30 days.
23	Equivalent SWQDv criteria	Page 30, 8.c.iii(4)	See Comment 7.
24	Projects that treat water offsite through retention, infiltration or use should not also have to treat water onsite.	Page 30, 8.c.iv	Revise to indicate that no onsite treatment is required

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Planning and Land Development Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
25	Cause or contribute to exceedance	Page 30-33, 8.c.iv	<p>Such requirements center on the treatment of stormwater runoff from the project site, including meeting either the pollutant specific benchmarks set forth in the attached table or “ensure that the discharge does not cause or contribute to an exceedance of water quality standards at the Permittee’s downstream MS4 outfall.”</p> <p>We have some concerns with respect to the second requirement. The requirement not to cause or contribute to exceedance of a water quality standard is not contained in the CWA, which only requires permittees to effectively prevent non-stormwater discharges to the MS4 and to take steps to the MEP to address pollutants in discharges from the MS4. Additionally, more clarity is needed on the meaning of “Permittee’s downstream MS4 outfall” and "cause or contribute to".</p>
26	Benchmarks for treatment control BMP performance are unsubstantiated.	Page 31, 8.c.iv.(1)(a)	<p>There are no non-infiltration based BMPs that can reliably achieve sanitary quality and pesticide bench-mark limits 100 percent of the time. Treatment BMPs are not a practical method for the removal of pesticides. Source control of pesticides is by far superior to treatment. The requirements described in this section will place an impractical risk on the developer and the MS4. Monitoring of BMPs by developers will not be an effective use of funds. Pesticides that cause receiving water toxicity must be controlled at the source (such as was done with diazinon).</p>

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Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
27	Inappropriate development of BMP performance standards	Page 31, 8.c.iv(2)	This provision is essentially establishing water quality based effluent limits for treatment control BMPs. Furthermore the effluent limits are in fact water quality objectives. There a number of reason why this is inappropriate. To begin with, the current knowledge of BMP performance is limited to establishing technology based performance standard. This is the concept that is imbedded in the Ventura permit and has technical basis for its inclusion. Second the direct application of water quality objectives to the end of pipe effluent quality as shown in the Table on page 31 and 32 does not account for the conditions in the receiving water. When WQBELs are established for wastewater plant, the derivation is based on the receiving water conditions that may allow for dilution/mixing zone, site specific objectives, hardness adjustment, etc. And finally as noted in comment #26 we are unaware of any BMPs that can meet the benchmark levels. This is because in some case we have no performance data (e.g. pyrethroids) and other cases there is no BMPs of the public domain type that can meet the objective (e.g. bacteria).
28	Unreasonable expectations for maintenance agreements	Page 38, 8.d.iii(1)	Requiring maintenance agreements for all LID practices is unrealistic and not commensurate with water quality improvement. Most LID strategies will be implemented at the site level (including individual residents) and to require homeowners to enter into maintenance agreements for their LID practices is impractical and a huge cost implications. Rather the maintenance agreements should be limited regional facilities and/or treatment control BMPs.
29	Inspection of BMPs	Page 40, 8.d.iv(1)(c,d)	BMP inspection based on a fixed time interval is arbitrary and poor use of resources. The Permittee should prioritize inspection based on previous inspection history. Private parties should be allowed the same flexibility if inspection is completed by a certified 3rd party.

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Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
30	Post Construction BMPs O&M	Page 40 8.d. iv(d)	"The Permittee shall require annual reports by the other parties demonstrating proper maintenance and operations" This proposed language is not practical and is difficult to enforce on private property owners. As an alternative we recommend that private property owners should maintain their records on site, and make them available upon request.

Attachment TBD Bioretention/Biofiltration Design Criteria (pages 74-82)			
1	Biofiltration/Bioretention Design Criteria: provide as guidance	Pages 74 - 79	The specificity of the Biofiltration/Bioretention Criteria should be provided as guidance. The permittees should not be required to adopt the criteria as stated in the attachment. Permittees should be given the ability to adopt guidelines and standards appropriate to the Los Angeles region and reflect the most up-to-date understanding of bioretention/biofiltration pollutant removal effectiveness. Specifications provided as guidance versus a hard and fast requirement will allow for continued experimentation and innovation. The guidelines issued via the Ventura TGM and Bay Area MRP are not yet a year old and it can be expected that these specifications can/will be modified as we gain on-the-ground experience.
2	Biofiltration/Bioretention Design Criteria: submittal requirements	Pages 74 - 79	The submittal requirements for bioretention/biofiltration soils are excessive and supersede other procedures and practices in place that ensure adequate implementation of treatment control BMPs. The submittal requirements are likely to discourage the use of bioretention/biofiltration practices. The Regional Board should allow Permittees to determine compliance through established guidance, plan review, and inspections. Soil mix submittal requirements should be deleted.

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Planning and Land Development Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
3	LID Training	Page 81 J	Requiring "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 " is not cost effective. There are other methods to providing information on LID implementation short of formal training. Please revise this section to allow Permittees to provide information regarding LID through their websites.

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Development Construction Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
1	General Comment		This proposed language includes many of the same requirements as the General Construction Permit. A construction project that falls under GCP does not need to also be regulated by the MS4 permit.
2	General Comment	VI.C.9.d. [Page 41]	The proposed language seems to indicate that all soil disturbing activities regardless of size must comply with all the requirements under this program. <u>County Recommendation</u> Clarify that projects under 1 acre only need to comply with a minimum set of BMPs.
3	Inventory/Electronic Tracking	VI.C.9.e. [page 41]	Construction Site Inventory/Electronic Tracking System for all types of permits as listed is nice to do but can be potentially very problematic and costly to implement, and thus should not be mandatory. <u>County Recommendation</u> Allow permittees to use existing non-electronic inventory/tracking systems if they work. Reduce the amount of information required to be tracked, particularly for small projects (under 1 acre).
4	Rain Event Action Plan (REAP)	VI.C.9.f.ii (3)(i) [page 43]	The proposed language seems to indicate that all soil disturbing activities regardless of size must prepare a Rain Event Action Plan. The language should be clarified to indicate that this requirement does not apply to projects under 1 acre. <u>County Recommendation</u> Clarify that projects under 1 acre only need to comply with a minimum set of BMPs.

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Development Construction Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
5	Tables of Minimum and Additional BMPs	VI.C.9.g. [pages 43-47]	<p>The working proposal limits the applicable BMPs to those in the CASQA or Caltrans handbooks. Allow flexibility to use other equivalent BMP manuals, such as the Los Angeles County Department of Public Works Construction Site BMP Manual.</p> <p><u>County Recommendation</u> Revise to: "Permittees are authorized to substitute the listed BMPs with the equivalent BMP contained in the most current version of the California Stormwater BMP Handbook (<u>Construction</u>), or <u>other equivalent handbook</u>, through the term of this Order."</p>
6	Inspection Frequencies	VI.C.9.h.ii.(1)&(2) [pages 47-49]	<p>The inspection frequencies in these sections appear excessive. For example, Section VI.C.9.h.ii.(2) on page 48 would appear to require 5 different inspections regardless of project size. Finally, some of the inspection frequencies are not consistent with those required under the State's CGP.</p> <p><u>County Recommendation</u> Add flexibility to allow the Permittees to select the appropriate times to inspect projects, such as during the grading and land development activities.</p>

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Public Agency Activities Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1	Maintain Inventory and Map Facilities	VI.C.10.c. [pages 53-54]	<p>Inventory, mapping and populating the highly detailed minimum fields of information for all the listed sites is very resource intensive. The list of facilities is very extensive and covers facilities that are already regulated under separate permits. In addition, the County has no jurisdiction over public schools. Annual updating of the inventory and map is unnecessary since municipal facilities do not change as frequently as private businesses.</p> <p><u>County Recommendation</u> Remove from the inventory list schools and facilities that are regulated under separate permits. The map and inventory should be updated once during the permit term. Allow at least 2 years to complete the inventory.</p>
2	Minimum fields of information for municipal facilities inventory	VI.C.10.c.ii. [page 54]	<p>The information required in the inventory is excessive and potentially very resource intensive. For example, determining which MS4 outfalls receive discharge from a facility may require field investigations which would be very resource intensive.</p> <p><u>County Recommendation</u> Revise the first sentence of the section to read: 'Each Permittee <u>should consider</u> shall <u>including</u> the following minimum fields of information...'</p>
3	Inventory of Existing Development for Retrofitting Opportunities	VI.C.10.d. [page 54]	<p>Developing an inventory of retrofitting opportunities that includes municipal, industrial, commercial, and residential areas would be extremely resource intensive. Inventory of existing development should not be required as part of the minimum control measures, but instead, if feasible, part of a larger TMDL implementation strategy.</p> <p><u>County Recommendation</u> Clarify the intent of the inventory, which based on our discussion with staff, appears to be identifying regional treatment opportunities as opposed to parcel level opportunities. This section should be revised to reflect this intent.</p>

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Public Agency Activities Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
4	Implement and maintain the general and activity specific BMPs	VI.C.10.e.iii. Table [TBD] [page 57]	<p>This table lists specific BMPs from the Caltrans Stormwater Quality Handbook Maintenance Staff Guide. Allow flexibility to use alternate equivalent BMPs, such as those in the CASQA Municipal BMP Handbook.</p> <p><u>County Recommendation</u> Include in the table the BMPs from the CASQA Municipal BMP Handbook. Revise the language to read: "Each Permittee shall implement and maintain the general and activity specific BMPs listed in Table [TBD] <u>or other set of equivalent BMPs...</u>"</p>
5	Vehicle and Equipment Washing	VI.C.10.f.i & iii. [page 59]	<p>Clarify this section so that it only applies to permanent vehicle and equipment washing areas.</p> <p><u>County Recommendation</u> Revise to read: "Each Permittee shall implement and maintain the activity specific BMPs listed in Table [TBD] (BMPs for Public Agency Facilities and Activities) for all <u>fixed</u> vehicle and equipment washing;"</p>
6	Landscape, Park, and Recreational Facilities Management - pesticides application	VI.C.10.g. [page 60]	<p>The County is supportive of implementing an integrated pest management program. However, this language does not consider costs associated with such a program. There are instances when application of environmentally friendly pesticides that do not threaten water quality is the least costly method to manage pests. Allow flexibility to continue use of such pesticides so long as it is done according to applicable permits and established guidelines without the need to demonstrate measurable reductions in pesticide use.</p> <p><u>County Recommendation</u> Delete "(7)(c) Demonstrate measurable reductions in pesticide use."</p>

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Public Agency Activities Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
7	Infiltration from Sanitary Sewer to MS4/Preventive Maintenance	VI.C.10.h.ix.(4) [page 64]	<p>At the time of adoption of the 2001 MS4 Permit, Sanitary Sewer Systems did not have their own Waste Discharge Requirements or a separate NPDES Permit. However, in 2006, separate Waste Discharge Requirements were adopted to regulate sanitary sewer systems. Therefore, they no longer need to be covered under the MS4 Permit.</p> <p><u>County Recommendation</u> Delete the section referencing sanitary sewer systems.</p>

County of Los Angeles Comments
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Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
1	MS4 Mapping	11.b.i. [page 68]	<p>While an electronic MS4 map may be useful, to develop and maintain such as system is potentially very resource intensive, and the benefit of such a system may not be justifiable. This requirement should be optional.</p> <p><u>County Recommendation:</u> Revise the section to read: "Each Permittee <u>is encouraged to</u> shall maintain an up-to-date and accurate electronic MS4 map. If possible, the map should be maintained within a GIS. The MS4 map <u>should</u> must show the following, at a minimum :"</p>
2	Implementation of Non-Stormwater Outfall-Based Monitoring Program to Detect IC/IDs Level	11.c.i [page 69]	<p>The provision requires the monitoring of authorized non-stormwater discharges. It is unclear what specific monitoring activities are required. We also believe characterizing and monitoring authorized non-stormwater discharges from other NPDES/WDR permittees should not lie with MS4 Permittees. Instead the LARWQCB should direct the other NPDES/WDR permittees to characterize and monitor their own discharges and report back to them.</p> <p><u>County Recommendation</u> Remove characterization and monitoring of authorized non-stormwater discharges.</p>

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Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
3	Illicit Discharge Source Investigation and Elimination	11.d.ii, 11.g.i.(2) [page 69, 72]	<p><u>County Recommendations</u></p> <p>Modify the language as follows:</p> <p>(ii) At a minimum, each Permittee shall <u>initiate</u> conduct an investigation(s) to identify and locate the source within <u>one business day</u> 48 hours of becoming aware of the illicit discharge.</p> <p>(2) <u>Initiation of investigation of all public and employee ID and spill complaints within one business day</u> 24 hours of receiving the complaint to access validity.</p> <p>Add as footnote; similar qualifier used for Industrial/Commercial Facilities Inspection:</p> <p><u>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 two business days.</u></p>

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Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
4	Illicit Discharge Source Investigation and Elimination	11.d.iv.(1) [page 70]	<p>This section states: "...Permittee shall immediately notify the responsible party of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 48 hours of notification."</p> <p>This may not be feasible. For example, an illicit discharge could occur and the Permittee may not be able to immediately identify the responsible party. Additionally, if the illicit discharge occurs on a weekend or during a large public event, it may not be feasible to eliminate the illicit discharge within 48 hours (i.e. contractors and equipment may not be readily available). However, it may be possible to initiate some activities to contain the illicit discharge and minimize its impacts.</p> <p><u>County Recommendations</u> <i>"...Permittee shall immediately notify the responsible party of the problem and require the responsible party /parties to immediately initiate conduct all necessary corrective actions to eliminate the <u>illicit non-stormwater discharge within 48 hours of notification</u> . Upon being notified that the discharge has been eliminated, the Permittee(s) shall conduct a follow-up investigation to verify that the discharge has been eliminated <u>and cleaned up to the satisfaction of the Permittee(s)</u> . 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 field screening, monitoring and all inspection <u>and investigation s , cleanup, and oversight</u> activities. "</i></p> <p>Define "Progressive Enforcement Policy."</p>

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Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
5	Illicit Discharge Source Investigation and Elimination	11.d.iv. [page 71]	<p><u>County Recommendations</u></p> <p>Add (3): "(3) If the source of the illicit discharge cannot be traced to a suspected responsible party, affected Permittees shall implement the approved illicit discharge/spill response plan.</p>
6	Illicit Discharge Source Investigation and Elimination	11.d.iv.(2) [page 70]	<p><u>County Recommendations</u></p> <p>Add the same recovery and remediation costs language from (1) to (2): "Each Permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of field screening, monitoring and investigations."</p>
7	Illicit Discharge Source Investigation and Elimination	11.d.iv.(2) [page 70]	<p>The provision requires Permittees notify upstream jurisdictions in writing if the source of the illicit discharge was determined to originate from that jurisdiction. The permit should provide flexibility in how Permittees communicate with each other and other jurisdictions and agencies, such as via telephone or email.</p> <p>There may be illicit discharges that are visually observed and not determined from screening activities. In such cases there may not be characterization and field screening data to provide.</p> <p><u>County Recommendations</u> Modify to read "...the Permittee shall <u>notify</u> inform in writing both the upstream jurisdiction and the Regional Board within 30 days of such determination and provide all the information collected at characterization and field screening data collected as a component of the field survey and <u>efforts taken to identify its source</u>."</p>

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Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
8	Illicit Discharge Source Investigation and Elimination	11.d.v. [page 71]	<p>Requires the Permittee to work with the Regional Board to provide diversion of the entire flow to the sanitary sewer or provide treatment if the Permittee is unable to eliminate an ongoing illicit discharge.</p> <p><i>There may be situations where the illicit discharge is extremely difficult to trace, the responsible party(ies) is not clear, diversion to the sanitary sewer is not feasible (due to the size or location of the discharge), or treatment is too cost prohibitive. For example, the oil discharge discovered in January 2011 in the Dominguez Channel near 223rd Street in the City of Carson involved months of investigation involving multiple agencies and possible responsible parties. The discharger(s) must be held responsible and be part of the solution.</i></p> <p><u>County Recommendation</u> <i>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, including the inability to find the responsible party/parties, or other circumstances prevent the full elimination of an ongoing illicit discharge, the Permittee shall notify the Regional Water Board in writing within 30 days of such determination and work with provide available information for to the Regional Water Board to take action against the suspected discharger(s) 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.</i></p>

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Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
9	Identification and Response to Illicit Connections	11.e.i & ii [page 71]	<p>Requires the Permittee to complete a suspected illicit connection investigation within 21 days, and ensure elimination of the connection within 90 days upon confirmation of an illicit MS4 connection.</p> <p>The County consists of approximately 80 unincorporated islands throughout the Permit area. The County requires sufficient time to address suspected illicit connections, and would like to see the same timeframes carried over from the current to the new Permit.</p> <p><u>County Recommendations</u> Modify to read: (i) " ... complete <u>initiate</u> an investigation within 21 days..." (ii) "...ensure that the connection is eliminated within 90 <u>180</u> days..."</p>
10	Public Reporting of Non-Stormwater Discharges and Spills	11.f.ii.(1) & (2) [Page 71-72]	<p>The provision makes reference to a "County sponsored PIPP."</p> <p>The County of Los Angeles recognizes the cost-effectiveness in participating in a collaborative and coordinated PIPP program, and supports a countywide PIPP program as one of the options; however, the County does not have plans to sponsor a countywide PIPP.</p> <p><u>County Recommendation</u> Modify to read "(1) By jointly implementing a regional PIPP program"</p> <p>Replace "PIPP" with "hotline".</p>

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Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
11	Public Reporting of Non-Stormwater Discharges and Spills	11.f.iv. [page 72]	<p>The provision requires annual evaluations of procedures.</p> <p><i>County Recommendation</i> <i>In light of the large number and variety of potential stakeholders that could be involved in these procedures, we recommend that evaluations be conducted once during the Permit term.</i></p>
12	Illicit Discharge and Spill Response Plan	11.g. i.(1), (3) [page 72]	<p><i>County Recommendations</i></p> <p><i>"(2) Initiation of investigation of all public and employee ID and spill complaints within 24- <u>hours one business day</u> of receiving the complaint to assess validity."</i></p> <p><i>"(3) Response to ID and spills for containment within 2-4 <u>2-4</u> 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."</i></p>



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

April 12, 2012

IN REPLY PLEASE

REFER TO FILE: **WM-9**

Ms. Renee Purdy, Chief
California Regional Water Quality
Control Board – Los Angeles Region
Regional Programs Section
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Dear Ms. Purdy:

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT COMMENTS STAFF WORKING PROPOSAL ON MINIMUM CONTROL MEASURES

On behalf of the Los Angeles County Flood Control District, thank you for the opportunity to comment on the draft working proposal for Minimum Control Measures released on March 21, 2012. Enclosed are our comments for your review and consideration. Additionally, we concur with the comments submitted by the County of Los Angeles and submit them by reference.

If you have any questions, please contact me at (626) 458-4300 or ghildeb@dpw.lacounty.gov or your staff may contact Ms. Angela George at (626) 458-4325 or ageorge@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works

GARY HILDEBRAND
Assistant Deputy Director
Watershed Management Division

AT:jtz

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Enc.

cc: County Counsel (Judith Fries)

Los Angeles County Flood Control District Comments
 Staff Working Proposal on Minimum Control Measures

Public Agency Activities Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1	Public Facility Inventory - Maintain Inventory and Map Facilities	VI.C.10.c. [page 53]	<p>Flood control facilities that already are regulated under other environmental permits should not be included in the facility inventory list. For example, debris basins are regulated under separate permits, including the State Water Resources Control Board Order No. 2003-0017-DWQ General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification, US Army Corps of Engineers, Los Angeles District Regional General Permit SPL-2003-00411-KW, and the Department of Fish and Game Final Lake or Streambed Alteration Agreement Notification No. 1600-2008-0290-R5.</p> <p><u>LACFCD Recommendation</u> Revise to read: "(22) Flood control facilities (e.g. debris basins, sediment placement sites)"</p>
2	Public Agency Facility and Activity Management - Evaluate existing structural flood control facilities	VI.C.10.e.ii.(2) [page 56]	<p>It is not feasible to evaluate every existing flood control facility, including channels, for feasibility of retrofitting when there is no reasonable guarantee that such a project can be funded.</p> <p><u>LACFCD Recommendation</u> Evaluate facilities during the planning phases of major maintenance or rehabilitation projects on the feasibility of incorporating stormwater quality improvement components.</p>
3	Public Agency Facility and Activity Management - flood management projects - maintenance of earth-bottom channels	VI.C.10.e.ii.(3) [page 56]	<p>Maintenance of earth-bottom flood control channels is already regulated under separate Waste Discharge Requirements (Regional Water Board Order No. R4-2010-0021) and other permits including US Army Corps of Engineers Nationwide Permit Number 31 and should not be included under the MS4 Permit.</p> <p><u>LACFCD Recommendation</u> Remove item (3) that refers to the maintenance of earth-bottom flood control channels.</p>

Los Angeles County Flood Control District Comments
 Staff Working Proposal on Minimum Control Measures

Public Agency Activities Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
4	Catch Basin Labels and Open Channel Signage - storm drain inlets	VI.C.10.h.VI.(1) [page 63]	The term "storm drain inlets" is potentially problematic. <u>LACFCD Recommendation</u> Revise the language to read: "Each Permittee shall label all storm drain inlets catch basins that they own with a legible "no dumping" message.
5	Catch Basin Labels and Open Channel Signage - Re-stencil or Re-label	VI.C.10.h.vi.(3) [page 63]	This requirement has been modified to record all catch basins with illegible stencils and re-stencil or re-label within 15 days of inspection rather than the current requirement of within 180 days of inspection. The LACFCD requires additional time to comply with this requirement due to its large area and large number of catch basins it owns. <u>LAFCD Recommendation</u> Revise the requirement to re-stencil or re-label to within 15 <u>90</u> days.
6	Storm Drain Maintenance - trash removal	VI.C.10.h.viii.(1) & (2) [page 63]	Maintenance of debris basins are already regulated under separate permits including the State Water Resources Control Board Order No. 2003-0017-DWQ General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification, US Army Corps of Engineers, Los Angeles District Regional General Permit SPL-2003-00411-KW, and the Department of Fish and Game Final Lake or Streambed Alteration Agreement Notification No. 1600-2008-0290-R5. <u>LACFCD Recommendation</u> Remove all references to debris basins from the proposed language
7	Emergency Procedures	VI.C.10.j. [page 67]	<u>LACFCD Recommendation</u> Revise to read: "Each Permittee may conduct repairs <u>and rehabilitation</u> of essential public service systems..."

Los Angeles County Flood Control District Comments
 Staff Working Proposal on Minimum Control Measures

Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
1	Implementation of Non-Stormwater Outfall-Based Monitoring Program to Detect IC/IDs Level	11.c.i [page 69]	<p>The provision requires the monitoring of authorized non-stormwater discharges. It is unclear what specific monitoring activities are required. We also believe characterizing and monitoring authorized non-stormwater discharges from other NPDES/WDR permittees should not lie with MS4 Permittees. Instead the LARWQCB should direct the other NPDES/WDR permittees to characterize and monitor their own discharges and report back to them.</p> <p><u>LACFCD Recommendation</u> <i>Remove characterization and monitoring of authorized non-stormwater discharges.</i></p>
2	Illicit Discharge Source Investigation and Elimination	11.d.ii, 11.g.i.(2) [page 69, 72]	<p><u>LACFCD Recommendation</u></p> <p><i>Modify the permit language as follows:</i></p> <p><i>(ii) At a minimum, the LACFCD each Permittee shall <u>initiate</u> conduct an investigation(s) to identify and locate the source within <u>one business day</u> 48 hours of becoming aware of the illicit discharge.</i></p> <p><i>(2) <u>Initiation of</u> investigation of all public and employee ID and spill complaints within one business day 24 hours of receiving the complaint to access validity.</i></p> <p><i>Add as footnote; same qualifier used for Industrial/Commercial Facilities Inspection:</i></p> <p><u><i>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 two business days.</i></u></p>

Los Angeles County Flood Control District Comments
 Staff Working Proposal on Minimum Control Measures

Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
3	Illicit Discharge Source Investigation and Elimination	11.d.iv.(1) [page 70]	<p>This section states: "...Permittee shall immediately notify the responsible party of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 48 hours of notification."</p> <p>This may not be feasible. For example, an illicit discharge could occur and the Permittee may not be able to immediately identify the responsible party. Additionally, if the illicit discharge occurs on a weekend or during a large public event, it may not be feasible to eliminate the illicit discharge within 48 hours (i.e. contractors and equipment may not be readily available). However, it may be possible to initiate activities to contain the illicit discharge and minimize impacts.</p>
4	Illicit Discharge Source Investigation and Elimination	11.d.iv.(2) [page 70]	<p>The provision requires Permittees notify upstream jurisdictions in writing if the source of the illicit discharge was determined to originate from that jurisdiction. The permit should provide flexibility in how Permittees communicate with each other and other jurisdictions and agencies.</p> <p>There may be illicit discharges that are visually observed and not determined from screening activities. In such cases there may not be characterization and field screening data to provide.</p>

Los Angeles County Flood Control District Comments
 Staff Working Proposal on Minimum Control Measures

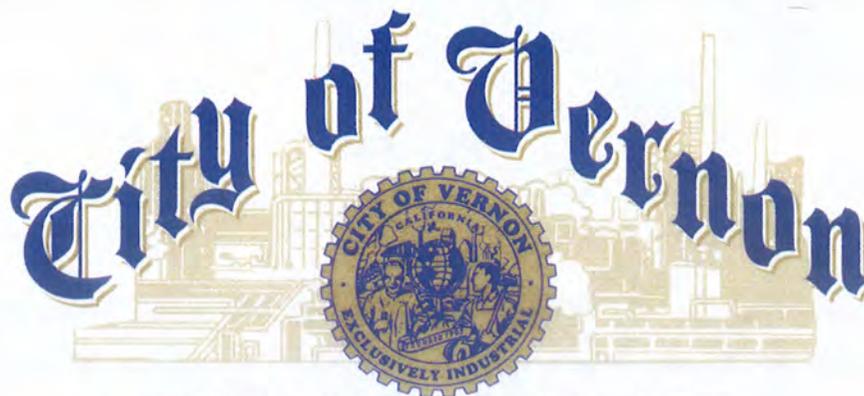
Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
5	Illicit Discharge Source Investigation and Elimination	11.d.v [page 71]	<p>Requires the Permittee to work with the Regional Board to provide diversion of the entire flow to the sanitary sewer or provide treatment if the Permittee is unable to eliminate an ongoing illicit discharge.</p> <p>There may be situations where the illicit discharge is extremely difficult to trace, the responsible party(ies) is not clear, diversion to the sanitary sewer is not feasible (due to the size or location of the discharge), or treatment is too cost prohibitive. For example, the oil discharge discovered in January 2011 in the Dominguez Channel near 223rd Street in the City of Carson involved months of investigation involving multiple agencies and possible responsible parties. The discharger(s) must be held responsible and be part of the solution.</p> <p><u>LACFCD Recommendation</u> In the event the Permittee(s) are is 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 Permittee(s) shall notify the Regional Water Board in writing within 30 days of such determination and work with provide available information for the Regional Water Board to take action against the suspected discharger(s) 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.</p>

Los Angeles County Flood Control District Comments
 Staff Working Proposal on Minimum Control Measures

Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
6	Identification and Response to Illicit Connections	11.e.i & ii [Page 71]	<p>Requires the Permittee to complete a suspected illicit connection investigation within 21 days, and ensure elimination of the connection within 90 days upon confirmation of an illicit MS4 connection.</p> <p>The LACFCD owns and maintains a vast network of open channels and underground storm drains. The LACFCD requires sufficient time to address suspected illicit connections, and would like to see the same timeframes carried over from the current to the new Permit.</p> <p><u>LACFCD Recommendations</u> Modify to read: (i) " ... complete <u>initiate</u> an investigation within 21 days..." (ii) "...ensure that the connection is eliminated within 90 <u>180</u> days..."</p>
7	Public Reporting of Non-Stormwater Discharges and Spills	11.f.ii.(1) & (2) [Page 71-72]	<p>The provision makes reference to a "County sponsored PIPP."</p> <p><i>The LACFCD recognizes the cost-effectiveness in participating in a collaborative and coordinated PIPP program, and supports a regional PIPP program as one of the options; however, the County does not have plans to sponsor a countywide PIPP.</i></p> <p><u>LACFCD Recommendation</u> Modify to read "(1) By jointly implementing a regional PIPP hotline"</p>

Los Angeles County Flood Control District Comments
 Staff Working Proposal on Minimum Control Measures

Illicit Connection and Illicit Discharge Elimination Program			
Comment #	Identify Permit Element/ Issue/ Concern	Location in Working Proposal	Comment/Recommendation
8	Public Reporting of Non-Stormwater Discharges and Spills	11.f.iv. [Page 72]	The provision requires annual evaluations of procedures. <u>LACFCD Recommendation</u> <i>In light of the large number and variety of potential stakeholders that could be involved in these procedures, we recommend that evaluations be conducted once during the Permit term.</i>
9	Illicit Discharge and Spill Response Plan	11.g. i.(1), (3) [Page 72]	<u>LACFCD Recommendations</u> <i>"(2) Initiation of investigation of all public and employee ID and spill complaints within 24- <u>hours one business day</u> of receiving the complaint to assess validity."</i> <i>"(3) Response to ID and spills for containment- within 2-4 <u>2-4</u> 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."</i>



4305 Santa Fe Avenue, Vernon, California 90058

Telephone (323) 583-8811

April 12, 2012

California Regional Water Quality Control Board

ELECTRONIC MAIL

Los Angeles Region

320 West 4th Street, Suite 200

Los Angeles, California 90013

Attn: Mrs. Renee A. Purdy, Regional Programs Section Chief

Mr. Ivar Ridgeway, Stormwater Permitting Section Chief

Subject: Comments on Working Proposal of Minimum Control Measures Related to the Los Angeles County Municipal Stormwater Permit

Dear Mrs. Purdy and Mr. Ridgeway:

The City of Vernon appreciates this opportunity to provide comments on the subject proposed Minimum Control Measures (MCMs) for the draft Los Angeles Municipal Stormwater (MS4) permit. With strong support from our City Council and City Administration, both the Health and Environmental Control and Community Services and Water Departments are committed to protecting the environment and appreciate cooperative efforts of the Regional Water Quality Control Board (RWQCB) and its staff in developing this next iteration of the Los Angeles County Municipal Stormwater Permit.

Based on our review of the proposed MCMs, we have several concerns and would like to express the following comments:

1. Section VI.C.2.i., under Legal Authority, specifies that each permittee must:

Control the contribution of pollutants to its MS4 from stormwater discharges associated with industrial and construction activity and control the quality of stormwater discharged from industrial and construction sites. This requirement applies both to industrial and construction sites with coverage under an NPDES permit, as well as to those sites that do not have coverage under an NPDES permit. Grading ordinances must be updated and enforced as necessary to comply with this Order;

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Concern- The authority to *control* (which suggests discretionary authority to authorize discharges) the contribution of pollutants from both industrial and construction sites, through an NPDES permit, is bestowed upon the SWRCB and RWQCBs. It appears that although these facilities are under a State General Stormwater Permit which specifically regulates stormwater and prohibits non-stormwater run-off from these sites, this proposed MCM will unlawfully grant each municipal permittee duplicative authority to authorize any contribution of pollutants from NPDES permitted facilities to stormwater.

Proposed solution- The current MS4 permit specifies “*permittees shall possess the necessary legal authority to prohibit non-stormwater discharges to the storm drain system*”. We suggest that the current permit language corresponding to Legal Authority remain unchanged. Furthermore, the authority and responsibility to regulate NPDES permitted industrial and construction sites should remain with the SWRCB and RWQCBs.

2. Sections VI.C.2.a.i., iv., vii., and viii. specify that each permittee must *control* the contribution of pollutants, the discharge of spills, and the contribution of pollutants to its MS4 as well as from one MS4 to another MS4.

Concern- The word “control” erroneously suggests permittees have discretionary authority to authorize the contribution of pollutants, discharge of spills, and the contribution of pollutants to its MS4. In addition, sections also conflict with the Illicit Discharge/Connection Elimination Program.

Proposed solution- Replace the word “control” with the word “prohibit”.

3. Section VI.C.8.c.ii.(2), under New Development/Redevelopment Project Performance Criteria, indicates:

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.

Concern- The City of Vernon was incorporated in 1905 and has since been zoned exclusively industrial. With over a century of heavy industrial land use, soil and groundwater contamination has been a concern in approximately the past 30 years in which the City continues to mitigate. Although many sites have been remediated, determined to pose minimal risk of human health and the environment, and subsequently closed, the remaining soil should not be considered *contaminant or risk free*. Many sites have been closed (requiring no further environmental action) with the strict condition that an impervious cap to remain intact to prevent migration of

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residual contamination to our groundwater aquifers. In our opinion, requiring a project applicant to demonstrate technical infeasibility by submitting a site-specific hydrological design analysis endorsed by a registered engineer for historical contaminated sites would be unnecessary and counterproductive.

Proposed solution- We suggest that an option be provided for MS4 permittees, who have soil remediation oversight authority within their jurisdictional boundaries, to determine technical infeasibility due to potential groundwater contamination. This option should not require a site-specific hydrological design analysis.

4. Section VI.C.3.a., b., and c. under Fiscal Resources states the following;

Each Permittee shall exercise its full authority to secure the fiscal resources necessary to meet all requirements of this Order.

Concern- This MCM assumes the permittees can secure the required fiscal resources necessary to meet all the requirements without consideration to economic challenges and the fact that we have to be mindful that any stormwater fees must be approved under Prop 218. In addition, during the April 5th 2012 RWQCB workshop, Board members commented on being mindful of the current economic challenges and asked Board staff to do the same.

Proposed solution- We recommend that Fiscal Resources language be removed.

5. Section VI.C.8.d.iv.(1)(d), specifies:

For post-construction BMPs operated and maintained by parties other than the Permittee, the Permittee shall require annual reports by the other parties demonstrating proper maintenance and operations.

Concern- This requirement appears to be superfluous and without substance in addition to lacking the technical details required to be included in such a report.

Proposed solution- monitor and regulate the BMP maintenance through the Commercial/Industrial Inspection Program.

6. Section VI.C.9.c. specifies the following;

Each Permittee shall require operators of public and private construction activity within its jurisdiction to select, install, implement, and maintain BMPs that comply with the State Water Board's current General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit).

Concern- The requirements to regulate the selection, installation, implementation, and maintenance of BMPs in accordance with the State Water Board's current

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General Permit for Discharges of Stormwater Associated with Construction Activity should be the direct responsibility of the permitting agency. This MCM unlawfully imposes duplicative enforcement responsibility of Construction General Permitted private construction projects onto the MS4 permittees.

Proposed solution- Enforcement authority for the selection, installation, implementation, and maintenance of BMPs in compliance with the General Construction Permit should remain the responsibility of the permitting authority (SWRCB & RWQCB).

7. Section VI.C.9.f.ii.(1) describes the following:

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 Erosion and Sediment Control Plan (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 erosion and sediment control plan unless it contains appropriate site-specific construction site BMPs that meet the minimum requirements of a Permittee's erosion and sediment control ordinance.

Concern- The requirement for construction operators to prepare and submit a site specific Erosion Control Plan for all grading and building projects, regardless of size or scope of work, would likely be an excessive and unnecessary requirement for many under-one-acre projects.

Proposed solution- Based on the Planning and Land Development Program applicability criteria, set the threshold for requiring an ESCP to projects disturbing 5,000 sq. ft. or more of surface area.

8. Section VI.C.9.f.ii.(2) describes the following:

ESCPs must include the elements of a Stormwater Pollution Prevention Plan (SWPPP). SWPPPs prepared in accordance with the requirements of the Construction General Permit can be accepted as ESCPs for construction sites larger than 1 acre.

Concern- For projects disturbing less than one acre of surface area, the requirement to develop and implement an ESCP that must be equivalent to a SWPPP appears to be excessive and may provide marginal value.

Proposed solution- Require minimum BMPs in all ESCPs for projects sizes disturbing 5,000 sq. ft. to one acre. In addition, require supplementary BMPs for "high risk" construction activities such as concrete sawcutting/mixing/paving, wood & material cutting, vehicle tracking, and equipment cleaning.

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9. Section VI.C.9.f.ii. (3) describes the following:

At a minimum, the ESCP/SWPPP 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-stormwater 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) Rain Event Action Plan (REAP) when soil disturbance activities will be conducted during the wet-weather season.*

Concern- Based on the current General Construction Activity Stormwater Permit, construction sites disturbing one acre or more of surface area categorized as a Risk Level 1 are not required to develop or implement Rain Event Action Plans. Requiring operators of construction sites disturbing less than one acre of surface area to address requirements reserved for Risk Level 2 and 3 projects appears counter intuitive and unnecessary.

Proposed solution- We suggest omitting the REAP requirement.

10. Section VI.C.9.f.ii.(6) details the following:

Each Permittee shall require that all structural BMPs be designed by a California licensed engineer.

Concern- This requirement erroneously claims that only structural BMPs designed by California licensed engineer are effective. This requirement also asserts that structural BMPs designed by engineers licensed in other states are also inadequate.

Proposed solution- Use the identical language used in Section VI.C.9.g.i. indicating:
BMPs must be consistent with the applicable California Stormwater Quality Association (CASQA) Best Management Practices Handbooks (or the Caltrans Handbook for public transportation related construction projects) tailored to the risks posed by the project.

11. Section VI.C.9.h.ii.1, under Table titled Inspection Frequency, Risk Level 3 construction sites are to be inspected when (1) 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 and at (3) least once every two weeks. This section also indicates that Risk Level 1 & 2 construction sites are to be inspected at least monthly.

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Concern- Regardless of risk level, construction sites of one acre or more are permitted by the State Water Resources Control Board to “Control Stormwater Discharges Associated with Construction and Land Disturbance Activities”. Fees associated with this permit, which are collected by the SWRCB, are intended to support a corresponding construction site inspection program by the permitting agency. Requiring municipal permittees to perform inspections, which should be the responsibility of the permitting agency, at such a frequency is alarming and distressing.

Proposed solution- As the primary enforcement agency for the GCASP, consider having Regional Water Quality Control Board inspection staff perform the inspections in a frequency as described; or, allocate a portion of the GCASP permitting fees to the municipal permittees to support a Inspection Program aimed at assessing compliance with the General Construction Permit.

12. Section VI.C.9.h.ii.(2), mandates each permittee shall inspect all phases of construction as follows;

- a. Prior to Land Disturbance,
- b. Grading and Land Development,
- c. Streets and Utilities,
- d. Vertical Construction,
- e. Final Landscaping and Site Stabilization.

Concern- Again as previously stated, the SWRCB is collecting a substantial fee to permit construction sites of one acre or larger to “control stormwater discharges associated with construction and land disturbance activities”. Permit fees should be sufficient to support an inspection program by the permitting agency. This clear “release” of GCASP inspection responsibility to the MS4 permittees is a gross neglect of permit enforcement obligation of the permitting agency. In addition, during the April 5th 2012 RWQCB workshop, Board members commented on why a shift of responsibility.

Proposed solution- We suggest omitting this MCM and Require the Regional Water Board inspection staff perform the inspections in the frequency described.

13. Section VI.C.9.h.ii.(3), mandates that each permittee develop and implement a progressive enforcement policy to ensure that facilities are brought *into compliance with all stormwater requirements through the following*;

- f. Follow-up Inspections
- g. Enforcement action
- h. Maintenance of records

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Concern- The State General Construction Activity Stormwater Permit, enforced by the Regional Water Boards, in its title states its purpose as, (to) “Control Stormwater Discharges Associated with Construction and Land Disturbance Activities”. Enforcement of stormwater requirements specified in the GCASP is the primary responsibility of the permitting agency. The permitting agency collecting permit fees should be held accountable for the enforcement of its permit. Furthermore, this section of the MCM fails to provide an option to refer violators of the GCASP to the Regional Water board. Moreover, there is no joint enforcement provision despite the heavier penalties for a GCASP violation in comparison to the penalties for a municipal code violation.

Proposed solution- We suggest omitting this MCM and requiring the Regional Water Board inspection staff perform the inspections and enforcement, which is intended to regulate the GCASP, in the frequency described.

14. Section VI.C.9.h.ii.(5), requires each Permittee to develop, implement, and revise as necessary, an Inspection and Enforcement Standard Operating Procedures which includes the following;
- a. Verification of GCASP coverage
 - b. Review of ESCP/SWPPP in addition to inspection of construction sites
 - c. Assessment of compliance, including the implementation and maintenance of minimum BMPs and their effectiveness.
 - d. Assessment of the appropriateness of the planned BMPs and their effectiveness.
 - e. Visual observation and record keeping
 - f. Develop a written or electronic inspection report
 - g. Tracking of the number of inspections for the inventoried construction sites to verify that the sites are inspected at the minimum frequencies required this Order.

Concern- This inspection and enforcement requirement engenders an unnecessary layer of authority and duplicates procedures that should have already been established by the GCASP administering agency.

Proposed solution- We suggest that this MCM be omitted and maintain the Inspection and Enforcement Standard Operating Procedures, intended to monitor compliance with the GCASP, with the RWQCB inspection and enforcement staff.

15. Section VI.C.10.d., mandates that each permittee to develop an inventory of existing development for retrofitting opportunities.

Concern- Although this section is under the Public Agency Activities Program, it requires inventorying of industrial, commercial, and residential developments in addition to municipal developments. Furthermore, this MCM disregards facilities operating under a GIASP. The California State General Industrial Activity

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Stormwater Permit has been in effect since 1992. Since then, the State Water Resources Control Board has collected a substantial quantity of stormwater analysis data from GIASP permittees. Municipalities do not have any site specific data to make an effective evaluation of an existing development.

Proposed solution- We suggest omitting this section or have the SWRCB evaluate the stormwater analysis data collected through the GIASPs to establish a list of prioritized retrofitting opportunities.

16. Section VI.C.10.d.v, indicates each Permittee shall consider the following practices in cooperating with private landowners to retrofit existing development;

(7) Fees for existing discharges to the MS4 and reduction of fees for retrofit implementation.

Concern- This item clearly conflicts with the Illicit Discharge/Connection Elimination Program.

Proposed solution- We suggest omitting item (7).

17. Section VI.C.10.f.ii and iii indicates that each permittee;

shall prevent discharges of wash waters from vehicle and equipment washing 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, and*

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.

Concern- This MCM does not provide an option to have vehicles washed at commercial car/truck washes.

Proposed solution- We suggest revising this section to include an option to have vehicles washed at commercial car/truck washes.

18. Section VI.C.10.f.ix requires each Permittee to implement controls and measures to prevent and eliminate infiltration of seepage from sanitary sewers to MS4.

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Concern- This MCM is a redundant and unnecessary requirement considering the Illicit Discharge/Connection Elimination Program and the Monitoring Program.

Proposed solution- We suggest omitting this section.

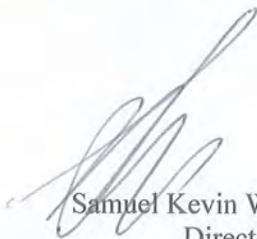
19. Section 4 of the Bioretention/Biofiltration Design Criteria indicates that *waterproof barriers may not be placed on the bottom of the biofiltration unit, as this would prevent incidental infiltration which is critical to meeting the required pollutant load reduction.*

Concern- This particular design criteria apparently does not consider pre-existing soil contamination concerns from historical industrial zones and erroneously assumes that all soil is uncontaminated. Based on our site closure records, despite sites undergoing a successful remediation process and subsequently being issued a No Further Environmental Action approval from a regulatory oversight agency, former soil contaminated sites are not contaminant free.

Proposed solution- Revise the design criteria to allow waterproof barriers to prevent migration of known environmental contaminants to groundwater from infiltration of rainwater.

The City of Vernon appreciates the RWQCB's staff efforts in providing frequent workshops with meaningful information and collaboration as we progress with the next iteration of the Los Angeles County Municipal Stormwater Permit. The City will continue to cooperate with the RWQCB to protect the environment. Please contact Mr. Jerrick Torres at (323) 583-8811 ext. 204 if you have any questions or comments.

Sincerely,



Samuel Kevin Wilson, P.E.
Director

Community Services and Water Department



Leonard Grossberg, MPA, R.E.H.S.
Interim Director / Health Officer
Health & Environmental Control
Department



Norman E. Witt, Jr. AICP
Senior Vice President

April 13, 2012

Ms. Renee A. Purdy
Chief, Regional Programs Section
Mr. Ivar Ridgeway
Chief, Storm Water Permitting
California Regional Water Quality Control Board
Los Angeles Region
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Re: Greater Los Angeles County MS4 Permit - New Development/Redevelopment Criteria

Dear Ms. Purdy and Mr. Ridgeway:

Cook Hill Properties, LLC (CHP) is the development partner on several projects within your jurisdiction.

CHP has several concerns regarding the proposed updated Greater Los Angeles County Municipal Separate Storm Sewer (MS4) NPDES Permit Minimum Control Measures. While we certainly agree with the objective of ensuring the implementation of *effective* Best Management Practices (BMPs) at construction sites to reduce the contribution of pollutants to the MS4 from construction activities, we believe that "one size fits all" BMPs are not necessarily the most effective means of controlling pollutants.

In terms of New Development/Redevelopment Criteria, certain BMPs allowed in the MS4 permit for Ventura County should be allowed in the Greater Los Angeles County MS4 Permit. Low Impact Development (LID) is best achieved when it is incorporated early in the design phase of a project and considers the site-specific development context. The permit should allow for different types of LID BMPs to be used because the type of development that occurs in LA County is varied. The best LID design for one type of project may not work in another. Specifically, bio-filtration BMPs should be allowed as they are in the permit issued by the LARWQCB for Ventura County.

While LID can be a good tool, it is never going to achieve the water supply and water balance goals outlined in the staff proposal. The LARWQCB should put its attention into addressing

Ms. Renee A. Purdy
Mr. Ivar Ridgeway
April 13, 2012
Page 2

pollution that emanates from the existing urbanized areas, rather than on incremental development. These new requirements will make redevelopment extremely difficult.

The staff working proposal blatantly ignores recent court decisions and national trends relating to numeric limits and incorporates numeric benchmarks that are legally and scientifically unsubstantiated.

Topographic features in many cases make on-site retention of storm water difficult or impossible, in combination with the applicable grading code, in order to meet slope stability requirements. Immediate off-site options are often limited by government ownership or other restrictions.

Thank you for the opportunity to comment on the proposed Greater Los Angeles County MS4 Permit. Please do not hesitate to contact me with any questions you may have about our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Norman E. Witt, Jr.", with a stylized flourish at the end.

Norman E. Witt, Jr.
Senior Vice President

Cc: *Holly Schroeder, BIA*
Sandy Sanchez, BIA

From: John Hadley <jhadley@trlsystems.com>
To: "rpurdy@waterboards.ca.gov" <rpurdy@waterboards.ca.gov>, "iridgeway@waterboards.ca.gov" <iridgeway@waterboards.ca.gov>
Date: 4/13/2012 10:52 AM
Subject: comments on staff proposal April 2012 C
Attachments: Template comments on staff proposal April 2012 C.docx

Please see my comments on the proposal

John Hadley

Comments on Staff Working Proposal for LA County MS4 Permit – Due April 13, 2012

SUBMIT TO: LA Regional Water Quality Control Board

rpurdy@waterboards.ca.gov

iridgeway@waterboards.ca.gov

- The staff working proposal is inflexible and confusing.
- The permit limits modern stormwater management technology that is considered LID; specifically biofiltration. The Staff proposal relegates biofiltration LID to an afterthought in a selection process that is unlike anything in practice currently. The selection process and use of “preferred” options is unnecessary. There is an established hierarchy and we need to stick to that hierarchy.
- The Clean Water Act standard is to reduce pollution to the Maximum Extent Practicable. There is no mention of this anywhere in the staff proposal, and without some balance of technical and economic feasibility, some of the requirements in the staff working proposal will render projects unviable. For example, green roofs and harvesting projects may not be the preferred option for a jurisdiction or a project.
- The staff working proposal regulates a project’s runoff twice: first, it mandates using a very restrictive set of LID BMPs, which when applied won’t allow most projects to manage the water quality volume on-site. For the remaining runoff volume, the project proponent must then install treatment controls on-site and the staff proposal sets pollution benchmarks for that runoff (p 31). And then, the staff proposal requires that the runoff volume which undergoes treatment control on-site be mitigated at an offsite location using LID BMPs. This unnecessarily penalizes a project proponent. Not only do they have to install treatment controls and monitor discharges several times a year, they have to pay to have the volume of runoff managed off-site using LID BMPs...essentially paying twice for the same molecule of water. This combination of requirements goes beyond the authority of the Board.
- A cost analysis needs to be performed to understand what the additional filter and retainage requirements will require.
- Limiting compaction on sights and trying to force people to do infill will limit product choices for the consumers. What impact will this have on the overall economy. There is demand for single family detached housing
- Who will provide education on the requirements – how long will it take to train – what will the training cost to produce and what will it cost to the consumer taking the training
- The inspections that are required to be performed – is that covered in the permit cost or will there be additional costs to have inspections performed.



TECS Environmental Compliance Services

106 South Mentor Avenue – 125 • Pasadena, CA 91106

Tel: 626.396.9424/Fax: 626.396.1916/email: rtahir@tecsenv.com

Comments In Re: Staff Working Proposal Greater Los Angeles County MS4 Permit – Non-Stormwater Discharges and Minimum Control Measures

Generally

The new requirements (viz., requirements that go beyond the current MS4 permit) appear to be “arbitrary” to the extent they are not supported by outfall monitoring relative to water quality standards (WQS), including TMDLs. Staff seems to have ramped-up the requirements for the sake of it.

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 mean.

This is new requirement to the extent that imposes on permittees the additional responsibility for “controlling” non-discharges into the MS4.

Issue: Federal stormwater regulations do not authorize the “control” of non-stormwater discharge into the MS4. They only require prohibiting illicit discharges to the MS4 and requiring non-stormwater discharges not exempted or allowed to be covered under a separate NPDES permit. Further, State Board Water Quality Order 2001-15 prohibits MS4 permittees to control by way of on-site treatment of non-stormwater discharges to the MS4.

Recommendation: Delete controlling discharges to the MS4.

- i. *Control the contribution of pollutants to its MS4 from stormwater discharges associated with industrial and construction activity and control the quality of stormwater discharged from industrial and construction sites. This requirement applies both to industrial and construction sites with coverage under an NPDES permit, as well as to those sites that do not have coverage under an NPDES permit. Grading ordinances must be updated and enforced as necessary to comply with this Order.*

This provision is new and is unclear as to what the difference is between controlling *the contribution of pollutants to its MS4 from stormwater discharge* and controlling the quality of stormwater discharged from industrial and construction sites.

Issue: Poses the problem of how a permittee will be able to require an industrial and construction site covered under general NPDES stormwater permits to control discharges to the MS4. This general requirement is covered under those permits. It is up to the general permittee here – not the municipal permittee – to

control pollutant discharges to the MS4. Further, for those industrial and construction activities that require coverage under general permits will be required to obtain them as condition for a grading permit or other municipal requirement. Further, this provision needs to make a distinction between construction sites that are subject to the general stormwater activity permit and those that are not (viz., those that disturb less than 1 acre of soil by grading, clearing, and excavating).

Recommendation: Discuss this issue with Regional Board industrial and construction permitting staff.

- ii. *Prohibit all non-stormwater discharges not otherwise conditionally allowed pursuant to Part [TBD]*

This is new requirement that is unnecessary and confusing. Conditionally exempt or allowed discharges are not only category of discharges that may enter the MS4.

Issue: There are some NSW discharges that are allowed into the MS4 because they are covered under separate NPDES permits. Those NSW discharges that are not exempted/conditionally exempted (or authorized) under the MS4 permit or a separate NPDES permit are simply illicit discharges. Further, it is redundant under 2.a.iii below.

Recommendation: Delete proposed requirement. The current permit already does this job nicely. It says: *Permittees shall possess the necessary legal authority to prohibit non-storm water discharges to the storm drain system, including, but not limited to ...*

- iii. *Prohibit and eliminate illicit discharges and connections to the MS4*

This is a new requirement in that it requires the elimination of illicit discharges.

Issue: Federal stormwater regulations do not require the elimination of illicit discharges; they only prohibit them. California MS4 permits only require the elimination of illicit connections (connections through which illicit discharges pass) to the MS4 through the illicit connection/discharge detection and elimination program.

Recommendation: Delete this requirement and default to current MS4 language which says to *prohibit illicit discharges and connections and require removal of illicit connections*. There is a difference to prohibiting illicit connections and removing them. Prohibit here means preventing the installation of an illicit connection while eliminating one applies to an existing connection.

- v. *Control the discharge of spills, dumping, or disposal of materials other than stormwater to its MS4*

This is new requirement that imposes on permittees the add burden to “control” discharges to its MS4.

Issue: It is not clear what “control” means here. In any case, controlling a spill or dumping or disposal of materials other than stormwater does not make sense. It suggests that permittees should control illicit discharges by reducing the pollutants contained in them to the maximum extent practicable (MEP), which is how the term “control” is used vis-à-vis stormwater discharges from the MS4. You don’t want this. What you want instead is a definite prohibition of these types of illicit discharges – period -- as is required under federal stormwater regulations. Further, State Board Order 2001-15 prohibits requiring controlling pollutants in non-stormwater discharge to the MS4.

Recommendation: Delete this requirement.

vi. *Utilize enforcement mechanisms to require compliance to require compliance with applicable ordinances, permits, contracts, or orders*

This is a new requirement it tells permittees to do what they already know what to do.

Issue: Permittees must in any case utilize enforcement mechanisms to enforce legal authority requirements.

Recommendation: Delete this requirement.

vii. *Control the contribution of pollutants from one portion of the shared MS4 to another portion of the of the MS4 through interagency agreements among Co-permittees.*

This is a new requirement that introduces the term “shared MS4.”

Issue: Without knowing what “shared MS4” means it is not clear what this new legal authority requirement is trying to accomplish.

Recommendation: Provide clarification of what it means and why it is necessary.

viii. *Control of the contribution of pollutants from one portion of the MS4 through interagency agreements with other owners of the MS4 such as the State of California Department of Transportation*

This is a new requirement whose purpose is also unclear.

Issue: The proposed legal authority requirement does not explain why it is needed and needs to explain how a State agency can be the owner of the MS4 (municipal separate storm sewer system).

Recommendation: Explain the purpose of the requirement or delete it.

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-stormwater 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

This is new requirement that calls for permittees to have the legal authority prohibit non-stormwater discharges into receiving waters as well as the MS4. It also requires the permittee the authority to enter, *monitor, inspect, take measurements, review and copy records, and require regular reports from entities discharging into its MS4*, which exceeds the equivalent legal authority requirement under the current permit.

Issue: The proposed legal authority requirement exceeds federal stormwater regulations limitation to the extent that it prohibits illicit discharges to receiving waters. Again federal stormwater regulations only prohibit illicit discharges to the MS4. Receiving waters lie outside the regulatory scope of the MS4 permit by virtue of the fact that it is an MS4 permit and not a receiving water permit. Further, if an illicit discharge is prohibited to the MS4 it would be, by extension, prohibited to a receiving water in any case. However, there are some situations where an illicit discharge may be directly discharged into a receiving water by by-passing an MS4 component through direct dumping or by spill from a property to the receiving water. Permittees should have the legal authority to prohibit such discharges but only under these narrow circumstances.

Recommendation: Language should be revised to prohibit illicit discharges to the MS4 and to discharges that by-pass the MS4 and directly enter a receiving water.

- x. *Require the use of control measures to prevent or reduce the discharge of pollutants to achieve water quality standards.*

This provision is vague in that it does not explain whether it applies to stormwater discharges from the MS4 or illicit discharges to the MS4. Further, it is not clear if this requirement is aimed at all dischargers including: industrial and construction with and without permits; all commercial dischargers (not just the ones that are defined in the proposed permit); and/or to residential dischargers.

Issue: This proposed legal authority requirement could force permittees to impose requirements on dischargers not authorized under federal law. It would also make likely make it impossible to determine if a dischargers is not reducing pollutants to achieve water quality standards (narrative and numeric).

Recommendation: Unless staff can explain how this requirement would be complied with it should eliminate it.

- b. *Each Permittee must submit a statement certified by its chief legal counsel that the Permittee has taken the necessary steps to obtain and maintain full legal authority within its jurisdiction to implement and enforce each of the requirements contained in 40 CFR §122.26(d)(2)(i)(A-F) and 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 (i) 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.

This provision in general is unnecessarily prescriptive. It specifies that a permittee's "chief" legal counsel must certify legal authority; it must cite relevant portions of 40 CFR §122.26(d)(2)(i)(A)-(F) and of proposed permit; and it dictates to permittees how to implement enforcement actions.

Issues: (1) It should be left up to the permittee to determine whether chief legal counsel or non-chief legal counsel should certify legal authority; (2) citing federal regulations is unnecessary since all is required to justify legal authority requirements to cite the permit which is a reflection of both applicable state and federal regulations; and (3) because CFR §122.26(d)(2)(i)(A)-(F) encompasses so many requirements it would be difficult for City Attorneys to know which provisions therein are applicable.

Recommendation: Delete this requirement and default to existing permit requirements.

8. Planning and Land Development Program

Providing comprehensive comments in connection with this proposed program is not possible because of the short comment period the Regional Board Staff has set. In general terms, the new requirements associated with this program have been proposed without justification. There is no outfall data that would suggest that the existing Development Planning/SUSMP program is not having some affect on reducing pollutant discharges from subject projects.

a.i.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.*

Issues: This is too prescriptive. How a permittee addresses stormwater quality impacts should be left to its discretion.

Recommendation: Delete this requirement.

c.i.1 *Minimizing Impervious Area*

Issue: This should not be an end to itself but rather a goal that would be achieved by infiltrating runoff from impervious areas through infiltration controls. An entire

area of project could be impervious but as long as the runoff is infiltrated there should be no issue.

Recommendation: Change language to require minimize impervious area to the extent practicable.

b.i.1 New Development Projects

Issue: No justification is provided for reducing the trigger for requiring post-construction mitigation from 1 acre for industrial and commercial uses to 10,000 square feet. Such a requirement should be based on whether outfall monitoring reveals exceedances for those pollutants in stormwater runoff that can be reduced to the MS4. Further, analysis needs to be provided to estimate how much a given pollutant may be reduced to and from the MS4 by lowering the soil disturbing trigger to 10,000 square feet. To do otherwise would render this requirement arbitrary.

Recommendation: Eliminate requirement or justify its need.

b.i.1.g Streets, roads, highways, and freeway construction of 10,000 square feet or more of impervious surface area shall follow USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets to the maximum extent practicable

Issue: As in the case of the above, there is justification for this new requirement. Such a requirement should not be imposed without piloting it first.

Recommendation: Delete requirement and if outfall monitoring indicates that additional infiltration is needed a pilot demonstration project for infiltrating street runoff should be conducted.

c. New Development/ Redevelopment Project Performance Criteria

Issue: The new requirements proposed here, particularly on-site and off-site retention and benchmarks for treating pollutants through infiltration are not justified. Again, no outfall data is available to demonstrate that these new measures are required. Further, staff should not make groundwater recharge an objective of the new permit. Permittees are only obligated to reduce pollutants in runoff from the MS4 to the maximum extent practicable. It should be noted, nevertheless, that at least 30 permittees situated in Reach 2 of the Rio Hondo and in the Upper San Gabriel River drains into groundwater recharge basins, thereby obviating the need for this requirement.

Recommendation: Discussion of these enhanced post-construction runoff mitigation measures should be postponed until outfall monitoring indicates exceedances for applicable water quality standards. Delete any reference to groundwater recharge as a permit requirement.

9.a.iv Prevents construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.

Issue: This new requirement is excessive because it places the burden on the permittee to prevent construction discharges from causing or contributing to a violation of a water quality standard. Again, permittees are only required to control pollutants in stormwater runoff to the maximum extent practicable.

Recommendation: Delete requirement.

f.ii.1 *Construction Plan Review and Approval Procedures – Erosion Control Plan*

Issue: Requiring an erosion control plan for construction projects under 1 acre is unnecessary and there are too many new plans proposed in the new and old permit as it is. Typically, only a few BMPs are required to control erosion on any construction site: silt fencing placed perpendicular to flow, sand bags (two or three rows high depending on site conditions and when construction will be performed), and covering stockpiled sediment, and perhaps a de-silting basin (which is rarely needed). These BMPs can be prescribed as conditions without the need for a formal plan. This is currently done as minimum BMPs for construction sites.

f.ii.2 *Construction Plan Review and Approval Procedures – Specifying SWPPPs for 1 Acre Construction Sites*

Issue: Specifying SWPPP requirements for 1 acre projects is not necessary because they require a General Construction Activity Stormwater permit which controls.

Recommendation: Delete any specific references to SWPPPs.

f.ii.6 *Each Permittee shall require that for all projects, the landowner or the landowner's agent sign a statement on the Local ESCP/SWPPP ...*

Issue: A local SWPPP is no longer a requirement (talk to Ivar)

Recommendation: Remove this provision.



City of Malibu

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April 13, 2012

Sent via email to rpurdy@waterboards.ca.gov

Renee Purdy
Regional Program Section Chief
Los Angeles Regional Water Quality Control Board
320 4th Street, Suite 210
Los Angeles, CA 90013

RE: City of Malibu Comments - Staff Working Proposal for Provisions Regarding Minimum Control Measures in the Reissuance of the Los Angeles Region Municipal Stormwater Permit

Dear Ms. Purdy:

The City of Malibu thanks the Los Angeles Regional Water Quality Control Board and staff (Regional Board) for allowing the opportunity to review and comment on the proposed minimum control measures for the pending draft municipal storm water permit for the Los Angeles region. Early and ongoing communication is critical to the successful development of a protective but reasonable permit. Therefore, the ongoing dialogue, workshops, and public comment periods are much appreciated.

The City of Malibu, as a participant in the Los Angeles Permit Group (LA Permit Group), would like to express its support for the letter submitted by the LA Permit Group dated April 13, 2012. The comments therein are a balanced compromise of the various permittees' views and representative of the collective concerns of the permittees. The negotiations and consensus building within that group has been vital to this process, and yields workable recommendations for this complex permit. The City encourages the Regional Board to consider the comments in that letter and adjust the proposed permit language accordingly. The City of Malibu would also like to emphasize the following additional comments.

Legal Authority Section VI.C.2.a.vii and VI.C.2.a.viii

In section VI.C.2.a.vii on page 4, the Staff proposal states, that [permittees shall] "control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Co-permittees". In addition to the LA Permit Groups

comments on this section, the intent and scope of this provision is not clear. For example, it is not clear which permittees or which portions of the MS4 this is intended to cover. Please clarify what a "Shared MS4" means, as that is not a defined term. Additionally, if you can please provide some clarification as to what this provision is attempting to accomplish, permittees will be better able understand if they have the legal authority to comply with this mandate. Without additional information, it is difficult to determine the scope of this proposed requirement.

New Development Projects Section 8.b.i.1.g Regarding Roadways

The City is a strong supporter of green streets and low impact development (LID) strategies, as evidenced by the City's Cross Creek Roadway project (Winner of SCAG Compass Blueprint Recognition for Excellence and Achievement in Planning), Legacy Park Project (winner of 6 awards in 2011 and 2012 including the American Society of Civil Engineers' Project of the Year Award for Region 9, which includes the entire state of California.), and two Proposition 84 funded roadway and drainage retrofit projects currently in design that will include biofiltration and one may include limited infiltration. Therefore, including the recommendation to employ such strategies on new street, road, highway, and freeway construction is sensible and supported by the City. However, it is important that the Regional Board include a clarification that this section does not apply to routine maintenance projects, and the City requests that such language be included in the permit.

New Development and Redevelopment Options for Stormwater Management Design Table

The City would like to emphasize that the preferred option to provide on-site retention of the SWQDv in the table on page 26, will be physically impossible for many projects in Malibu due to high groundwater, geotechnical hazards and geologic instability, or where there are adjacent onsite wastewater treatment systems (OWTS). Under the medium preferred options, offsite infiltration or bioretention most likely will be infeasible since onsite retention is almost impossible in many areas of the City. In other words, there is no other place to put the water in certain areas because the same problematic groundwater and geologic conditions are widespread throughout the City. Groundwater replenishment is definitely not an option in most areas, as the City does not have a viable aquifer due to geological conditions. Retrofitting an existing developed site has limited options, as Malibu already has a high percent of open and undeveloped space and existing developed space that is primarily low density and rural residential, and the City has few existing commercial properties. The only feasible option left for the very limited number projects that are in the City, which are already heavily regulated by the City's approved Local Coastal Plan, is the on-site biofiltration systems. However, requiring 1.5 times the SWQDv is excessive, arbitrarily assigned, and without any substantiation that treating 1.5 the volume will significantly improve the water quality any more than a design using the SWQDv.



Technical Infeasibility Section 8.c.ii.2.c

The section discussing technical infeasibility to implement options for stormwater management design on page 27 should also include dewatering wells as a justification for technical infeasibility. There are several special geologic hazard assessment areas in the City with dewatering wells to mitigate landslide threats. These wells must continually divert and discharge water to avoid rising groundwater that could cause landslides. Areas requiring dewatering wells should be expressly included as technically infeasible situations for stormwater management by the preferred options.

Alternative Compliance Measures Section 8.c.iii.3.c

The Alternative Compliance Measures detailed starting on page 27 leave projects in the City of Malibu with few alternatives. As previously explained, offsite infiltration or bioretention will rarely be an option. Additionally, groundwater recharge cannot be performed within the City due to high groundwater, geotechnical hazards and geologic instability, or where there are adjacent OWTS.

Water Quality Mitigation Criteria Section 8.c.iv.2.a

The Water Quality Mitigation Criteria section on page 31 lacks a definition for “qualifying storm event”. The City requests that the Regional Board please include a definition for this term, either in this section or in the overall definitions. It is preferred that the qualifying storm event definition match the requirements under the State’s Construction General Permit.

Documentation and Reporting- General

The minimum control measures overall will require an inordinate amount of tracking and documentation, much of which may not lead to a demonstration that water quality is being protected. One such example is the requirement that “Each Permittee shall use an electronic system to inventory grading permits, encroachment permits, demolition permits, building permits, or construction permits”. While an electronic system is ideal, it is not always available to a permittee, is a costly endeavor, and should be an optional method of maintaining records, not mandatory. Further, the permit needs clarification to better describe which types of permits must be reported (i.e. which permits affect water quality). For example, contractors must apply for an encroachment permit to place a temporary office in the public right of way, and building permits are issued for electrical work, neither of which have any relationship to water quality. Yet under the language as proposed, a permittee would still be required to report such permits. The City of Malibu is in the process of developing such an electronic permitting system, but there is no guarantee that it will be completed in time to meet this condition, or that the funding will be available to include *all* of the specifics of this provision. Therefore the City requests that (1) the Regional Board take a closer look at this section and specify what data is of real value to determining compliance and / or water quality protection; and (2) allow for reasonable time frames to comply with these requirements (if an advanced tracking and inventory system remains a requirement).



City of Malibu Comments on Proposed Minimum Control Measures
April 13, 2012
Page 4 of 4

Malibu is appreciative of the Regional Board's efforts to consider the comments from stakeholders and to work collaboratively on this permit reissuance, and understands the inherent challenges in drafting a permit for such a diverse geographic region. Again, the City would like to emphasize the need for flexibility and reasonableness when a one-sized fits all approach is not feasible for various parts of the County. In the end, the permit must identify a method of balancing the need to protect receiving water quality in a manner that accounts for the real, practical challenges that the permittees face. The City continues to support the interactive approach to developing this permit and iterative options for compliance, thanks the Regional Board for the opportunity to comment, and urges the Regional Board to properly address the City of Malibu's comments. If you have any questions regarding this letter, you may contact Jennifer Brown, Senior Environmental Programs Coordinator at (310) 456-2489 x 275 or jbrown@malibucity.org.

Sincerely,



Jim Thorsen
City Manager

cc: Vic Peterson, Environmental Sustainability Director
Robert L. Brager, Public Works Director
Christi Hogin, City Attorney
Ivar Ridgeway, Stormwater Permitting Chief, Regional Water Quality Control Board



CITY OF LOS ANGELES
CALIFORNIA



ANTONIO R. VILLARAIGOSA
MAYOR

April 13, 2012

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Mr. Sam Unger
Executive Officer
Los Angeles Regional Water Quality Control Board
320 4th Street, Suite 210
Los Angeles, CA 90013

Attention: Renee Purdy, Regional Program Section Chief
Ivar Ridgeway, Storm Permitting Chief

Greetings:

TECHNICAL COMMENTS ON LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD STAFF WORKING PROPOSAL FOR THE GREATER LOS ANGELES COUNTY MS4 PERMIT – MINIMUM CONTROL MEASURES

The City of Los Angeles (City) appreciates the opportunity to provide technical comments on the Los Angeles Regional Water Quality Control Board (Regional Board) Staff Working Proposal for the Greater Los Angeles County MS4 Permit. The City appreciates the time your staff has dedicated to meeting with us and the process that has provided the opportunity for substantial engagement and input. The City recognizes that this Working Proposal for Minimum Control Measures (MCMs) is part of the overall process and appreciates your consideration of our comments at this time. The following highlights a few key technical issues. Additional detailed technical comments are also provided in the associated attachments.

Watershed-Based Program

The City supports Regional Board staff's Watershed-Based Program approach. A watershed based program is the quintessential approach allowing for integration of all program elements (referred to by Regional Board staff as "Watershed Management Programs" during the April 5, 2012 workshop) and affords agencies the opportunity to comply with requirements while focusing efforts on the highest priorities for each watershed through customization of MCMs. This approach also considers the current efforts undertaken by agencies to obtain grant funding for water quality projects, for the reason that criteria for many water quality grants are based on watersheds.



Mr. Sam Unger, Executive Officer
Los Angeles Regional Water Quality Control Board
April 13, 2012
Page 2

Finally, this approach supports implementation of TMDLs, which are developed and implemented based on watersheds. The City recognizes that the specific details regarding customization of MCMs have not yet been developed and that this aspect of the Permit will continue to evolve over the next several months. Comments provided herein are intended therefore to inform the process at this point in time. The City looks forward to working with Regional Board staff to continue to develop the Watershed Management Programs.

Timeline

The Staff Working Proposal does not currently provide timelines for the start-up and implementation of the MCMs. This is a key aspect of understanding the feasibility and ease of implementation associated with new requirements. The City requests that the Regional Board staff provide a draft timeline for implementation and phasing-in of the Minimum Control Measure requirements.

Industrial/Commercial Facilities Program

As discussed previously with Regional Board staff, the City maintains a database of facilities that have been inspected over the last decade. The data obtained from inspecting these facilities provides a wealth of information regarding the necessary frequency of inspection. The City would appreciate the opportunity to tailor the Industrial/Commercial program (e.g., establish inspection frequencies) via the Watershed Management Programs using the information from the database and extensive on-the-ground inspection experience.

Additionally, as discussed during the April 5th workshop, Regional Board staff indicated that consideration would be given to streamlining the requirements of the MS4 Permit with general permit requirements. The City requests that the Regional Board consider the streamlining of the Industrial General Permit's (IGP) tracking and inspection activities with those required in the Working Proposal Industrial/Commercial provision. Reducing overlap with inspections conducted by the State and information tracked by SMARTS will allow the City to focus resources on areas that will maximize water quality benefits. In the absence of this proposed streamlining and flexibility to target the most important categories, the additional provisions of this proposed language will put the number of increased inspections outside of our reach.

Planning and Land Development

The City of Los Angeles recently adopted a Low Impact Development (LID) Ordinance which will go into effect in May 2012. The creation of the ordinance included the participation from several stakeholder groups including Regional Board staff. The City requests that Regional Board staff consider referencing the City's LID Ordinance within the Permit as an equivalent mechanism for compliance with the Planning and Land Development MCMs.

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Los Angeles Regional Water Quality Control Board
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Although the City recommends that the permit reference the LID Ordinance as equivalent, additional more detailed technical comments on the Planning and Land Development Provision are provided in Attachment A. In particular, the City asks the Regional Board staff to consider allowing biofiltration, including planter boxes as a "Medium Preferred Option." There are numerous physical and site constraints within the highly urbanized Los Angeles Region, limiting the feasibility of infiltration, and rainwater harvesting in certain circumstances. Given that these preferred options will not be available for certain sites, including biofiltration within the "Medium Preferred" category would provide a feasible option in those circumstances.

Additionally, the City requests that Regional Board staff consider revising the water quality standards for development site runoff with a technology-based performance standard as established within the Ventura County NPDES MS4 permit.

Construction Provision

As currently written, the Construction provision applies to "all activities involving soil disturbance..." The City requests that Regional Board staff consider revising the standard to include a minimum threshold, such as 100 cubic yards of soil disturbance. This threshold would appropriately focus the Construction provision requirements on projects that would require grading permits within the City. In addition the proposed language would treat smaller than one-acre sites similarly to the sites that are subject to the Construction General Permit (CGP) which will greatly impact existing construction practices without necessarily improving water quality.

As noted above, during the April 5th workshop, Regional Board staff indicated that consideration would be given to streamlining the requirements of the MS4 Permit with general permit requirements. The City requests that such consideration also include the requirements contained within the GCP, such as the tracking and inspection requirements. The City appreciates the Regional Board staff's consideration as such revisions would result in efficiencies between the CGP and MS4 Permit, helping to provide the City with the flexibility needed to invest resources in the areas and construction sites where it is needed most.

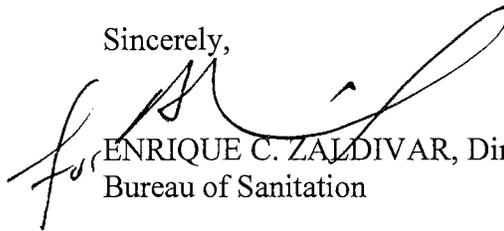
Cause or Contribute Language

Language relating to "cause or contribute to water quality exceedances" is currently utilized throughout the MCMs. This language comes from the Receiving Water Limitations provision of the Permit. For clarity and consistency, the City requests that the "cause or contribute" language be addressed solely within the Receiving Water Limitations provision. In the MCMs, where such language is currently used, the phrase should be replaced with a reference to Part 2 (Receiving Water Limitations).

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Thank you for considering our technical comments on the Working Proposal. We look forward to continuing to work with you and your staff. If there are any questions, please contact Shahram Kharaghani at (213) 485-0587.

Sincerely,



ENRIQUE C. ZALDIVAR, Director
Bureau of Sanitation

Attachment A: Specific Comments on the Regional Board Staff Working Proposal for the
Greater Los Angeles County MS4 Permit

Cc: Deborah J. Smith, Los Angeles Regional Water Quality Control Board
Michael Mullin, Mayor's Office
Traci Minamide, Bureau of Sanitation/EXEC
Varouj S. Abkian, Bureau of Sanitation/EXEC
Adel Hagekhalil, Bureau of Sanitation/EXEC
Shahram Kharaghani, Bureau of Sanitation/WPD
Mas Dojiri, Bureau of Sanitation/EMD
Omar Moghaddam, Bureau of Sanitation/RAD

**ATTCHMENT A:
CITY OF LOS ANGELES TECHNICAL COMMENTS
ON STAFF WORKING PROPOSAL FOR THE GREATER LOS ANGELES COUNTY MS4 PERMIT
(APRIL 13, 2012)**

Minimum Control Measure Definitions			
No.	Page	Citation	Comment
1	2 – 3	1.c	Please consider including all the definitions in a separate chapter as was done under the current Municipal Stormwater Permit (Permit). Include all critical terms and remove terms that are not used. (i.e Effective Impervious Area)
2	3	1.c.xi	Planter boxes are commonly considered biofiltration systems. Please consider allowing their use since for many sites in the City of Los Angeles (City) they would be the only viable option.

Legal Authority			
No.	Page	Citation	Comment
3	4	2.a.i	Since permittees do not have jurisdiction or authority over certain entities such as federal facilities, the City recommends that the following language be modified from “Control contribution of pollutants...associated with industrial and construction activity” to “ensure that industrial and commercial activities control contribution of pollutants to its MS4 through the implementation of NPDES permits, education and outreach and ID/IC program.”
4	5	2.a.xii	Homeowners and other private landowners may find difficulty in documenting the effectiveness of their structural BMPs. The City recommends the following revision: “Require documentation on the operation and maintenance of structural BMPs and their effectiveness in reducing the discharge of pollutants to the MS4.”

Public Information and Participation Program			
No.	Page	Citation	Comment
5	8	6.d.i(3)	Please consider removing “pharmacies” from the list. Improper disposal of drugs has already been the focus of municipal wastewater and refuse collection programs. Consider adding paint stores to the list.

Industrial/ Commercial			
No.	Page	Citation	Comment
6	8	7.a.i	The “cause and contribute” language comes from the Receiving Water Limitations provision of the Permit. For clarity and consistency, the City requests that the “cause or contribute” language be addressed solely within the Receiving Water Limitations provision. In the MCMs, where such language is currently used, the phrase should be replaced with a reference to Part 2 (Receiving Water Limitations).
7	9	7.b.i(3)	Please consider removing industrial facilities that are covered under the General Industrial Permit (IGP) or have their own permit (e.g., municipal landfills) since they fall under the State’s purview. However as part of TMDL compliance efforts, the City would utilize data and information from the State’s tracking and inspection efforts.
8	10	7.b.i(4)	This requirement, as written, will apply to all commercial and industrial activities within the City of Los Angeles which account for about 150,000 establishments. Please consider revising this provision in favor of a more narrow criterion as outlined in 7.b.i(5). As indicated in the cover letter, the City’s database of Critical Sources has the on-the-ground information needed to target facilities of concern.
9	10	7.b.ii(10)	As a way of reducing overlap of activities between the RWQCB and the permittees, consider excluding the facilities that are subject to the IGP or individual permits.
10	16	7.d.ii	Please consider adding language that remove industrial facilities as they are covered under the IGP or have their own permit (e.g., municipal landfills) and they fall under the State’s purview. However as part of TMDL compliance efforts, the City would utilize all information from the State’s tracking and inspection efforts.

Planning and Land Development			
No.	Page	Citation	Comment
11	21	8.b	This provision establishes the scope of development projects subject to the post-construction controls. Sometimes the criterion is based on impervious area and other times it is based on surface area. For consistency, please consider revising the criterion so that the impervious surface area is the mechanism for determining applicability as it is an accurate surrogate for establishing project eligibility.
12	21	8.b.i(g)	The threshold of 10,000 sq ft is low for public roads construction. Please consider revising the streets and roads applicability threshold from 10,000 sq ft to 50,000 sq ft.
13	24	8.c.i(7)	Similarly, please consider making green roofs an optional consideration (versus required) so that municipalities and projects have the flexibility to determine if green roofs conflict with water and landscape conservation goals.
14	25-26	Table	Unique challenges to the proposed prioritization and restrictions on stormwater management options would be faced by the Port of Los Angeles. While our Harbor Departments supports LID techniques were feasible, it is concerned that many of infiltration, rainwater harvesting and even biofiltration options are not applicable for the port facilities. This is due to its presence of typical constrains infiltration and rainwater harvesting combined with the limited space and the need for efficiency in a global operation, which in turn reduces air pollution and aerial deposition. In addition the option of offsite mitigations is not allowed due to State Tidelands Trust restrictions which limit Port expenditures outside of the Tidelands Trust jurisdiction. Allowance for treatment technologies that go beyond LID techniques maybe needed in this case.
15	26	8.c.ii(2)	As indicated in Comment #13, green roofs may conflict with water and landscape conservation goals. Please consider providing some flexibility so that permittees and developers can take these goals into account when selecting BMPs.
16	27	8.c.ii(2)(f)	Please consider adding, "Other site or implementation constraints as identified by Permittees" to the list of technical infeasibility criteria. Similar language was provided in the Ventura County's NPDES MS4 Permit and allowed permittees to identify further constraints through the development of their post-construction technical guidance manual.
17	28	8.c.iii(2)(a)	A retrofit project is likely to capture, retain, and treat a mix of land uses. As a result, an offsite project's (i.e., regional retrofit) land uses (and associated EMCs) may not exactly line up with the land use of the new development. The City recommends that this language be revised with more flexible language that requires the applicant to show "equivalent pollutant control."
18	28	8.c.iii(3)(b)	The City requests that the watershed boundaries proposed within this section be aligned with those established in the Integrated Regional Water Management Plan (IRWMP) process. Utilizing the same watershed boundaries will assist in aligning stormwater permit requirements with the goals of IRWMPs and allow municipalities to maximize the opportunities to implement groundwater replenishment projects identified within IRWMPs. This may be distinguished as separate criteria from other alternative compliance options that should occur within the same HUC-12.
19	29	8.c.iii(3)(f)	The four year timeline makes the implementation of regional facilities via an offsite mitigation program difficult due to the length of time it takes to acquire all of the necessary permits. Additionally, it may take several years for a permittee to accumulate the funds necessary for the design, construction and permitting of a regional facility. Instead the City suggests that the language be modified to indicate that four years is the goal for construction of an offsite facility, but that an additional four year extension is available to regional facilities.

Planning and Land Development			
No.	Page	Citation	Comment
20	31	8.c.iv(2)	The use of the proposed monitoring and BMP retrofit requirements for development projects is unprecedented. They introduce uncertainty on what are the required BMPs. In addition, post-construction opportunities for BMP implementations are limited and much more expensive as compared to during the development phase.
21	31-33	8.c.iv(1)(b) & (3)	The “cause and contribute” language comes from the Receiving Water Limitations provision of the Permit. For clarity and consistency, the City requests that the “cause or contribute” language be addressed solely within the Receiving Water Limitations provision. In the MCMs, where such language is currently used, the phrase should be replaced with a reference to Part 2 (Receiving Water Limitations).
22	31	8.c.iv(1) & (2)	Please consider revising the benchmarking tables to reflect a technology-based performance standard as established within the Ventura County NPDES MS4 permit. These performance tables should be provided as guidance and targets, since in designing on-site BMP controls will be based on design standards.
23	33	8.c.v(1)	Please consider alternatives to the Ventura County NPDES MS4 Permit Hydromodification criteria such as “maintain the peak flow control” used in the existing permit and the County of Los Angeles Hydromodification Criteria as outlined in County LID Manual.
24	39	8.d.iv	Please provide a definition for grandfathered projects namely what projects must comply with this order versus those that must comply with the previous one.
25	40	8.d.iv(d)	Alternatively, please consider allowing Permittees to require as part of the BMP Maintenance Agreement that the property owner performs BMP-specific maintenance and keep log of their maintenance and inspections on-site.

Construction			
No.	Page	Citation	Comment
26	41	9.a.iv.	The “cause and contribute” language comes from the Receiving Water Limitations provision of the Permit. For clarity and consistency, the City requests that the “cause or contribute” language be addressed solely within the Receiving Water Limitations provision. In the MCMs, where such language is currently used, the phrase should be replaced with a reference to Part 2 (Receiving Water Limitations).
27	41	9.d	Please consider revising the requirement to include a lower threshold for projects such as 100 cubic yards or 10,000 square feet of soil disturbance.
28	41	9.e.ii	Please consider reducing the overlap between SMARTS and the tracking required under this provision. This could be accomplished by allowing Permittees to access SMARTS for this information versus creating a separate system that tracks similar information.
29	41	9.3.ii(3)	The proximity of a construction site to a waterbody is not always a good indicator of impact. Please consider revising this language to indicate when a site is directly adjacent to, directly upstream from, or on a waterbody.
30	42	9.f.ii	The proposed language treats the Erosion and Sediment Control Plan (ESCP) similarly to the SWPPP required for GCP sites. GCP guidance was never intended for sites smaller than one acre of disturbed soil. An ESCP for sites less than one acre can achieve its goal by requiring the project proponent to show the placement of the BMPs in a narrative form or as part of the construction documents in the form of one to two sheets of the design plans.
31	43	9.f.ii(4)	Please consider revising the language to read “Require that the erosion and sediment control plan include the rationale used for selecting or rejecting BMPs” since quantifying soil loss potential from BMPs is not commonly performed or required for projects permitted under the Construction General Permit (CGP).
32	43	9.f.ii(8)	The US ACOE requires all other permits to be in place prior to issuing the 404 permit. To reduce conflicting requirements, please consider revising this language to read “Require that the ESCP list applicable permits including, but not limited to the State Water Board’s CGP, State Water Board 401 Water Quality Certification, U.S. Army Corps 404 permit, and California Department of Fish and Game 1600 Agreement. Include as a condition of the grading permit that the Operator submit evidence to the MS4 that all permits required for the project have been obtained prior to commencing ground disturbing activities.”
33	43	9.f.ii(4)	In the interest of streamlining requirements, please consider aligning or deferring to CGP requirements. As an example, as currently written, the Construction MCM Provision requires projects that are less than an acre to prepare a REAP which is not a requirement for small projects under the CGP.
34	44	9.f.iv	This section refers to the 2003 version of the California Stormwater BMP Handbook, Industrial Commercial. The City recommends that all references (including fact sheet references within tables) be updated to reference the 2010 version of the CASQA Construction BMP Handbook.
35	44-47	9.g.iv	For clarification, please add the following lead-in sentence for each of the tables: “Each Permittee shall require the implementation of an effective combination of the following BMPs”

Construction			
No.	Page	Citation	Comment
36	48	9.h.ii	<p>Please consider revising inspection frequencies and associated language to reflect requirements in the Ventura County NPDES MS4 Permit (R4-2010-0108):</p> <ul style="list-style-type: none"> Each Permittee shall require that high risk sites shall be inspected by the project proponents Qualified SWPPP Developer or Qualified SWPPP Practitioner or personnel or consultants who are Certified Professional in Erosion and Sediment Control (CPESC) at the time of BMP installation, at least weekly during the wet season and at least once each 24 hour period during a storm event..." (page 71) Each Permittee shall inspect all construction sites for the implementation of stormwater quality controls a minimum of once during the wet season. Concurrently, each Permittee shall ensure that: <ol style="list-style-type: none"> The local SWPPP is reviewed for compliance with local codes, ordinance, and permits. A follow-up inspection takes place within two weeks for inspected sites that have not adequately implemented their local SWPPP." (page 74)
37	48-49	9.h.ii(2)	<p>This provision requires inspection during all phases of the construction. For the City of Los Angeles, this requirement will mean ten of thousands of additional inspections with limited resources. Please consider revising inspection frequency as indicated in the previous comment and limit to the following 2 construction phases: grading phase and prior to the issuance of the Certificate of Occupancy.</p>

Public Agency Activities Program			
No.	Page	Citation	Comment
38	54-56	10.d	<p>Please consider revising this section so that it is limited to public right of way and approved TMDL implementation plans.</p>
39	54	10.d.i	<p>The "cause and contribute" language comes from the Receiving Water Limitations provision of the Permit. For clarity and consistency, the City requests that the "cause or contribute" language be addressed solely within the Receiving Water Limitations provision. In the MCMs, where such language is currently used, the phrase should be replaced with a reference to Part 2 (Receiving Water Limitations).</p>
40	57-59	10.e.iv	<p>To maintain flexibility in BMP selection, please allow for other sources of BMPs from sources other than the Caltrans Stormwater Quality Handbook.</p>
41	60	10.g(7)(c)	<p>The City has an established Integrated Pest Management (IPM) program and as a result, has made significant reductions in pesticides used by the City. The requirement to "demonstrate measureable reductions in pesticide use" will be difficult because reductions have already occurred. Please consider revising the language as follows: "Demonstrate implementation of IPM alternatives where feasible to reduce pesticide use."</p>
42	63	10.vi(3)	<p>Please consider revising the timeline for relabeling storm drains to 180 days to allow the City to bundle the labeling of multiple catch basins together.</p>
43	63	10.vii(1)	<p>Please consider revising the requirement that the revision of catch basin cleanout and inspection schedule be approved by the Executive Officer, to allow Permittees to report and document changes to the schedule within the annual report.</p>
44	65	10.x(3)	<p>Please provide a definition for residual water. For clarification purposes, please provide background or reference information on the basis for the discharge limitations.</p>

Illicit Connection and Illicit Discharge Elimination Program			
No.	Page	Citation	Comment
45	68	11.b	Please modify the section to clarify that mapping requirements apply to Permittee-owned outfalls (18 inches in diameter or greater), open channels, and MS4 pipes due to the significant number of outfalls that the City needs to document. Consider allowing updates for only once during the permit cycle.
46	69	11.c	Based on past surveys, there are approximately 1900 City outfalls discharging directly to Los Angeles River and tributaries; and 1400 into Ballona Creek. In the 1990's, the City performed field screening of dry weather discharges from its outfalls Los Angeles River, Ballona Creek and Dominguez Channel, as required by the previous MS4 permit. It took a crew of 20 inspectors and engineers (dedicated to do field screening only) five years to complete this task. The current MS4 permit draft is asking for an annual re-assessment, which implies that the initial screening should be completed in one year and repeated yearly to determine if there are any changes to the initial observations. Due to the significant number of City outfalls, the City would recommend to be allowed to screen a manageable number of outfalls every year and conduct re-assessment once during the permit cycle.
47	70	11.d.iv(1)	This section states "...require the responsible party to conduct all necessary corrective actions to eliminate the illicit discharge within 48 hours of notification." Please consider revising this language to require elimination within 72 hours. The additional time may be necessary for the Permittee to identify the responsible party or in the event that the discharge occurs on the weekend or during a large public event (i.e. contractors and equipment may not be readily available).

Attachment TBD: Bioretention/ Biofiltration Design Criteria			
No.	Page	Citation	Comment
48	74 – 79	throughout	Please consider making the Bioretention/ Biofiltration Design Criteria Attachment suggested guidelines. The City would appreciate the opportunity to consider guidelines and standards appropriate to the Los Angeles region and reflect the most up-to-date understanding of bioretention/biofiltration pollutant removal effectiveness. This is particularly important as the stormwater field's understanding and knowledge base regarding Low Impact Development practices and soil media specifications evolve.
49	78	5.e	Please consider flexibility in the submittal requirements for bioretention/biofiltration soils. Please consider allowing to Permittees to determine compliance through established guidance, plan review, and inspections.



CITY OF SIGNAL HILL

2175 Cherry Avenue ♦ Signal Hill, California 90755-3799

13 April 2012

VIA EMAIL

Staff
State Water Resources Control Board
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Subject: Comments on Staff Working Proposal of the Permit Provisions Related to Minimum Control Measures (MCMs) Proposed for the Reissued Los Angeles County MS4 Permit

Dear Ms. Purdy and Mr. Ridgeway:

I am writing on behalf of the City of Signal Hill to provide comments on the Staff Working Proposal of the Part VI permit provisions related to the Minimum Control Measures (MCMs) currently being considered by Regional Water Board staff for inclusion in the reissued Los Angeles County MS4 Permit. Thank you for the opportunity to provide these comments. We will offer a few general comments on the document, followed by detailed comments on Staff Working Proposal language.

General Comments

Staff noted at the beginning of the April 5, 2012 Board Workshop on reissuance of the Los Angeles MS4 Permit that there was a decision last fall to structure the permit to facilitate watershed management. The City of Signal Hill appreciates Staff's efforts and the City of Los Angeles' support for the watershed approach. It could encourage collaboration and could focus resources on the highest priorities, especially if the AB 2554 stormwater fee - with 50% of its funding allocated to watershed efforts approved by the proposed Watershed Authority Groups - is supported by landowners.

However, our experience in organizing the MS4 permittees in the Los Angeles River Watershed to develop, implement, and pay for the Coordinated Monitoring Plan and special studies related to the Los Angeles River Watershed Metals TMDLs has taught us

City of Signal Hill Comments on Staff Working Proposal Regarding Minimum Control Language for Greater Los Angeles County MS4 Permit

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that implementing even a limited watershed program can be very difficult. Some municipalities appear to believe that their contributions to water quality impairments are so minor and their budgets are so stressed that there is no need for them to participate actively in nor financially support a watershed-wide program. In the case of the LA River six of 40 municipalities chose not to participate in supporting special studies. Furthermore, some cities could use watershed programs as camouflage to avoid individual efforts to improve water quality.

We agree with Member Glickfeld that the permit should provide a variety of options. One option that we would like to see is the option for proactive cities, especially those in multiple watersheds, to be recognized as separate, distinct entities within the permit. Such entities could still work with watershed or subwatershed groups through Memoranda of Agreement to address TMDL implementation and other water quality issues. This option could be an alternative to the individual permits sought by a few cities if it were structured to hold the cities responsible for their own discharges while protecting them from joint and several liability requirements.

One overall comment we have about the Working Proposal language is that it is extremely prescriptive. The City of Signal Hill is concerned that, in the current draft form, its prescriptive nature would have the unintended consequence of taking essential monies away from TMDL implementation programs, thereby defeating the purpose of spelling-out detailed design requirements. It would be more appropriate for design details to be presented in a separate Technical Guidance Document as was done in Ventura County. A Guidance Document would be much easier to correct than the permit, if corrections were required after adoption. However, if the Board decides to keep the detailed prescriptive language in the permit, Board members and Staff should carefully review the language to avoid unintended consequences that would have a negative impact on Permittees' ability to protect water quality in the region.

In addition to being prescriptive, the Working Proposal is overly broad. The scope needs to be reduced and terms need to be well defined. The MCMs in the Staff Working Proposal should be minimized to enable Permittees to focus resources on the highest priority areas. The list of Public Activities Program requirements on page 52, for instance, contains the requirement that Permittees prepare an Inventory of Existing Development for Retrofitting Opportunities. One of the areas to be addressed is "Areas of existing development that generate pollutants subject to a TMDL for the receiving water." Does that include atmospheric deposition, over which permittees have no control authority? Depending on how "generate" is defined, these "areas of existing development" could include entire watersheds, and creating an inventory of retrofitting opportunities for an entire watershed would be cost prohibitive and of limited benefit.

Further, the Permit should acknowledge the value of true source control and operational source control and encourage their use in a comprehensive approach to improving water quality. It is much more efficient and cost-effective to remove pollutants through source control than to try to remove them by treatment at the end of pipe. By recognizing true

source control in the reissued permit, the Regional Water Board and Staff would be recognizing the best management practice that provides the most complete removal of pollutants. Stormwater regulators and the regulated community alike need to consistently advocate for true source control and to encourage other regulatory agencies such as the Department of Toxic Substances Control (DTSC), the Department of Pesticide Regulation (DPR), and the Air Boards to consider water quality impacts when they develop and implement regulations. Only if we move forward collectively to bring about True Source Control will we be able to significantly reduce or eliminate the contributions of certain types of pollutants. True Source Control should also be defined in the definition section.

The City of Signal Hill agrees with the LA Permit Group that the costs to implement all of the “minimum control measures” while addressing multiple TMDLs will far exceed the fiscal resources currently available. The situation could be much more manageable if the County’s proposal for a stormwater fee program is passed. However, this permit is proposed to be adopted several months before the fee proposal election is scheduled. Therefore, the new permit should be structured to avoid undue core program costs to permittees. We also agree with the Permit Group that various regulatory requirements, including clean water requirements, need to be developed in a balanced manner. Municipalities constantly have to make choices between conflicting goals and objectives.

In addition, the City of Signal Hill would like to support comments made at the Board Workshop by the Building Industry Association and the Construction Industry Coalition on Water Quality concerning MEP and the balancing requirements of the Water Code, as well as their comments about the use of biofiltration and the minimum infiltration rate.

Lastly, near the end of the Board Workshop, Member Glickfeld stated that she didn’t understand why the Los Angeles MS4 permit has industrial facility and construction components when the State has its own permits for industrial facilities and construction projects. As a municipal Permittee, the City of Signal Hill agrees with her concerns. We have a long list of requirements for which we are responsible and would like to be assured that additional responsibilities that belong to the Regional Board – such as inspections related to enforcement of the State’s Construction General Permit and Industrial General Permit – will not be transferred to us. We also agree with Member Glickfeld that it would be beneficial to see a conceptual framework on how the proposed permit would work.

Specific Comments on Staff Working Proposal Language

Definition Section Should Be Expanded

The City appreciates the inclusion of a Minimum Control Measures Definitions section. However, several revisions should be made to clearly define additional terms used in the Staff Working Proposal and to expand upon current definitions.

- **BMPs** – There is already a definition for BMPs in the definition section, but it should be revised to reference source control. It is beneficial to recognize options, as the Staff Proposal does. However, the current definition leaves out one of the most beneficial options -- true source control. Adding true source control to the list of suggested options would encourage Permittees to keep it in mind as they design their stormwater quality improvement programs.
- **Development** – The definitions of Development, New Development, and Redevelopment should be clearly defined as they are in the existing MS4 permit, except that the 5,000 square foot threshold in the definition of redevelopment should be increased to at least 10,000 square feet.
- **Environmentally Sensitive Areas (ESAs)** – This term should be defined.
- **Green Infrastructure** - This term should be defined. EPA states on the LID page of its website that green infrastructure “is a relatively new and flexible term” that “has been used differently in different contexts.” EPA also states “Green infrastructure can be used at a wide range of landscape scales in place of, or in addition to, more traditional stormwater control elements to support the principles of LID.”
- **MS4 outfalls** – These should be defined and there should be a separate definition for major outfalls, which should be defined as outfalls with a diameter of 36” or greater.
- **Operational Source Control** – This term needs to be clearly identified and utilized throughout the document to differentiate it from True Source Control.
- **Predevelopment conditions** – This term is referred to on page 36 and could be viewed in an overly broad manner unless it is clearly defined in the definition section.
- **Stormwater harvest and use** – Since it may be desirable in the course of implementing TMDLs to harvest stormwater from an existing built-up area to infiltrate or use for irrigation, this term should be defined.
- **True Source Control** – This term needs to be defined. Staff could use the definition from CASQA’s True Source Control Initiative.

Special Provisions

Provision VI.C.1.a. States “each permittee shall implement the requirements in Parts [TBD for each Minimum Control Measure (MCM)] below, or customized actions within

City of Signal Hill Comments on Staff Working Proposal Regarding Minimum Control Language for Greater Los Angeles County MS4 Permit
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each of these general categories of control measures to achieve equivalent pollutant control...” The concept of customized actions appears beneficial, but permittees need to see actual permit language defining the range of permissible customized actions.

Regarding Provision VI.C.1.b. Timelines for Implementation on page 1, a phase-in period may be necessary. The MCM Permit Language states, “each Permittee shall ensure implementation of the requirements contained in Part VI.C.6 upon the Effective Date of the Order;” however, most implementation programs are not established until the permit is effective. Phasing in permit requirements would allow Permittees to make good faith efforts to move forward in their implementation efforts, while preventing them from being subject to being in immediate non-compliance upon Permit adoption.

Legal Authority Language

It appears that provisions VI.C.2.a.vii. and VI.C.2.a.viii. in the Legal Authority section on page 4 are partly duplicative and should be combined. In addition, the reference to documentation of effectiveness of BMPs in reducing the discharge of pollutants to the MS4 should be deleted from Provision VI.C.2.a.xii on page 5.

Fiscal Resources

Section VI.C.3 of the Working Proposal almost appears to assume the proposed stormwater fee has been approved and is operational. In actuality, municipalities, like the State, are struggling to secure sufficient fiscal resources to maintain current public services. The problem is particularly acute for municipalities that have lost redevelopment agencies. In many cases, redevelopment agencies were making significant contributions to water quality improvements in association with redevelopment projects. It is appropriate to address fiscal resources, but it is not appropriate to assume that a permittee can “exercise its full authority to secure the fiscal resources necessary to meet all requirements of this Order.” The phrase “all requirements of this order” is particularly troublesome because the Regional Board proposes to include TMDL requirements in the Order. The costs to meet TMDL requirements are partially unknown, but are likely to be very high – especially if traditional treatment control BMPs are used to achieve compliance.

To improve water quality in this Region, all parties are going to have to contribute what they can to this effort. However, it is inappropriate for a state agency to assume that municipalities can secure fiscal resources to meet permit requirements when the State cannot secure all the fiscal resources it needs and has taken resources away from municipalities. Furthermore, the proposed annual fiscal analysis will cost money and divert resources away from addressing water quality. It should be eliminated from the Proposed Order.

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Public Information and Participation Program

Language specifying “pursuant to Part VI.C.6.b” should be added to Provision VI.C.6.a.i on page 6. It should read, “Each Permittee shall implement a Public Information and Participation Program (PIPP) pursuant to Part VI.C.6.b that includes...”

Residential Outreach Program

Provision VI.C.6.d.i (5) on page 8 deals with the residential outreach program as it relates to schools. Public schools ideally would have been subject to the Phase II permit, but were exempted. Recommending outreach materials that public schools would be asked or required to distribute should not be required of Permittees. Schools and school boards are generally not open to curriculum input from cities since curriculum decisions are, in large part, dictated by Sacramento. The State Water Board should work directly with the California Department of Education to make those determinations.

Industrial/Commercial Facilities Program

In Provision VI.C.7.a.i on page 8, the language stating that each Permittee shall implement a program that “prevents” illicit discharges should be changed to read that such a program “is designed to prevent” illicit discharges.

In Provision VI.C.7.a.ii it may be useful to recognize that CASQA is planning to convert the Industrial and Commercial BMP Handbook to a web portal.

Track Critical Sources

In Provision VI.C.7.b.(4) Staff lists as critical sources to be tracked “all other commercial or industrial facilities tributary to a waterbody segment addressed by TMDL provisions in Part 7, where the facility generates pollutants addressed by the TMDL for that waterbody.” This language could be interpreted to refer to *all* commercial and industrial facilities because of the number of waterbody segments for which TMDLs have been adopted or established pursuant to the Consent Decree and the possible interpretation of the term “generate.” Does it include atmospheric deposition? Please revisit this Provision to clarify and to narrow the focus to those that are truly critical sources.

A similar problem exists in Provision VI.C.7.b.ii (9). A broad interpretation of “generates” to include atmospheric deposition of pollutants that are subsequently discharged from a facility site with stormwater discharges could result in virtually all commercial and industrial facilities discharging to a 303(d) listed waterbody being identified as critical sources.

Planning and Land Development Program

The language in Provision VI.C.8.a.i.(5) (pp. 20-21) should be changed to specify minimizing pollutant loadings “through the use of properly designed, technically appropriate BMPs (including true source control BMPs such as materials substitution or product bans and operational source control BMPs such as good housekeeping practices, pet waste clean-up, and pesticide use regulation), LID Strategies, and treatment control BMPs.”

Applicability - New Development Projects

Provision VI.C.8.c.i.(1) on page 23-24 should be modified to also allow biofiltration. The three methods currently specified – infiltration, bioretention, and harvest and use – focus on controlling runoff to eliminate the pollutant transport mechanism, but pollutant reduction through biofiltration is also a useful tool for improving water quality.

Provision VI.C.8.c.i.(2) on page 24 could be simplified by having one standard rather than requiring comparison of two standards and using whichever is greater. Stormwater quality programs across the state have broadly focused on the runoff from the 85th percentile, 24-hour rain event. Therefore, we recommend that the reissued MS4 permit focus on the 85th percentile, 24-hour rain event as the single standard. We also recommend that Provision VI.C.8.c.i.(3) be modified to specify that infiltration BMPs be limited to sites with a demonstrated infiltration rate under saturated conditions of no less than 0.5 inch per hour. A BMP with an infiltration rate as low as 0.15 inch per hour is much more likely to fail than one with an infiltration rate of 0.5 inch per hour.

The New Development and Redevelopment Projects Options for Stormwater Management Design table (pp. 25-26) should be divided into two tables - one for new development and one for redevelopment, and both tables should be designed to provide for more flexibility and to reduce costs. Greenfield development and redevelopment of the built environment are quite different and those differences result in different options for stormwater management.

Green roofs should be added to the Medium Preferred Options table for redevelopment.

Provision VI.C.8.c.ii (2)(a) on page 27 should be changed to an infiltration rate of less than 0.5 inch per hour. An infiltration rate of 0.15 inch per hour is too marginal and could easily result in investment in a BMP that quickly fails.

Provision VI.C.8.C.ii (2)(b) on page 27 should be changed to specify locations “where seasonal high groundwater is within 10 feet of the surface.” Groundwater within 5 feet of the surface does not allow sufficient depth for construction of an in-the-ground infiltration facility and natural filtration of water through the natural soil matrix.

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With respect to the references to hydrologic areas HUC-10 and HUC-12 in Provision VI.C.8.c (3)(b) on page 28, the City recommends that a map showing the locations of these subwatersheds be included or made available by the Regional Board.

The units for lead, zinc, and copper in the Benchmarks Applicable to New Development Treatment BMPs table on page 32 are listed as mg/L, but in the TMDLs the units of measure are μ /L. To be consistent, the units used in the permit should also be μ /L. In addition, the metals benchmarks in the Hardness Dependent Benchmarks table on p. 33 should be expressed in μ /L.

Provision VI.C.8.c.v.(1)(c)(i)1. on page 35 should be changed to specify runoff from the 85th percentile storm – not the 95th percentile storm. The permit should establish consistent use of the 85th percentile storm.

Provision VI.C.8.d.i appears to be a good idea, but it needs further refinement. How is it to be determined that a local LID ordinance does not fully incorporate the applicable requirements of this Order? How will reasonable assurances be provided? We would appreciate the opportunity to further explore this concept with Staff.

Development Construction Program

Provision VI.C.9.d. on page 41 should be revised to specify a size limit, not “all activities involving soil disturbance with the exception of agricultural activities.” There are some applicability thresholds that should be considered. We recommend changing the language to “all activity meeting applicability thresholds with the exception of agricultural activities.”

Construction Plan Review and Approval Procedures

Provision VI.C.9.f.ii.(1). on page 42 is excessive and inappropriate. Locally required Erosion and Sediment Control Plans should not be required to include all of the elements of a SWPPP prepared in accordance with the requirements of the Construction General Permit. The State has established very detailed requirements for construction projects disturbing one acre or more of soil. It is neither necessary nor appropriate to duplicate these requirements for smaller projects.

Provision VI.C.9.f.ii.(6) on page 43 states “each permittee shall require that all structural BMPs be designed by a California licensed engineer.” Not all structural BMPs need to be designed by a licensed engineer. Some are simple cover and containment operational source control BMPs.

BMP Implementation Level

The language in Provision VI.9.g.i. on pages 43-44 should be changed to read, “BMPs must be consistent with the applicable California Stormwater Quality Association (CASQA) Best Management Practices Handbooks or Portals.”

Public Agency Activities Program

Municipalities do not have the authority to control atmospheric deposition. The City requests that the State Water Board and the Regional Water Board use the authorities granted them by Clean Water Act (CWA) Sections 13146 and 13247, respectively, to compel actions by the California Air Resource Board to control the sources of metals in atmospheric deposition.

Provision VI.C.10.d. (starting on page 54) needs to be rethought and modified. The goal of beginning to address the impacts of existing development through consideration of retrofit projects is worthwhile. In fact, TMDL requirements and state grant programs such as Proposition 84 are driving consideration of retrofit projects. However, this provision as written is likely to be very expensive and divert limited resources away from higher priority projects. The provision could be made more workable and affordable by making Provisions VI.C.10.d.i. and VI.C.10.d.ii apply to a preliminary broad inventory of potential retrofitting opportunities while limiting Provision VI.C.10.d.iii to a limited number of probable projects - perhaps 3-5 during the permit cycle. This would be an affordable way to start the long-term process of retrofitting the existing built environment.

Public Agency Facility and Activity Management

Provision VI.C.10.e.ii.(2) on page 56 should be revised to specify that “Permittee-owned and operated” existing structural flood control facilities should be evaluated to determine feasibility of retrofitting for additional pollutant removal. Inspection of privately owned facilities or those owned and operated by other agencies should not be the responsibility of a city in which these facilities happen to be located.

The title of the table on pages 57-59 should be modified to specify that these are “BMPs for Public Agency Facilities Where Activities are Conducted that Require BMPs.”

Landscape, Park, and Recreational Facilities Management

Provision VI.C.10.g.i. on page 59 calls for Permittees to implement and maintain the activity-specific BMPs listed in the table for all public right-of-ways, flood control facilities, open channels, etc. This should be modified to specify the conditions that would require permittees to implement and maintain BMPs listed in the table.

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Biorention/Biofiltration Design Criteria Attachment

This attachment belongs in a separate technical guidance manual.

Developer Technical Information and Guidelines

“All natural drainages” in the Developer Technical Information and Guidelines Attachment 1.i.vi. on page 81 needs to be defined. This term could be interpreted to include such drainages as rills or gullies, but that is not likely what Staff intended.

Conclusion

We appreciate Staff’s comments at the April 5, 2012 Regional Water Board Workshop that Permittees would be allowed to propose customized actions to achieve equivalent pollutant control based on water quality conditions in the area under the Permittee’s jurisdiction. Water quality protection is not a turnkey operation, and this suggestion reflects Regional Board staff’s recognition of this fact. We also appreciate Staff’s inclusion of a tiered BMP approach in certain instances.

We urge Board Staff to give serious consideration to the comments of all permittees regarding the MCM Permit Language in the Staff Working Proposal. It is the permittees who have experience with design, construction, operation, and maintenance of BMPs and the implementation of MS4 permit requirement. Utilizing that experience could significantly enhance the workability of the new MS4 permit. We also strongly suggest that the minimum control measures in the Staff Working Proposal be simplified and better defined in order to allow Permittees to focus their limited resources on the highest priorities for water quality.

Thank you again for the opportunity to provide these comments.

Sincerely,

CITY OF SIGNAL HILL



Steve Myrter
Director of Public Works



April 13, 2012

Submitted via email to: iridgeway@waterboards.ca.gov

Original sent via U.S. Mail

Attn: Mr. Ivar Ridgeway, Chief
Storm Water Permitting
Los Angeles Regional Water Quality Control Board
320 W. Fourth Street, Suite 200
Los Angeles, CA 90013

RE: Comments from Building and Construction Industry Representatives Concerning the Staff Working Proposal for the Greater Los Angeles County MS4 Permit, Minimum Control Measures

Dear Mr. Ridgeway:

We appreciate the opportunity to provide comments on the Staff Working Proposal for the Greater Los Angeles County MS4 Permit, Minimum Control Measures (MCM document) that was released for public review on March 21, 2012. The comments provided herein, and as attachments, are those of the following entities, each of which represents the homebuilding industry or related construction and land development industries within the Southern California region that includes Los Angeles County. Specifically, the comments are from:

- Building Industry Association of Southern California, Inc. (BIASC), including its Los Angeles-Ventura Chapter (BIASC/LAV)
- Building Industry Legal Defense Foundation (BILD)
- Construction Industry Coalition on Water Quality (CICWQ)

BIA/SC is a nonprofit trade association representing more than 1,300 member companies, which together have nearly 100,000 employees. BIA/SC's members have, for decades, built the majority of the homes in the region that it serves, and the LAV Chapter works with members building in Los Angeles and Ventura Counties. BILD is a nonprofit mutual benefit corporation and controlled affiliate of BIA/SC. BILD's purposes are to monitor legal and regulatory conditions for the construction industry in Southern California and intervene as appropriate. BILD focuses particularly on litigation and regulatory matters with a regional or statewide significance to its mission. CICWQ is a water quality coalition comprised of representatives from five industry trade associations (in addition to BIA/SC) involved in the development of public and private building, infrastructure and roads throughout California (Associated General Contractors, Engineering Contractors Association, Southern California Contractors Association, Engineering and General Contractors Association, and United Contractors). All of the above trade associations are affected by the post construction runoff control requirements proposed in



the MCM document, and this letter and supporting attachments are intended to provide the LA Regional Board staff with constructive suggestions for improvement.

This comment letter summarizes and highlights comments we make on the MCM document in a 17-page comment matrix, which is also supported by four Attachments.

We appreciate the effort and commitment of the LA Regional Board Staff in evaluating alternatives for the LA County MS4 permit, and proposing Minimum Control Measures (MCMs), including post-construction runoff requirements for new and redevelopment projects meeting specific applicability thresholds. The staff proposal contains some elements found in similar, recently adopted MS4 permits in California, most notably the Ventura County MS4 permit that was considered and adopted by the LA Regional Board in July 2010. In addition, the MCM document recognizes that off-site management of the storm water quality design volume (SWQDv) may offer superior water quality and water supply benefit that on-site management of the same runoff volume, in certain circumstance.

However, the MCM document content deviates from some of the key elements adopted into the Ventura County MS4 permit, and also redefines key terms and modifies established, technically sound processes and engineering design criteria for selecting Low Impact Development (LID) Best Management Practices (BMPs). The proposal moves away from flexible and progressive approaches to hydromodification control found in recently adopted MS4 permits in southern California. And finally, the Staff Working Proposal fails to mention that the Clean Water Act standard is to reduce pollution to the Maximum Extent Practicable, and there is no mention of MEP or the required balancing of multiple factors when evaluating and selecting stormwater management controls, including economics. Given that the draft MCMs severely curtail the stormwater management options available to builders and that implementation of the MCMs occurs in more than 80 individual jurisdictions with different needs and circumstances, the MCMs must be balanced with the MEP standard. These needed improvements, therefore, form the emphasis of our comment matrix and attachments that support it.

The Staff Working Proposal MCM Fundamentally Moves Away from the Process and Practices for Stormwater Management Adopted by the Los Angeles Regional Board for Ventura County in 2010

Significant time and effort was spent by the Los Angeles Regional Board members, its staff, and all stakeholders who participated in the development of the revised Ventura County MS4 permit, which was adopted in 2010. The staff working proposal MCM document for Los Angeles County fundamentally moves away from the process and engineering principles that were agreed upon and adopted by the Los Angeles Regional Board for evaluating and selecting LID BMPs for managing stormwater runoff and for what constitutes an LID BMP. Most notable here is the elimination of biofiltration as a means to meet the on-site runoff volume retention standard, and the redefinition of what is an acceptable LID BMP to meet that standard. These types of changes are confusing to the membership we represent, as the Staff Working Proposal



MCM on page 2 of the 82-page document clearly points out the viability of biofiltration as an LID BMP option in Footnote 1. The new Table [TBD] (page 25 of 82) which presents options for stormwater management design, fundamentally moves away from the LID BMP evaluation and selection process adopted into the Ventura MS4 permit and introduces a zero discharge standard that is technically unsupportable and scientifically unsound. And finally, the Staff Working Proposal introduces a new level of engineering prescription into the LA County MS4 permit language, instead of properly placing design criteria and support in a Technical Guidance Document. The requirement for a Technical Guidance Document is absent, and this should be included in the forthcoming release of a Draft LA County MS4 permit.

The Nature of Los Angeles County Development in the Future Necessitates a Flexible Approach to Stormwater Management that Includes Use of All LID BMP Technologies Available to a Project Designer

Los Angeles County is substantially built-out and a significant portion of new development is predicted to be in the form of re-development of existing properties. Given this fact, the next LA County MS4 permit must allow flexible and adaptive management strategies that facilitate improved water quality. While we appreciate that staff has recognized the value of off-site mitigation options when the entire SWQDv cannot be managed on-site, these offsite options are limited to very small areas and instances at this time. In addition, with more than 80 cities in LA County and competing needs and interests, the viability of these off-site projects is uncertain.

Moreover, LID is best applied when it is incorporated early in the design phase of a project and considers the site-specific development context. The LA County MS4 permit should allow for different types of LID BMPs to be used because the type of development that occurs in LA County is varied, and will include a focus on property redevelopment. The best LID design for one type of project may not work in another. Again, the LID goals must be balanced with other goals, including the desire for increased density, accessibility, and improved streetscapes. Flexible on-site compliance strategies must be afforded to project proponents if needed development and redevelopment is expected to continue at any reasonable rate.

The current MCM document limits LID BMP technologies to only those that retain water on-site and do not allow for any runoff, even after biofiltration or biotreatment. This approach does not facilitate improved water quality outcomes in any meaningful way, especially considering the limited amount of development relative to the amount of land that is already urbanized. While LID can be a good tool for stormwater management, it is never going to achieve the water quality, balance, and supply goals outlined in the staff proposal. The LA Regional Board should place its attention on addressing pollution from the existing urbanized areas, rather than on incremental development. These new requirements found in the Staff Working Proposal MCM will make redevelopment extremely difficult.



Inconsistencies in Project Applicability

The requirement for existing projects in the development pipeline is a very stringent and restrictive project grandfathering clause and will create a significant burden for project developers. The homebuilding and land development community invested significant time and resources during the Ventura County MS4 permit revision process, and the procedure and guidelines that the LA Regional Board adopted and placed into the permit and into the Ventura Technical Guidance Manual have been eliminated. We strongly suggest that the Staff Working Proposal MCM document be revised to be consistent with the grandfathering procedure agreed upon for the Ventura MS4 permit and its Technical Guidance Manual. There is no basis for a different standard in Los Angeles County than in Ventura County.

Retrofitting Existing Development

While we support retrofitting of existing development as a potential off-site opportunity for mitigating the volume of runoff that cannot be technically or economically managed by a suite of LID BMPs on-site, we are cautious of any requirement that makes project approvals contingent on actions outside the control of the project proponent. The Staff's proposal elevates existing development retrofits to a status and hierarchy we are skeptical will ever be achieved or realized. We suggest making existing retrofit of development an option for off-site volume mitigation, but include this process and procedure in a Technical Guidance Manual. We don't believe Staff has considered the enormous economic impact on municipalities to prepare and execute storm water infrastructure retrofit plans. We encourage cities and the Los Angeles Regional Board to incorporate plans for retrofit as part of TMDL implementation and to identify appropriate retrofit opportunities as part of regular stormwater planning activities.

Conclusion

We appreciate the amount of effort that LA Regional Board staff put forth in preparing the MCM document and facilitating a dialogue among interested stakeholders. With the comments contained herein we feel that progressive and flexible LA County MS4 permit conditions can be developed that protect water quality, while at the same time facilitating growth and needed development within Los Angeles County. We look forward to continuing to work with staff, the Regional Board members, and all stakeholders in revising the LA County MS4 permit in the coming months. If you have any questions concerning our comments, please contact Dr. Mark Grey, at mgrey@biasec.org; (951) 781-7310, or (909) 525-0623.

Sincerely

A handwritten signature in black ink, appearing to read 'Holly Schroeder', written over a horizontal line.

Holly Schroeder, CEO
BIA-Los Angeles/Ventura

Comments on Staff Working Proposal, Minimum Control Measures, Greater Los Angeles County MS4 Permit Submitted by The Building Industry Association of Southern California, Los Angeles-Ventura Chapter; Building Industry Legal Defense Foundation; and Construction Industry Coalition on Water Quality

Minimum Control Measures Staff Working Proposal Narrative Requirement	BIA/LAV-BILD-CICWQ Comment	Rationale for Change in Staff Working Proposal Minimum Control Measures	BIA/LAV-BILD-CICWQ Suggested Permit Language/Requirement
<p>General Comment:</p> <p>Economic considerations in evaluating and selecting LID BMPs for control of the stormwater quality design volume are absent.</p>	<p>We recommend recognizing and including economic feasibility in selecting on-site or off-site LID BMPs, and include economic feasibility as part of the LID BMP feasibility determination process along with technical feasibility. The maximum extent practicable (MEP) standard expressly includes the recognition of economic considerations when evaluating stormwater management options.</p>	<p>Santa Ana Regional Board Permit R8—2009-0030, Section XII.C.6: “The LID BMPs shall be designed to mimic pre-development hydrology through technically and economically feasible preventative and mitigative site design techniques. LID combines hydrologically functional site design, with pollution prevention methods to compensate for land development impact on hydrology and water quality.”</p> <p>San Diego Regional Board Permit R9—2009-0002, Section F.(7)(b): “For each PDP participating, a technical feasibility analysis must be included demonstrating that it is technically infeasible to implement LID BMPs that comply with the requirements of Section F.1.(d)(4). The Copermittee(s) must develop criteria for the technical feasibility analysis including a cost benefit analysis, examination of LID BMPs considered and alternatives chosen. Each PDP participating must demonstrate that LID BMPs were implemented as much as feasible given the site’s unique conditions.</p> <p>Ventura County MS4 Permit, R4-2009-0057, Definitions: Maximum Extent</p>	<p>Revisions or additions are shown in <u>strikeout</u> or <u>underline</u>:</p> <p>Within the current MCM staff working proposal there are several instances where, in addition to a demonstration of technical feasibility, economic feasibility must be included when evaluating and selecting LID BMPs. In the current MCM, these instances are found in:</p> <ol style="list-style-type: none"> 1. VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, i. Integrated Water Quality/Flow Reduction/Resources Management Criteria <u>(2)</u>. 2. VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, ii, Alternative Compliance for Technical Infeasibility or Opportunity for Groundwater Replenishment <u>(1) and (2)</u> 3. Table [TBD]. New Development and Redevelopment Projects-Options for Stormwater Management Design (listed in order of preference)

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Minimum Control Measures Staff Working Proposal Narrative Requirement	BIA/LAV-BILD-CICWQ Comment	Rationale for Change in Staff Working Proposal Minimum Control Measures	BIA/LAV-BILD-CICWQ Suggested Permit Language/Requirement
		<p>Practicable (MEP) – The technology-based permit requirement established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water must meet. Technology-based requirements, including MEP, establish a level of pollutant control that is derived from available technology or other controls. MEP requires municipal dischargers to perform at maximum level that is practicable. Compliance with MEP may be achieved by emphasizing pollution prevention and source control BMPs in combination with structural and treatment methods where appropriate. The MEP approach is an ever evolving and advancing concept, which considers technical and economic feasibility.</p>	<p><u>Medium Preferred Options</u> <u>Least Preferred Options</u></p> <p>4. VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, iii. Alternative Compliance Measures, <u>introductory paragraph and in (3)(e).</u></p> <p>We suggest inserting “<u>and economically</u>” to read “technically and economically infeasible” in the instances noted above, except for Issue No. 3 , where we have suggested text edits found in Attachment 1.</p>
<p>VI. Provisions, C. Special Provisions, 1. General Requirements, c. Minimum Control Measure Definitions:</p> <p>Definition edits needed for:</p> <ul style="list-style-type: none"> ii. Biofiltration iii. Bioretention viii. Infiltration xi. Planter boxes and other flow-through treatment BMPs 	<p>Some definitions provided are inconsistent with established knowledge and practice in infiltration and biotreatment system designs. In addition, we recommend including definitions for “bioinfiltration”, “project” and “total project area.”</p>	<p>There are established definitions in the Ventura County MS4 Permit Technical Guidance Manual that clearly and succinctly define essential permit terms and conditions, in addition to those in the staff proposed MCM.</p>	<p>Biofiltration: A LID BMP that reduces stormwater pollutant discharges by intercepting rainfall on vegetative canopy, and through evapotranspiration, incidental infiltration <u>if feasible</u>, and filtration. As described in the Ventura County Technical Guidance Manual, studies have demonstrated that bioinfiltration <u>biofiltration</u> of 1.5 times the stormwater quality design volume (SWQDv) provides approximately equivalent or greater</p>

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<p>Definitions needed for: 1) Bioinfiltration 2) Project 3) Total Project Area</p>			<p>reductions in pollutant loading when compared to bioretention or infiltration of the SWQDv. <u>Incidental infiltration volume reduction</u> 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 <u>infiltration volume reduction through the use of vegetated media to promote ET and by allowing for incidental infiltration where feasible</u>. Biofiltration BMPs include bioretention systems with an underdrain, bioswales, <u>and other systems providing biofiltration mechanisms to address pollutants of concern</u>.</p> <p>Bioretention: A LID BMP that reduces stormwater 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 an <u>optional</u> gravel-filled temporary storage pit dug into the in-situ soil. As defined in this Order, a bioretention BMP <u>should may</u> 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</p>

Comments on Staff Working Proposal, Minimum Control Measures, Greater Los Angeles County MS4 Permit Submitted by The Building Industry Association of Southern California, Los Angeles-Ventura Chapter; Building Industry Legal Defense Foundation; and Construction Industry Coalition on Water Quality

Minimum Control Measures Staff Working Proposal Narrative Requirement	BIA/LAV-BILD-CICWQ Comment	Rationale for Change in Staff Working Proposal Minimum Control Measures	BIA/LAV-BILD-CICWQ Suggested Permit Language/Requirement
			<p>Order as <u>bioinfiltration (if the underdrain discharge point is elevated)</u> or <u>biofiltration (if the underdrain is at the bottom or the system must be lined)</u>.</p> <p>Infiltration: A LID BMP that reduces stormwater runoff by capturing and infiltrating the runoff into in-situ soils or amended on-site soils. Examples of infiltration BMPs include infiltration basins, <u>bioretention areas</u>, dry wells, and pervious pavement.</p> <p>Planter boxes and other flow-through treatment BMPs: modular vault type planter boxes or “high flow biotreatment” devices contained within an impervious vault with an underdrain or designed with an impervious liner and an underdrain. Planter boxes do not allow for incidental infiltration and therefore do not meet the requirements of biofiltration as defined in this Order. However, planter boxes may be used to meet Water Quality Mitigation Criteria as specified in Part [TBD] of this Order.</p> <p>Bioinfiltration: A LID BMP that is designed for <u>partial infiltration of runoff and partial biofiltration</u>. These facilities are similar to <u>bioretention devices with underdrains, but the discharge elevation from the underdrain</u></p>

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Minimum Control Measures Staff Working Proposal Narrative Requirement	BIA/LAV-BILD-CICWQ Comment	Rationale for Change in Staff Working Proposal Minimum Control Measures	BIA/LAV-BILD-CICWQ Suggested Permit Language/Requirement
			<p>is raised above the gravel sump (via upturned elbow or elevated underdrain) to facilitate infiltration. These facilities can be used in areas where there are no hazards associated with infiltration, but infiltration of the full SWQDv may not be feasible due to low infiltration rates or high depths of fill. These facilities may not result in retention of the SWQDv but they can be used to meet the requirement to retain stormwater on-site to the maximum extent practicable (MEP). Swales and other biofiltration systems can be designed as bioinfiltration systems by including an infiltration sump below the lowest surface discharge elevation.</p> <p>Project: development, redevelopment, and land disturbing activities. The term is not limited to “project” as defined under CEQA (Reference: California Public Resources Code § 21065).</p> <p>Total Project Area: Total project area (or “gross project area”) for new development and redevelopment projects is the disturbed, developed, and un-disturbed portions within the project’s property (or properties) boundary, at the project scale submitted for first approval. Areas proposed to be permanently dedicated for open space purposes as part of the project are explicitly</p>

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Minimum Control Measures Staff Working Proposal Narrative Requirement	BIA/LAV-BILD-CICWQ Comment	Rationale for Change in Staff Working Proposal Minimum Control Measures	BIA/LAV-BILD-CICWQ Suggested Permit Language/Requirement
			<p><u>included in the "total project area." Areas of land precluded from development through a restrictive covenant, conservation easement, or other recorded document for the permanent preservation of open space prior to project submittal shall not be included in the "total project area."</u></p>
<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, a. Purpose, i.(3)(7)</p>	<p>We recommend that the term “pre-development water balance” be eliminated or exceptions to this goal be explicitly recognized. This may be a reasonable goal in some cases, but may be more restrictive than is required to protect surface water and groundwater quality. For example, if recharge is needed, then why require water balance matching when you actually want to increase recharge compared to natural conditions? Additionally it may be cost prohibitive to attempt to manage the entire water balance.</p> <p>We recommend combining (7) (a) and (b) into a single statement indicating LID BMP selection preference and deleting the reference to “bioretention”.</p>	<p>Phase I MS4 permits in California including North and South Orange County, Western and Southern Riverside County, and San Bernardino County recognize the use of LID BMPs as a means to potentially mimic “pre-development hydrology”.</p>	<p>Remove the reference to “pre-development water balance” and replace with “pre-development hydrology” and include “biofiltration”. Section (3) would then read: <u>“...and employing Low Impact Development (LID) design principles to mimic pre-development hydrology through infiltration, evapotranspiration, harvest and use, and biofiltration”.</u></p> <p>The statement should combine (7)(a)(b) into (7)(a) and read: <u>“...managing water resources in the following order of preference: (a) Infiltration, rainfall harvest and use, and biofiltration”</u></p>
<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, b.</p>	<p>We recommend providing clarifying language that implementing the green streets manual to the MEP fulfills and</p>	<p>This roadway requirement is consistent with the approved Ventura County MS4 Permit Technical Guidance Manual.</p>	<p>Add footnote to b. Applicability, i. New Development Projects, (1)(g) that reads: <u>“implementing the USEPA Green</u></p>

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<p>Applicability, i. New Development Projects (1)(g)</p>	<p>supersede all other development/redevelopment requirements (i.e., LID and/or hydromodification control).</p> <p>In addition, we recommend providing clarifying language that the green streets provision applies to streets, roads, highways, and freeways that are proposed within a larger project or as standalone projects.</p>		<p><u>Streets Manual to the MEP fulfills and supersedes all other development/redevelopment requirements, including Low Impact Development and Hydromodification Control criteria”.</u></p>
<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, b. Applicability, iii.</p>	<p>This requirement is a very stringent and restrictive project grandfathering clause and will create a significant burden for project developers.</p>	<p>See permit requirements in Ventura County MS4 Permit, top of page 56, which addresses projects with prior approvals.</p>	<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, b. Applicability, iii, should be revised to include the five specific factors specified in the Ventura Technical Guidance Manual, Section 1.5, Effective Date, pages 1-7 and 1-8. The five factors that must be recognized, at a minimum, include:</p> <p><u>1) Projects or phases of projects where applications for such projects have been deemed complete for processing, or words of equivalent meaning, by the applicable local permitting agency in accordance with the local permitting agency’s applicable rules, prior to the Effective Date; or</u></p> <p><u>2) Projects that are the subject of an approved Development Agreement and/or</u></p>

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			<p><u>an adopted Specific Plan, or an application for a Development Agreement and/or Specific Plan where the application for the Development Agreement and/or Specific Plan has been “deemed complete for processing”, or words of equivalent meaning, by the applicable local permitting agency in accordance with the local permitting agency’s applicable rules, and thereafter during the term of such Agreement and/or Specific Plan unless earlier cancelled or terminated; or</u></p> <p><u>3) All private projects in which, prior to the Effective Date, the private party has completed public improvements; commenced design, obtained financing, and / or participated in the financing of the public improvements; or which requires the private party to reimburse the local agency for public improvements upon the development of such private project; or</u></p> <p><u>4) Local agency’s projects for which the governing body or their designee has approved initiation of the project design prior to the Effective Date.</u></p> <p><u>5) A Tentative Map or Vesting Tentative Map deemed complete or approved by the local permitting agency prior to the Effective Date.</u></p>

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			<p><u>and subsequently a Revised Map is submitted, the project would be exempt from the xxxx LA County TGM provisions if the change requested under the Revised Map was solely initiated by the local permitting agency or other public agency, and the local permitting agency has determined that the revisions substantially conform to original map design, consistent with Subdivision Map Act requirements. Changes must also comply with local and state law.</u></p>
<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, i. Integrated Water Quality/Flow Reduction/Resources Management Criteria (1-8).</p>	<p>The staff proposal does not support the established hierarchy of LID BMP selection found in similar Phase I MS4 permits adopted in California since 2007, and as most recently as 2010.</p> <p>In addition, we recommend significant changes to design criteria in this section and suggest permit language revisions. There are several criteria that are unsupported and problematic.</p> <p>We recommend revising the language in this section to address these issues. Additionally, we recommend moving more detailed elements to a Technical Guidance Manual that would be</p>	<p>For infiltration system design criteria support, see Attachment 2, which presents a review of Minimum Infiltration Rates in LID and Stormwater Management Manuals and Ordinances. In addition, see Attachment 3, which presents a case study analysis of the effect of infiltration rate feasibility on BMP sizing requirements.</p> <p>For rainfall harvest and use system design criteria support (including calculation of reliable on-site demand), see Ventura TGM, pages 6-94 to 6-101</p>	<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, i. Integrated Water Quality/Flow Reduction/Resources Management Criteria (1) should read: <u>“...(2) controlling runoff from impervious surfaces through infiltration, harvest and use, evapotranspiration, and biofiltration.”</u></p> <p>Other Infiltration Design Criteria suggestions for changes in part (3) that we recommend are moved to a Technical Guidance Manual:</p> <p>Adjust infiltration drawdown criterion to 48 hours. Maintain at least a 10 foot separation to seasonal high groundwater, not a 5-10 foot separation as currently proposed.</p>

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	<p>developed based on input from a permittees, engineers, and other stakeholders.</p> <p><u>Infiltration Design Criteria</u></p> <p>(1). The 24-hour criterion for infiltration is arbitrary and is an unnecessarily short drawdown time for achieving acceptable performance in back to back storms. Additionally, this limitation is unnecessary to protect against vector concerns. Under this criteria in basins designed to drain in 48 -72 hours (standard practice) would only be able to count 1/3 to 1/2 of volume as infiltrated.</p> <p>(2). The 0.15 in/hr criterion is extremely low and un-protective compared to the Ventura TGM and other LID BMP design guidance documents supporting MS4 programs in southern California (Orange, Riverside, and San Bernardino County, for example). Additionally, it is not clear if this criterion is before or after a factor of safety is applied.</p>		<p>Include an option to demonstrate 80% average annual retention using continuous modeling analysis. (This is consistent with Ventura County permit and TGM guidance).</p> <p>Make the on-site infiltration criterion more consistent with other MS4 permits and guidance documents adopted/approved in California (0.3 or 0.5, after a factor of safety).</p> <p>Use a 3-tier structure with two infiltration rate thresholds that is equivalent to the selection process described in the Ventura TGM:</p> <p>Less than 0.3 in/hr – infiltration infeasible, use biofiltration.</p> <p>0.3 to 0.5 in/hr – bioinfiltration, with sump depth equal to the depth that would infiltrate in 12 to 24 hours, unless infiltration is infeasible for other reasons.</p> <p>Greater than 0.5 in/hr – infiltration of full design water quality volume, unless infeasible for other reasons.</p> <p>Include a table in a Technical Guidance Manual indicating specific percent of site area that would be expected to be dedicated</p>

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	<p><u>Rainfall Harvest and Use Criteria:</u></p> <p>(1) The Permit should recognize that use of reclaimed, recycled water where available is a higher priority than rainfall harvest and use systems.</p> <p>(2) Add language that would rule out rainfall harvest and use if demand was not adequate to drain the system in 72 hours. (This is analogous to the approach in Ventura County, Orange County, and SF Bay Area). It is not practicable to provide harvest and use for sites with small reliable demand (economic and O&M complexity considerations).</p> <p>(3) Require green roofs to be evaluated based on their applicability to the project type, analysis of costs and benefits compared to biofiltration, and overall water management objectives (i.e., irrigation demand).</p>		<p>to infiltration or biofiltration based on a project type and density.</p> <p><u>Rainfall Harvest and Use Design Criteria Suggested Changes:</u></p> <p>Delete section i. Integrated Water Quality/Flow Reduction/Resources Management Criteria (5-8), and provide design criteria guidance for harvest and use systems in a Technical Guidance Manual.</p> <p>Include clear permit language waiving analysis of rainfall harvest and use if recycled water is supplied to the project location.</p> <p>Specify the duration of the reliable demand of harvested runoff stored on-site to be 72 hours.</p> <p>Indicate that harvest and use be considered infeasible below a certain level of site demand as specified in Ventura County TGM. Reliable demand is based upon on-site irrigation demand, and the potential for indoor toilet flushing demand. This analysis could be done by the permittees to avoid requiring analyses to be conducted for each project, and is suitable for inclusion in a Technical Guidance Manual. For more complex conditions including other types of</p>

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			demand, the project proponent would be able to demonstrate conformance by demonstrating 80 percent average annual capture using continuous simulation.
VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, ii. Alternative Compliance for Technical Infeasibility or Opportunity for Regional Groundwater Replenishment (1-3).	See comments for matrix row addressing “New Development and Redevelopment Projects – Options for Stormwater Management Design” Table	Process proposed is inconsistent with other 4 th term California Phase I MS4 Permits.	Edit language in this section to reflect recommended LID BMP selection process provided in Attachment 1.
Table [TBD]. New Development and Redevelopment Projects-Options for Stormwater Management Design (listed in order of preference)	The proposed process table that makes distinctions among preferred, most preferred, and least preferred is technically unsupported, is inconsistent with the application of the MEP standard, and is inconsistent with established LID BMP feasibility process determination requirements in other California Phase I MS4 permits. We express our full support for the current option to participate in	All other 4 th term California Phase I MS4 Permits that require LID BMPs to the MEP use a similar hierarchy that includes and allows the use of biofiltration to manage the SWQDv and meet the on-site volume retention performance requirement. Additionally, this table as proposed establishes hierarchies and criteria that are not technically supportable from the perspective of receiving water protection.	See Attachment 1 for suggested New Development and Redevelopment Stormwater Management Options and Process.

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	<p>qualifying off-site projects/programs as an equal alternative to on-site retention. However, there are other issues with this table that must be addressed to provide a logical and reasonable selection process.</p>		
<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development / Redevelopment Project Performance Criteria, iii. Alternative Compliance Measures (1-5)</p>	<p>The alternative compliance criteria only recognize two pathways for using off-site BMPs: technical infeasibility on-site, or more advantageous groundwater replenishment opportunity off-site.</p> <p>We recommend providing language that recognizes that there are other valid rationales for using off-site infiltration or biofiltration:</p> <ul style="list-style-type: none"> --Facilitate smart growth density goal --Address runoff from larger amount of existing development --Institutional management and monitoring of facilities (long term performance) --Cost per unit of benefit is significantly greater --Lower risks of groundwater contamination 	<p>Process proposed is inconsistent with other 4th term California Phase I MS4 Permits.</p>	<p>Edit language in this section to reflect recommended LID BMP selection process provided in Attachment 1.</p>

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<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, iv. Water Quality Mitigation Criteria (1-3)</p>	<p>This is an extremely onerous requirement and questionably legal given recent court rulings; we recommend striking much of this requirement and providing an alternative method of demonstrating that treatment control BMPs have been selected to adequately address pollutants of concern.</p>	<p>Numeric limits for stormwater best practices have been invalidated in stormwater permits in California.</p> <p>Water quality protection can be ensured through the selection of BMPs that achieve equal or better performance compared to sand filters for the project pollutants of concern.</p> <p>The Ventura County MS4 permit and Technical Guidance Manual recognizes and allows demonstration of annual capture and treatment of the 80th percentile average annual runoff volume.</p>	<p>Delete all of this section except iv. Water Quality Mitigation Criteria (1), (b), and (3)</p> <p>Include language so that sand filter equivalency is an acceptable pathway when selecting treatment control BMPs.</p> <p>Include a table that list which BMPs are equal to or better than sand filters for each pollutant of concern. Base the table on the latest analyses of the International BMP Database (USEPA/EWRI/WERF/FHWA). See an example table template in Attachment 4; values could be developed at a future date.</p> <p>For treatment control sizing, include an option to demonstrate 80% average annual capture using continuous modeling analysis.</p>
<p>VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, c. New Development/Redevelopment Project Performance Criteria, v. Hydromodification (Flow/Volume/Duration) Control Criteria (1)(b)(iii) and (1)(c)(i)1.</p>	<p>We recommend providing a definition for pre-project condition.</p> <p>We recommend striking (1)(c)(i)1 and allowing projects less than 50 acres to install LID BMPs to the MEP per process described in Attachment 1, to meet interim hydromodification control standards. In addition, allow projects an additional option of complying with existing LA County Hydromodification Control Requirements found on pages 19 and</p>	<p>Ventura County MS4 Permit and Technical Guidance Manual</p> <p>County of Los Angeles Low Impact Development Standards Manual, January 2009.</p>	<p>Provide definition for pre-project condition:</p> <p><u>Pre-project conditions:</u> “<u>The existing land use condition prior to the proposed activity.</u>”</p> <p>Delete section v. Hydromodification (Flow/Volume/Duration) Control Criteria (1)(c)(i)1., and replace with the following:</p> <p><u>1. Projects disturbing land area less than 50 acres will be subject to LID and/or source or treatment BMPs as addressed in this permit. The combined effects of LID and the</u></p>

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	20 in the County of Los Angeles Low Impact Development Standards Manual, January 2009.		<p>treatment BMPs are considered adequate for <u>Hydromodification control for projects that disturb less than 50 acres (See Ventura County MS4 Permit, 2010, page 61, (3) Interim Hydromodification Control Criteria, (A)(i).</u></p> <p>Include a 4th option for meeting interim hydromodification control standards by referencing the existing LA County hydromodification control requirements found on pages 19 and 20 in the County of Los Angeles Low Impact Development Standards Manual, January 2009.</p>
VI. Provisions, C. Special Provisions, 8. Planning and Land Development Program, d. Implementation, i. Local Ordinance Equivalence	We recommend recognizing regional mitigation programs in addition to local ordinances that provide program equivalence.	Local ordinances and regional mitigation programs provide greater program flexibility, allow jurisdictional specific water quality issues to be directly addressed at a local level, and allow regional projects to incorporate and achieve multiple benefits while meeting water quality standards.	<p>i. <u>Local Ordinance or Regional Mitigation Program</u> Equivalence</p> <p>A local LID ordinance <u>and technical manual or a regional or sub-regional storm water mitigation program</u> that does not fully incorporate the applicable requirements of this Order, shall <u>may</u> be submitted to the Executive Officer of the Regional Water Board for approval <u>as equivalent</u> within X months after the Order effective date. The Executive Officer shall <u>will</u> assess whether the Permittee has provided reasonable</p>

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			<p>assurance that the alternative requirements in the local ordinance <u>or regional or sub-regional storm water mitigation program</u> will provide equal or greater reduction in storm water discharge pollutant loading and volume as would have been obtained through strict conformance with Part [TBD] (Integrated Water Quality/Flow Reduction Resources Management Criteria) or Part [TBD] (Alternative Compliance Measures for Technical Infeasibility or Opportunity for Regional Groundwater Replenishment) of this Order and, if applicable, Part [TBD] (Hydromodification (Flow/Volume Duration) Control Criteria. Local ordinances <u>or regional or sub-regional storm water mitigation programs</u> that do not strictly conform to the provisions of this Order must be approved by the Executive Officer of the Regional Water Board as being “equivalent” in effect to the applicable provisions of this Order.</p>
<p>VI. Provisions, C. Special Provisions, 9. Development Construction Program. f. Construction Plan Review and Approval Procedures (3)(i) and (4)</p>	<p>We are concerned about inconsistencies with SWRCB CGP, such as requiring a REAP for a project less than 1 acre in size, and requiring a REAP for a project > than 1 acre that is a Risk Level or LUP Level 1 project</p>	<p>State Water Resources Control Board General Construction Permit, Order No. 2009-0009-DWQ; NPDES No. CAS000002.</p>	<p>Delete all requirements for preparing a rain event action plan (REAP) for projects less than 1 acre.</p> <p>Delete any requirement that exceeds requirement found in SWRCB CGP, such as preparation of a REAP for a Risk Level 1 project.</p>

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Attachment TBD Bioretention/Biofiltration Design Criteria	We recommend moving this detailed design criteria to a Technical Guidance Manual specific to Los Angeles County.	All other existing MS4 permits in southern California provide permittees and project applicants with detailed design criteria support in a technical guidance manual. Including this level of detail in the permit significantly reduces flexibility of design standards to evolve with evolving science and innovation.	Delete Attachment; See comments on biofiltration definition on page 2 of this comment matrix.
Attachment TBD Developer Technical Information and Guidelines	We recommend moving these guidelines to a Technical Guidance Manual specific to Los Angeles County.	All other existing MS4 permits in southern California provide permittees and project applicants with detailed design criteria support in a technical guidance manual.	Delete Attachment

Primary Stormwater Management Options for Retaining the SWQDv to the MEP

On-site approach	Equivalent off-site approaches when opportunities are available	
<p>On-site retention of the SWQDv. New Development and Re-development Projects must be designed to minimize the impervious area footprint and to retain stormwater runoff using Low Impact Development best management practice designs which may include infiltration, bioretention, and/or rainfall harvest and use.</p> <p>Note: In cases where it is infeasible to retain the SWQDv onsite due to limiting infiltration rates, but infiltration is otherwise feasible, bioinfiltration may be used to provide partial retention of the SWQDv.</p>	OR	<p>Offsite groundwater replenishment if the following conditions apply:</p> <ul style="list-style-type: none"> • The volume of stormwater runoff used to replenish groundwater must be equal to or greater than the SWQDv. • Must demonstrate that equal benefits to groundwater recharge could not be met on the project site. • Must provide equal or greater benefits to surface water quality in the same subwatershed as the proposed project. <p>Offsite infiltration, harvest and use, or evapotranspiration in cases where off-site stormwater management is demonstrated to be more consistent with the MEP standard¹ than on-site compliance. The following conditions must apply:</p> <ul style="list-style-type: none"> • The volume of stormwater runoff retained must be equal to or greater than the SWQDv. • Must provide equal or greater benefits to surface water quality in the same subwatershed as the proposed project. <p>Note: Must also provide pollutant reduction through treatment of the SWQDv at the project site unless it is demonstrated that equivalent or greater pollutant load reduction for project pollutants of concern is achieved at the point where the site runoff first discharges to a receiving water (Waters of the US).</p>

Stormwater Management Options for Remaining Volume (Rv) after Retaining the SWQDv to the MEP

On-site approach	Equivalent off-site approach when opportunities are available	
<p>On-site biofiltration systems, sized to treat 1.5 times the remaining design stormwater runoff volume ($R_v * 1.5$).</p>	OR	<p>Retrofit existing development to increase the volume of stormwater runoff addressed at the subwatershed scale. The following conditions apply:</p> <ul style="list-style-type: none"> • The increase in the volume of stormwater runoff addressed as a result of the retrofitting of existing development must be equal to or greater than the R_v. • Must provide equal or greater benefits to surface water quality in the same subwatershed as the proposed project. <p>Note: Biofiltration allowed under retrofit provisions at volume ratio of $1.5 * R_v$. Note: Must also provide pollutant reduction through treatment of the R_v at the project site unless it is demonstrated that equivalent or greater pollutant load reduction for project pollutants of concern is achieved at the point where the site runoff first discharges to a receiving water (Waters of the US).</p>

¹ Maximum Extent Practicable (MEP) – The technology-based permit requirement established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water must meet. Technology-based requirements, including MEP, establish a level of pollutant control that is derived from available technology or other controls. MEP requires municipal dischargers to perform at maximum level that is practicable. Compliance with MEP may be achieved by emphasizing pollution prevention and source control BMPs in combination with structural and treatment methods where appropriate. The MEP approach is an ever evolving and advancing concept, which considers technical and economic feasibility (Ventura County MS4 Permit Definition, 2010). Factors that may make off-site systems more consistent with the MEP standard than on-site systems include considerations of: land use planning (i.e., smart growth density goals), economics (i.e., relative cost-benefit of on-site vs. off-site systems for meeting overall watershed goals), long term performance (i.e., institutional management and monitoring of facilities vs. HOA maintenance); more effective management of risks (i.e., lower risks of groundwater contamination), and other factors.

Attachment 2 – Minimum Infiltration Rates in LID Manuals and Ordinances

Review of Minimum Infiltration Rates in LID and Stormwater Management Manuals and Ordinances

Updated: April 11, 2012

Manual/Jurisdiction	Minimum Infiltration Rate for Infiltration BMPs
<p>Ventura Technical Guidance Manual (approved by the Executive Officer of the Los Angeles Regional Board on July 13, 2011)</p>	<p>Infiltration is considered infeasible if infiltration is less than 0.3 inches per hour.</p> <p>Infiltration is considered partially feasible from 0.3 inches to 0.5 inches per hour; bioinfiltration system with elevated underdrain should be used, but infiltration systems without an underdrain are not considered feasible.</p> <p>Infiltration is considered feasible without an underdrain if rates are greater than 0.5 inches per hour</p>
<p>Orange County Technical Guidance Document (approved by the Executive Officer of the Santa Ana Regional Board on May 19, 2011)</p>	<p>Infiltration of the full design capture volume is considered infeasible if the infiltration rate is less than 0.3 inches per hour. A minimum factor of safety of 2.0 must be applied to testing observations before comparing to this criterion. Testing results must indicate 0.6 inches per hour or greater.</p> <p>If infiltration rate is less than 0.3 inches per hour but other infiltration feasibility constraints do not apply, then biotreatment systems must be designed with a sump below the lowest surface discharge point.</p> <p>Infiltration rate must be tested at a horizon 2 feet below the anticipated bottom of the infiltration facility to ensure that the potential benefits of soil amendments are accounted for.</p>
<p>City of Los Angeles SUSMP Infiltration Requirements and Guidance (not dated)</p>	<p>Infiltration BMPs Minimum site soil percolation rate shall be 0.5 inches per hour. Soils with a percolation rate of less than 0.5 in/hr may utilize a biofiltration system that includes an under drain system to prevent extended ponding.</p>

Attachment 2 – Minimum Infiltration Rates in LID Manuals and Ordinances

Manual/Jurisdiction	Minimum Infiltration Rate for Infiltration BMPs
<p>City of Los Angeles Development Best Management Practices Handbook - Part B: Planning Activities (4th edition) (adopted by City of Los Angeles' Board of Public Works, July 2011)</p>	<p>Infiltration is considered infeasible if infiltration is less than 0.3 inches per hour and connectivity to soils with higher infiltration rate is not feasible.</p> <p>Infiltration is considered potentially feasible from 0.3 inches to 0.5 inches per hour; additional design considerations may be needed such as an elevated underdrain to provide redundancy in design.</p> <p>Infiltration is considered feasible without additional features such as an underdrain if rates are greater than 0.5 inches per hour.</p>
<p>LA County SUSMP Manual (September 2002)</p>	<p>Bioretention: "The soil should have infiltration rates greater than 0.5 inches per hour, otherwise an underdrain system should be included."</p> <p>Infiltration Basin: "Soils with an infiltration rate of less than 0.3 inches per hour, are not suitable sites for infiltration basins."</p> <p>Infiltration Trench: "Soil should have infiltration rate greater than 0.3 inches per hour and clay content less than 30 percent."</p>
<p>LA County LID Manual (January 2009)</p>	<p>Infiltration is infeasible in locations with native undisturbed infiltration rate less than 0.5 inches per hour.</p>

Attachment 2 – Minimum Infiltration Rates in LID Manuals and Ordinances

Manual/Jurisdiction	Minimum Infiltration Rate for Infiltration BMPs
CASQA BMP Handbook (2004 revision)	<p>Bioretention: “In areas where the native soil permeability is less than 0.5 in/hr an underdrain should be provided.”</p> <p>Infiltration Trench: “The minimum acceptable hydraulic conductivity as measured in any of the three required test holes is 13 mm/hr (0.5 in/hr). If any test hole shows less than the minimum value, the site should be disqualified from further consideration.”</p> <p>Infiltration Basins: “Infiltration basins require a minimum soil infiltration rate of 0.5 inches/hour, not appropriate at sites with Hydrologic Soil Types C and D.”</p>
Caltrans BMP Technology Report (April 2006)	<p>Infiltration Basins: “Siting Constraints: Infiltration basins can only be placed in areas where soil type is RCS type “A”, “B”, or “C”. Soil shall not have more than 30 percent clay or more than 40 percent clay and silt combined. Minimum infiltration rate of 12 mm/hr [=0.47 in/hr] is preferred.</p> <p>Infiltration Trenches: “An infiltration rate of at least 14 mm/hr [=0.55 in/hr] is desired. This infiltration rate would be found in soils with low silt and clay content.</p>
Eastern Washington Manual/ WA DOE Manuals (2004)	<p>Soil Type (p 5-11): “The permeability of the soil underlying a treatment facility has a profound influence on its effectiveness. This is particularly true for infiltration treatment facilities that are best sited in sandy to loamy sand soils. They are not generally appropriate for sites that have final infiltration rates of less than 0.5 inches per hour.”</p>
City of Seattle Public Utilities Department of Planning and Development Stormwater Manual (released November 2009)	Infiltration is infeasible if the infiltration rate (after factor of safety correction) is less than 0.25 inches per hour. Factors of safety range from 2 to 10. Therefore tested infiltration rate must be at least 0.5 to 2.5 inches per hour for infiltration to be feasible.
State of Michigan (Not Dated)	0.52 inches per hour

Attachment 2 – Minimum Infiltration Rates in LID Manuals and Ordinances

Manual/Jurisdiction	Minimum Infiltration Rate for Infiltration BMPs
Georgia Stormwater Management Manual http://www.georgiastormwater.com/ (August 2001)	Bioretention: "The soil must have an infiltration rate of at least 0.5 inches per hour" Infiltration Trench: "Soil infiltration rate of 0.5 in/hr or greater required"

Case Study: Sensitivity of Infiltration Rate Feasibility Threshold on BMP Sizing Requirements and Associated Costs

Case Study Assumptions		Rationale
85th Percentile Storm Depth, inches	1.0	For illustration purposes, 85th pctl depth ranges from less than 0.75 to more than 1.5 across Los Angeles County
Site Imperviousness	90%	For illustration purposes
Runoff Coefficient	0.82	Based on Los Angeles County Hydrology Manual and LID Manual
Drainage Area, acres	1.0	For illustration purposes
Target Drawdown Time, hours	48	Consistent with Ventura TGM

Case Study System Design Calculations

Assumed Design Infiltration Rate ¹ , inches per hour	System Maximum Effective Depth to Drain in 48 hours, inches	Selected System Effective Depth based on Bioretention Design Criteria ² , inches	BMP Effective Footprint, sq-ft	Approximate BMP Capital Cost ³ , \$	Ranges of Capital Cost from Other Reference Material ⁴ , \$
0.075	3.6	3.6	9,920	170,000	99,000 - 397,000
0.15	7.2	7.2	4,960	84,000	50,000 - 198,000
0.3	14.4	14.4	2,480	42,000	25,000 - 99,000
0.5	24	18	1,980	27,000	20,000 - 79,000
1	48	18	1,980	27,000	20,000 - 79,000

1 - Design rate should be based on applying an appropriate factor of safety to tested value to account for site variability, uncertainty in testing methods, long term clogging, and other factors.

2 - Selected system depth based on the lesser of the depth that will drain in 48 hours and the depth provided using a common bioretention design profile that consists of 12 inch ponding and 2 feet amended soil (0.25 in/in available porosity assumed).

3 - Source: WERF, 2009. Whole Life Cycle Cost Worksheets, Curb Contained Bioretention. Economy of scale may exist that is not reflected here.

4 - Range of estimates from Bannerman et al. (2003), USEPA (2005), and and UFC (2004). Note, range of costs include retrofit and new development applications.

References

- Bannerman, Roger, G. Fries, J. Horwath. 2003. *Source Area and Regional Storm Water Treatment Practices: Options for Phase II Retrofit Requirements in Wisconsin (Document No. EPA-625-R-03-003)*. National Conference on Urban Storm Water: Enhancing Programs at the Local Level. Chicago, IL.
- LACDPW, 2009. Los Angeles County Low Impact Development Manual. January 2009.
- EPA Low Impact Development. 2005. *Quality Assurance for Nonpoint Source Best Management Practices*. http://www.lowimpactdevelopment.org/qapp/bio_costs.htm
- Unified Facilities Criteria (2004). *Low Impact Development*. UFC Publication No 3-210-10. Retrieved September 2008, from: http://www.wbdg.org/ccb/DOD/UFC/ufc_3_210_10.pdf
- Water Environment Research Foundation, 2009. SW2R08, LID and BMP Whole Life Cost Models: Version 2.0. Principal investigator: Christine A. Pomeroy, P.E..

Attachment 4 – Template for determining sand filter equivalency (rankings are preliminary, subject to further evaluation)

BMP Common Name	Suspended solids / sediment/ turbidity	Nitrogen compounds	Phosphorus	Heavy metals	Microbial / viral pathogens	Oils and grease	Dissolved toxic organic compounds	Trash and debris
Sand filter (inert) - baseline								
Shading indicates that BMP has been found to provide equivalent or better treatment compared to sand filters for pollutant of concern (to be completed based on review of published reports from the BMP Database, where available)								
Sand filter (specialized Media)								
Dry extended detention basin								
Dry extended detention basin with vegetated sand filter outlet structure								
Wet detention basins and constructed stormwater wetlands								
Cartridge media filter								
Hydrodynamic separator								
Catch basin insert								
Proprietary treatment systems	Case-by-case assessment ¹							

1 - Expected performance of proprietary systems should be based on evaluation of unit processes provided by BMP and available testing data. Testing data should be evaluated based primarily on the effluent quality achieved by the BMP and the ability of the BMP to provide statistically significant removal under average conditions observed in stormwater. The basis for determining the rating of proposed proprietary BMPs must be documented by the permittee or project applicant.



NATURAL RESOURCES DEFENSE COUNCIL

April 13, 2012

Via electronic mail

Mr. Sam Unger
 Executive Officer and Members of the Board
 California Regional Water Quality Control Board, Los Angeles Region
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 Los Angeles, CA 90013
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Re: *Comments on Staff Working Proposal for the Los Angeles County MS4 Permit, Minimum Control Measures, March 21, 2012 Draft*

Dear Mr. Unger:

On behalf of the Natural Resources Defense Council (“NRDC”) and our over 150,000 California members and activists, we are writing with regard to the March 21, 2012 Staff Working Proposal for the Los Angeles County MS4 Permit Minimum Control Measures (“Working Proposal”). We appreciate the opportunity to comment on the Working Proposal. We focus our comments here on the Proposal’s Planning and Land Development provisions. While we believe these provisions represent progress compared to the current Los Angeles MS4 permit,¹ now more than ten years old, they still must be strengthened to meet minimum legal requirements. Specifically, in several aspects the Working Proposal fails to meet the requirements of the Clean Water Act’s maximum extent practicable standard, and is otherwise inconsistent with both state and federal law. In this regard, we appreciate the willingness of Regional Board staff to engage in discussion of the Working Proposal’s terms, and look forward to working with staff to revise the Planning and Land Use section.

I. Standards Governing the Adoption of the Los Angeles County MS4 Permit by the Regional Board.

In considering the Los Angeles Municipal Stormwater permit (“Permit”), the Regional Board must not only ensure compliance with substantive legal standards, but it must also ensure that it complies with well-settled standards that govern its administrative decision-making. The Permit’s terms must be supported by evidence that justifies the Regional Board’s decision to include, or not to include, specific requirements. The Regional Board would be abusing its discretion if the Permit ultimately fails to contain findings that explain the reasons why certain control measures and standards have been selected and

¹ Order No. 01-182.

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others omitted. Abuse of discretion is established if “the respondent has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by the evidence.” (Cal. Code Civ. Proc. § 1094.5(b); *see also Zuniga v. Los Angeles County Civil Serv. Comm’n* (2006) 137 Cal.App.4th 1255, 1258 (applying same statutory standard).) “Where it is claimed that the findings are not supported by the evidence, ... abuse of discretion is established if the court determines that the findings are not supported by the weight of the evidence.” (*Phelps v. State Water Resources Control Bd.* (2007) 157 Cal.App.4th 89, 98-99.)

The administrative decision must be accompanied by findings that allow the court reviewing the order or decision to “bridge the analytic gap between the raw evidence and ultimate decision or order.” (*Topanga Ass’n for a Scenic Cmty. v. County of Los Angeles* (1974) 11 Cal.3d 506, 515.) This requirement “serves to conduce the administrative body to draw legally relevant sub-conclusions supportive of its ultimate decision ... to facilitate orderly analysis and minimize the likelihood that the agency will randomly leap from evidence to conclusions.” (*Id.* at 516.) “Absent such roadsigns, a reviewing court would be forced into unguided and resource-consuming explorations; it would have to grope through the record to determine whether some combination of credible evidentiary items which supported some line of factual and legal conclusions supported the ultimate order or decision of the agency.” (*Id.* at 517 n.15.) Currently, the Permit’s terms as presented in the Working Proposal are not supported by the necessary evidence, as discussed below. The lack of substantial evidence to support the Permit terms would render it unlawful as currently drafted. (*See, e.g., Bangor Hydro-Elec. Co. v. F.E.R.C.* (D.C. Cir. 1996) 78 F.3d 659, 664.)

II. Stormwater is a Leading Source of Pollution to Surface Waters and Must be Reduced to the Maximum Extent Practicable

The U.S. Environmental Protection Agency (“U.S. EPA”) considers urban runoff to be “one of the most significant reasons that water quality standards are not being met nationwide.”² As the U.S. EPA has stated:

Most stormwater runoff is the result of the man-made hydrologic modifications that normally accompany development. The addition of impervious surfaces, soil compaction, and tree and vegetation removal result in alterations to the movement of water through the environment. As interception, evapotranspiration, and infiltration are reduced and precipitation is converted to overland flow, these modifications affect not only the characteristics of the developed site but also the watershed in which the development is located. Stormwater has been identified as one

² U.S. General Accounting Office (June 2001) *Water Quality: Urban Runoff Programs*, Report No. GAO-01-679, available at, <http://www.gao.gov/new.items/d01679.pdf>.

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of the leading sources of pollution for all waterbody types in the United States. Furthermore, the impacts of stormwater pollution are not static; they usually increase with more development and urbanization.³

Consistent with the federal Clean Water Act, a fundamental goal of all municipal stormwater permits is to ensure that discharges from storm sewers do not cause or contribute to a violation of water quality standards. (33 U.S.C. § 1341.) In addition, for MS4s covered under the National Pollutant Discharge Elimination System (“NPDES”) program, a fundamental requirement is that permits for discharges from municipal storm sewers “shall require controls to reduce the discharge of pollutants to the maximum extent practicable.” (33 U.S.C. § 1342(p)(3)(B)(iii).) As one state hearing board held:

[MEP] means to the fullest degree technologically feasible for the protection of water quality, except where costs are wholly disproportionate to the potential benefits.... This standard requires more of permittees than mere compliance with water quality standards or numeric effluent limitations designed to meet such standards.... The term “maximum extent practicable” in the stormwater context implies that the mitigation measures in a stormwater permit must be more than simply adopting standard practices. This definition applies particularly in areas where standard practices are already failing to protect water quality....

(North Carolina Wildlife Fed. Central Piedmont Group of the NC Sierra Club v. N.C. Division of Water Quality (N.C.O.A.H. October 13, 2006) 2006 WL 3890348, Conclusions of Law 21-22 (internal citations omitted).) The North Carolina board further found that the permits in question violated the maximum extent practicable (“MEP”) standard both because commenters highlighted measures that would reduce pollution more effectively than the permits’ requirements and because other controls, such as infiltration measures, “would [also] reduce discharges more than the measures contained in the permits.” (*Id.* at Conclusions of Law 19.)

III. Planning and Land Development Program

The following sections present our comments on specific provisions within the Planning and Land Development Program section of the Working Proposal.

³ U.S. Environmental Protection Agency (December 2007) *Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices*, at v, available at, <http://www.epa.gov/owow/nps/lid/costs07/>.

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A. The Applicability Thresholds for Development Projects Are Set Unjustifiably High

1. The Overall Threshold is Unjustifiably Lenient

The Working Proposal establishes the threshold for application of requirements under the Planning and Land Development section for New Development Projects as “All developed projects equal to 1 acre or greater of disturbed area *and* adding more than 10,000 square feet of impervious surface acres.” (Working Proposal, at VI.C.8.b.i.(1)(a) (emphasis added).) This threshold, in particular the requirement that a project disturb 1-acre and *additionally* add 10,000 square feet of impervious surface is unduly lenient in comparison with other Phase I permits in California. For example, the South Orange County MS4 Permit requires any new development projects “that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site)” to comply with the Permit’s Development Planning Component provisions, without any requirement that the site also disturb 1-acre or greater of land.⁴ The San Francisco Bay Region MS4 Permit⁵ sets the same 10,000 square foot threshold for all non-“Special Land Use Category” development, which is set at 5,000 square feet.

More rigorous in its application thresholds for development, the recently adopted Low Impact Development Ordinance for the City of Los Angeles establishes that development creating, adding, or replacing only 500 square feet or more of impervious area may trigger requirements to implement low impact development practices to reduce stormwater runoff and pollution.⁶ The threshold set forth in the Working Proposal,

⁴ San Diego Regional Water Quality Control Board (December 16, 2009) Order No. R9-2009-0002, NPDES Permit No. CAS0108740, The Waste Discharge Requirements for Discharges of Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watershed of the County of Orange, the Incorporated Cities of Orange County, and the Orange County Flood Control District Within the San Diego Region, at F.1.d.(2), available at http://www.waterboards.ca.gov/rwqcb9/water_issues/programs/stormwater/docs/oc_permit/updates_012710/FINAL_R9_2009_0002.pdf.

⁵ San Francisco Regional Water Quality Control Board (October 14, 2009, revised November 28, 2011) Order No. R2-2009-0074, NPDES Permit No. CAS612008, Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for the discharge of stormwater runoff from the municipal separate storm sewer systems (MS4s) of the . . . San Francisco Bay Municipal Regional Stormwater Permit (MRP), at C.3.b.ii.(1)(a), available at http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2-2009-0074_Revised.pdf.

⁶ City of Los Angeles (Sept. 28, 2011) Low Impact Development Ordinance, at Sec. 64.72.D, available at <http://www.lastormwater.org/siteorg/program/LID/lidintro.htm>.

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applying requirements only to development adding 10,000 square feet of impervious surface *and* disturbing greater than one acre can hardly be construed as meeting the MEP standard when multiple other permits and local ordinances have set substantially more stringent limitations.

2. Repaving of Greater than 10,000 Square Feet of Surface Area on Publicly Owned Streets or Parking Lots Should Trigger Requirements to Meet Post-Construction Low Impact Development Standards

While it is critical that the MS4 permit address new and redevelopment projects and prevent the introduction of new or additional sources of pollution to receiving waters, the vast majority of runoff stems from existing development. One of the primary opportunities to address runoff from the existing built environment is through retrofit of existing streets and parking lots. We support the Working Proposal's requirement that new streets, roads, highways, and freeway construction must follow U.S. EPA guidance regarding green streets, and urge the Regional Board to require that roadway construction of this size should be required to meet the Working Proposal's otherwise applicable on-site stormwater runoff retention standards where technically feasible. Further, projects that result in the reconstruction or resurfacing of greater than 10,000 square feet of street, road, highway, freeway, or parking lot surface (or resurfacing of more than 25 parking spaces) should, at minimum, be required to implement post-construction LID BMPs, such as curb cuts, swales, or other retention practices. In combination with requirements to retrofit streets or parking lots undergoing resurfacing, the Regional Board should require permittees to implement a set number of "Green Street Pilot Projects" that incorporate low impact development ("LID") techniques for site design and treatment in accordance with the Working Proposal's otherwise applicable on-site stormwater retention requirements. (See, e.g., San Francisco Bay Regional MS4 Permit, at C.3.b.iii.)

B. The Working Proposal's Performance Criteria Allow for Alternative Performance and Stormwater Mitigation Management Options that do not Meet the Clean Water Act's MEP standard.

We are pleased to see that the Working Proposal establishes requirements for new development and redevelopment projects to retain on-site the runoff from the 85th percentile, 24-hour rain event or the 0.75 inch, 24-hour rain event, whichever is greater. This requirement, resulting in retention of stormwater runoff with no off-site discharge in the vast majority of storms, is consistent with on-site retention requirements of other permits throughout California, as well as in permits and ordinances found in all corners of the United States. For example:

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Ventura County: MS4 permit requires on-site retention of ninety-five percent of rainfall from the 85th percentile storm; off-site mitigation allowed if on-site retention is technically infeasible;⁷

South Orange County: MS4 permit requires on-site retention of the 85th percentile storm, off-site mitigation allowed if on-site retention is technically infeasible;⁸

Federal Buildings over 5,000 square feet: manage on-site (*i.e.*, prevent the off-site discharge of) the 95th percentile storm through infiltration, harvesting, and/or evapotranspiration;⁹

West Virginia: Statewide Phase II MS4 permit requires on-site retention of “the first one inch of rainfall from a 24-hour storm” event unless infeasible;¹⁰ and,

Philadelphia, PA: Infiltrate the first one inch of rainfall from all impervious surfaces; if on-site infiltration is infeasible, the same performance must be achieved off-site.¹¹

The retention requirement in the Working Proposal is additionally supported by recent technical analysis by a national stormwater expert, Dr. Richard Horner. The report demonstrates that, for five different types of land use development or redevelopment projects in Southern California, the full 85th percentile, or even the full 95th percentile,

⁷ Los Angeles Regional Water Quality Control Board (July 8, 2010) Ventura County Municipal Separate Stormwater National Pollutant Discharge Elimination System (NPDES) Permit; Order No. R4-2009-0057; NPDES Permit No. CAS004002.

⁸ San Diego Regional Water Quality Control Board (December 16, 2009) South Orange County MS4 Permit, Order No. R9-2009-0002, NPDES Permit No. CAS0108740.

⁹ 42 U.S.C. § 17094; U.S. EPA (2009) Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects, at 12, available at, http://www.epa.gov/owow/NPS/lid/section438/pdf/final_sec438_eisa.pdf.

¹⁰ State of West Virginia Department of Environmental Protection, Division of Water and Waste Management, General National Pollution Discharge Elimination System Water Pollution Control Permit, NPDES Permit No. WV0116025 at 13-14 (June 22, 2009), available at, <http://www.dep.wv.gov/WWE/Programs/stormwater/MS4/permits/Documents/WV%20MS4%202009%20General%20Permit.pdf>.

¹¹ City of Philadelphia (Jan. 29, 2008) Stormwater Management Guidance Manual 2.0, at 1.1, available at, <http://www.phillyriverinfo.org/programs/subprogrammmain.aspx?Id=StormwaterManual>.

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24-hour precipitation event could be retained on-site using *only* infiltration practices on sites overlying soils classified as Group C (typically containing 20 to 40 percent clay) under the Natural Resources Conservation Service (NRCS) major soil orders classification scheme.^{12,13} Even for sites overlying Group D soils (typically 40 percent or more clay with substantially restricted water transmissivity) and assuming no infiltration was feasible, greater than 50 percent of the 85th percentile storm could be retained at each development type using only rooftop runoff dispersion or harvest and reuse techniques.¹⁴ Additional retention under these scenarios could be achieved through use of evaporation practices, or, in cases where some infiltration is feasible, use of infiltration BMPs.

While we support the permit's inclusion of a robust stormwater runoff retention requirement, we are concerned by the Working Proposal's framing of alternative compliance for on-site retention of runoff or its "Options for Stormwater Management Design" provisions.

1. The Working Proposal Must Require Biofiltration to Achieve Equivalent Pollutant Load Reduction in Cases of Technical Infeasibility for On-site Retention

NRDC has commented to the Regional Board on numerous prior occasions regarding our support for the use of low impact development ("LID") practices that retain stormwater on-site through infiltration, harvesting and reuse, and evapotranspiration or bioretention.¹⁵ In contrast to these retention practices, which ensure that 100 percent of the pollutant load in the retained volume of runoff does not reach receiving waters, biofiltration practices that treat and then discharge runoff through an underdrain result in the release of pollutants to receiving waters. Indeed, in order to achieve equivalent pollutant load reduction benefits to the use of on-site retention, biofiltration practices would have to be 100 percent effective at filtering pollutants from runoff, which they are invariably not. As a result, we have previously commented that biofiltration practices are not a proper substitute for LID practices that retain water on-site.

¹² Natural Resources Conservation Service, Distribution Maps of Dominant Soil Orders (<http://soils.usda.gov/technical/classification/orders/>, last accessed December 16, 2011).

¹³ Dr. Richard Horner and Jocelyn Gretz (November 2011) Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices Applied to Meet Various Potential Stormwater Runoff Regulatory Standards (See Attachment A).

¹⁴ Id.

¹⁵ See, e.g., NRDC letter to Los Angeles Regional Water Quality Control Board re: Draft Ventura County MS4 Permit, April 10, 2009.

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This conclusion is borne out by studies by Dr. Richard Horner, which demonstrate that biotreatment systems using an underdrain attenuate only 57 percent of total suspended solids, 80 percent of total copper, 62 percent of total zinc, and 78 percent of total phosphorus in runoff from a site.¹⁶ Further, data presented in the Draft Ventura County Technical Guidance Manual estimates pollutant removal efficiency for total suspended solids to be 54-89 percent, and for total zinc to be 48-96 percent.¹⁷ Biofiltration has additionally been shown to be a particularly ineffective method of pollutant removal for addressing nitrogen or phosphorous, two common contaminants found in stormwater.¹⁸ The Draft Ventura Technical Guidance, for example, indicate that biofiltration achieves pollutant removal efficiency for total nitrogen at between only 21-54 percent,¹⁹ as compared with 100 percent for runoff retained on-site.

¹⁶ R. Horner (2007) *Initial Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices ("LID") for the San Francisco Bay Area*, at 16-19; R. Horner (2007) *Supplementary Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices ("LID") for the San Francisco Bay Area*, at 3-5. (See Attachments B, C.)

¹⁷ Ventura County Low Impact Development Technical Guidance Manual, July 13, 2011, at D-7, available at http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/ventura_ms4/VenturaTGM/Ventura%20Stormwater%20TGM%20Final%207-13-11.pdf.

¹⁸ Lawn irrigation has been identified as a “hot spot” for nutrient contamination in urban watersheds—lawns “contribute greater concentrations of Total N, Total P and dissolved phosphorus than other urban source areas . . . source research suggests that nutrient concentrations in lawn runoff can be as much as four times greater than other urban sources such as streets, rooftops or driveways.” Center for Watershed Protection (March 2003) *Impacts of Impervious Cover on Aquatic Systems* at 69; see also H.S. Garn (2002) *Effects of lawn fertilizer on nutrient concentration in runoff from lakeshore lawns, Lauderdale Lakes, Wisconsin*. U.S. Geological Survey Water- Resources Investigations Report 02-4130 (In an investigation of runoff from lawns in Wisconsin, runoff from fertilized lawns contained elevated concentrations of phosphorous and dissolved phosphorous). In this regard, we note that as a known source of pollutants to the MS4, the category of lawn irrigation runoff as a non-stormwater discharge must be prohibited under 33 U.S.C. § 1342(p)(3)(B)(ii) and 40 C.F.R. § 122.26(d)(2)(iv)(B)(1).

¹⁹ Ventura County Low Impact Development Technical Guidance Manual, July 13, 2011, at D-7. See also, BASMAA (December 1, 2010) *Draft Model Bioretention Soil Media Specifications-MRP Provision C.3.c.iii*, at Annotated Bibliography section 3.0 (noting nutrient removal from synthetic stormwater runoff demonstrated only 55 to 65 percent of total Kjeldahl nitrogen removal and that only 20 percent of nitrate is removed from the runoff).

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We urge the Regional Board to remove provisions allowing for use of biofiltration to meet the Permit's LID requirements in cases where it is technically infeasible to retain runoff on-site. (See, e.g., Working Proposal, Table [TBD], at 25.) To this end, we support the Working Proposal's requirement that for cases where it is technically infeasible to retain the design volume on-site, a project must perform off-site mitigation and implement on-site stormwater runoff controls. Biofiltration could then be used in place of engineered or conventional controls to meet these otherwise applicable on-site treatment requirements for the design storm volume. In the event the Regional Board determines to allow biofiltration to be substituted for on-site retention in cases of technical infeasibility, we note that the current Working Proposal's provision allowing that "if it is infeasible to retain 100 percent of the SWQDv . . . then on-site biofiltration systems, sized to treat 1.5 times the remaining design stormwater runoff volume, may be used," is not sufficiently protective of water quality and does not meet the Clean Water Act's MEP standard.

This Regional Board has, in fact, already passed more stringent requirements regarding application of biofiltration to meet on-site LID requirements in the MS4 Permit for Ventura County. The Ventura permit requires that biofiltration devices be sized to treat 1.5 times the design storm volume *and* achieve 1.5 times the pollutant load reduction as would on-site retention. Even retention of equivalent pollutant load reduction to on-site retention (let alone 1.5 times the loading), a minimum backstop at the very least, is not guaranteed by a biofiltration system treating 1.5 times the design stormwater runoff volume. Based on treatment efficiencies in the Ventura County Technical Guidance Manual, biofiltration of 1.5 times the design runoff volume could result in as little as 81 percent removal of TSS, 72 percent of total zinc, and 32 percent of total nitrogen. As a result, the Working Proposal should either eliminate biofiltration as an option for compliance, or at a minimum require that sites electing to use biofiltration for on-site compliance in cases of technical infeasibility must demonstrate both treatment of 1.5 times the design stormwater runoff volume *and* pollutant load reduction equivalent to that of retention practices. The 1.5 multiplier would thus set a minimum volume for treatment, but where a site is unable to demonstrate that biofiltration of 1.5 times the design volume will achieve equivalent pollutant load reduction to retention practices, the site would be required to treat a correspondingly larger volume of runoff until equivalent pollutant load reduction is achieved.

2. Biofiltration Should not be Allowed for Projects to Achieve Compliance at Off-site Retrofit Projects

Even if the Regional Board allows the use of biofiltration for compliance on-site in cases of technical infeasibility, there is no justification for the Board's proposal to allow use of biofiltration to achieve compliance off-site at retrofit projects. (See Working Proposal, at VI.C.8.c.iii.(2).) Where on-site retention is infeasible, off-site mitigation through retention of the design storm volume, including at a retrofit project, should be allowed,

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coupled with requirements that the project demonstrate equivalent off-site pollutant load reduction and perform on-site treatment of the design stormwater volume. Again, biofiltration could be used to meet the project's on-site treatment requirements, but no credit should be given for a site's off-site application of biofiltration to meet this section's applicable LID requirements.

3. The Working Proposal's Option Allowing for Off-site Mitigation to Increase Groundwater Replenishment Should Require that Mitigation be Tied to Water Supply And Distinguish Between Replenishment Facilities that Convey Runoff From the Project Site and Those that Are Hydrologically Unconnected to The Project Site

NRDC strongly supports efforts to use LID and groundwater recharge or other stormwater capture practices to increase water supplies in California. These initiatives are in line with California's stated policy goals. For example, the State Water Resources Control Board's State Recycled Water Policy establishes a goal of increasing the capture and use of stormwater over the amount used in 2007 by at least 500,000 acre-feet per year by 2020, and by at least one million acre-feet annually by 2030.²⁰ While we are encouraged by the Regional Board's move to incorporate provisions that could promote increased reliance on local, energy efficient water supply strategies such as groundwater replenishment, we are concerned that the Working Proposal would allow projects to perform "off-site regional groundwater replenishment" without requiring a finding that the subsequently recharged groundwater will (or even could), in fact, be used to increase local water supplies. The Working Proposal's groundwater replenishment provisions require only that: 1) the volume of stormwater to be recharged is equal to or greater than the design stormwater runoff volume; 2) equal benefits to groundwater recharge could not be met on-site; and, 3) equal or greater benefits to surface water quality will be provided within the same subwatershed. (Working Proposal, Table [TBD] at 25.) The Proposal does not condition participation in an off-site mitigation project on its connection to an aquifer used for municipal or other groundwater supply.

The provision raises two concerns. First, while the ostensible objective of the groundwater replenishment provision is to promote use of stormwater as an alternative water source through recharge to augment groundwater supplies, the lack of any requirement that recharge be directed to an aquifer actually used for groundwater production undercuts this objective. The Regional Board should include a requirement that, in order to perform off-site mitigation for groundwater replenishment, groundwater recharge must be directed to an aquifer used for water supply, or a purpose related to

²⁰ State Water Resources Control Board (May 14, 2009) State Recycled Water Policy, available at http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/recycledwaterpolicy_approved.pdf.

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preserving groundwater supply (e.g., to prevent saltwater intrusion into a groundwater aquifer used for supply). Further, we suggest that the Regional Board direct the Permittees to assess and prioritize areas within their jurisdiction that, at either the site or regional scale, present opportunities to increase groundwater replenishment specifically for water supply.

Second, the Working Proposal is unclear in its definition of “off-site,” and must provide clarification whether it intends for the term to mean an “off-site” project that is hydrologically unconnected to the project site, or a “regional” project that may receive runoff conveyed to it from the project site.²¹ Conveying runoff from the project site to a regional groundwater replenishment facility that will retain that runoff, albeit at a different location, typically does not implicate significant water quality concerns. Where the same, specific quantum of water is ultimately retained, 100 percent of the pollution contained in that particular volume of water will be prevented from reaching receiving waters. In contrast, where a project, performs off-site mitigation at some other location within the same watershed or sub-watershed, that is not hydrologically connected to the original project site, it raises substantial concerns as to whether the alternate location will “provide equal or greater benefits to surface water quality.” (See Working Proposal, Table [TBD] at 25.) Among the issues presented by this form of off-site mitigation are whether the off-site mitigation will be performed at a similar land use; whether the mitigation project will achieve equivalent pollutant load reduction; and if so, what pollutants it will be monitored for. In practice it may prove exceedingly difficult to assess the equivalency of benefits to surface water quality from retention at one site to the next.

As currently drafted, the Working Proposal would allow a project developer discretion to perform off-site mitigation, without a finding of infeasibility, at a site where it cannot be accurately determined whether equivalent protection of water quality will be achieved, to recharge groundwater that will not serve to increase local water supplies. While regional projects receiving runoff conveyed directly from the project site may raise less concern, the Working Proposal should be revised to allow off-site mitigation at a site hydrologically unconnected to the project site only when it is technically infeasible for the project to retain runoff on-site.

²¹ The provision under the “Options for Stormwater Management Design, Most Preferred Stormwater Management Options” requiring that a project opting to perform off-site groundwater replenishment “Must also provide reduction through treatment of the SWDQv at the project site” implies the former, that projects may perform off-site mitigation at a site hydrologically unconnected to the project within the same sub-watershed. In addition to the concerns described above, we also note our concern, described below, that the Working Proposal’s Water Quality Mitigation Criteria are not adequately protective of water quality and fail to meet the requirements of the Clean Water Act’s MEP standard.

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An additional concern raised by the Working Proposal's off-site mitigation provisions is that they would potentially allow for new development discharging polluted runoff to persist in the built environment. A project that is developed during the term of this permit may stand for 60 years or more.²² Yet if the project performs off-site mitigation, the permit would allow for that project to be developed using only conventional, engineered, treat and discharge controls on runoff, which have proven entirely inadequate for the protection of water quality in our urban and suburban environments. Instead, another "off-site" development would theoretically be retrofitted in place of on-site retention, even if that site might otherwise eventually be subject to the permit's (or a local ordinance's) requirements to incorporate LID based controls on a much shorter timeframe; e.g., while the new project will be developed using inferior engineered controls that will persist in the built environment for generations, the off-site project would, independent of its participation in the Working Proposal's off-site program, potentially have been required to implement LID controls within the next 5, 10, or even 20 years, resulting in a substantially faster conversion of development to LID controls. Under the Working Proposal a continuous stream of new projects could be introduced into the built environment without LID based stormwater controls, ensuring that pollution will continue to be discharged to receiving waters.

C. The Working Proposal's Water Quality Mitigation Criteria Are Insufficiently Protective of Water Quality

The Working Proposal contains requirements pertaining to Water Quality Mitigation Criteria for projects that have been approved for off-site mitigation or groundwater replenishment projects. (Working Proposal at 8.c.iv.) While we strongly support requirements to treat on-site runoff when off-site mitigation is performed in-lieu of on-site retention, we are concerned that the two standards contained within the Working Proposal fail to require controls to the MEP under the Clean Water Act.

First, we are concerned that the "pollutant specific benchmarks" contained in the Working Proposal appear insufficiently protective of water quality and do not rise to the level of treatment standards required in other MS4 permits in California, including those required for the Ventura County as detailed in either that county's MS4 Permit or the resulting Ventura County Technical Guidance Manual's "Treatment BMP Performance Standards." The Regional Board should revise the pollutant benchmarks to meet, at a minimum, these more protective requirements.

Second, we are concerned that the Working Proposal's authorization for projects only to "ensure that the discharge does not cause or contribute to an exceedance of water quality standards" would potentially allow for a project to institute *no* controls on stormwater

²² See, e.g., Nelson, Arthur C., 2004, *Toward a New Metropolis: The Opportunity to Rebuild America*, Brookings Institution, available at http://www.brookings.edu/reports/2004/12metropolitanpolicy_nelson.aspx.

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runoff, or to implement only minimal controls that do not reflect what is actually practicable to do. This standard should be removed, or should be required in addition to requirements to meet specific pollution benchmarks or treatment standards.

D. The Working Proposal's Local Ordinance Equivalence Provision Creates a Self Regulatory Scheme in Violation of the Clean Water Act.

The Working Proposal allows for a permittee to submit a local LID ordinance for “The Executive Officer [to] assess whether the Permittee has provided reasonable assurance 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” the permit’s performance criteria or hydromodification provisions. (Working Proposal, at 8.d.1.) But putting such review authority solely in the Executive Officer shields the development of these critical, core permit requirements from oversight and creates a self-regulatory scheme in violation of the Clean Water Act. In *Environmental Defense Center, Inc. v. U.S. E.P.A.*, 344 F.3d 832, 854-56 (9th Cir. 2003), the court explained: “[S]tormwater management programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity. . . . Congress identified public participation rights as a critical means of advancing the goals of the Clean Water Act in its primary statement of the Act’s approach and philosophy.”

In bypassing the public review process, the Local Ordinance Equivalence provision instead has the potential to exempt development from participation in the Permit’s core requirements to prevent the discharge of pollutants to the MS4 system. These requirements, encompassing the permit’s on-site stormwater controls, LID requirements, alternative performance criteria, hydromodification controls, and other post-construction requirements, are necessarily reviewed in order to determine whether the permit meets the requirements of the Clean Water Act’s MEP standard. This determination lies properly with the Regional Board in the first instance, through the process of public review and hearing. To the extent that any specific provision of a local ordinance imposes more stringent controls than those contained within the Working Proposal, these must be considered additive to the MS4 permit’s requirements; in order to “ensure that each [MS4 permit] program reduces the discharges of pollutants to the maximum extent practicable,” the Local Ordinance Equivalence provision should be removed, and permittees should be required to meet the permit’s applicable requirements.

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Conclusion

For the aforementioned reasons, Regional Board staff should revise the Working Proposal so that it meets the requirements of state and federal law.

Sincerely,

A handwritten signature in black ink, appearing to read "Noah Garrison". The signature is written in a cursive style with a large initial "N" and a long, sweeping underline.

Noah Garrison
Natural Resources Defense Council

**INVESTIGATION OF THE FEASIBILITY AND BENEFITS OF LOW-IMPACT
SITE DESIGN PRACTICES APPLIED TO MEET VARIOUS POTENTIAL
STORMWATER RUNOFF REGULATORY STANDARDS**

By

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Report to

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EXECUTIVE SUMMARY

STUDY DESIGN

A study was performed to investigate the degree to which stormwater management practices, commonly referred to as “low-impact development” methods or “green infrastructure,” can retain urban runoff and meet five possible regulatory standards that could be applied nationally. Retention is defined as preventing the conversion of precipitation to runoff discharging from a development site on the surface, from where it can enter a receiving water. Retaining runoff from impervious and pollutant generating pervious surfaces prevents the introduction of urban runoff pollutants to receiving waters as well as reduces runoff volume to prevent stream channel and habitat damage, flooding, and loss of groundwater recharge. ARCD methods were assessed for their ability to: (1-2) meet standards pertaining to retention of the runoff generated by the 85th and 95th percentile, 24-hour precipitation events; (3) retain 90 percent of the post-development runoff; and (4-5) retain the difference between the post- and pre-development runoff, both with and without a cap at the 85th percentile, 24-hour event. The study assessed five urban land use types (three residential, one retail commercial, and one infill redevelopment), each placed in four climate regions in the continental United States on two regionally common soil types.

Infiltrating bioretention was applied as an initial strategy in the analysis of each case. When the initial strategy could not fully retain post-development runoff, additional methods were applied, involving roof runoff harvesting in the most impervious development cases and roof water dispersion in those with substantial pervious area. Benefits were assessed with respect to reduction of the annual average surface runoff volume from the quantity estimated without any stormwater management practices, the associated maintenance of pre-development groundwater recharge, and water quality improvement achieved through preventing discharge to receiving waters of pollutants generated with developed land uses.

RETENTION AND POLLUTANT REDUCTION CAPABILITIES

The initial strategy of infiltrating bioretention could retain all post-development runoff and pre-existing groundwater recharge, as well as attenuate all pollutant transport, in the three residential land use development types on hydrologic soil group (HSG) B soils, in all cases, in all regions, taking a fraction of the available pervious area to do so. For the more highly impervious commercial retail and redevelopment cases, bioretention would retain about 45 percent of the runoff and pollutants generated and save about 40 percent of the pre-development recharge. Adding roof runoff management measures in these cases would approximately double retention and pollutant reduction for the retail commercial land use and raise it to 100 percent for the redevelopment. Results were generally similar with HSG C soils, although more of the pervious portion of sites was required to equal the retention seen on B soils.

For development on the D soils in all climate regions, use of roof runoff management techniques was estimated to increase runoff retention and pollutant reduction from zero to between about one-third to two-thirds of the post-development runoff generated, depending on the land use case. These strategies would offer little groundwater recharge benefit with this soil condition, but would still have the potential to significantly reduce runoff volume and pollutant loading.

ABILITY TO MEET STANDARDS

The projected ability to meet the five standards identified above was found to vary mostly in relation to soil type (B or C versus D) and the relative imperviousness of development. The ability to meet the five standards varied much less across climate regions. With B and C soils,

the methods considered were projected to meet all five standards in all but 12 of 125 evaluations. With D soils, however, only three standards could be met at all and those only occasionally. However, even on D soils, all cases for Standard 1 (retention of the 85th percentile, 24-hour precipitation event) were able to retain greater than 50 percent of the required runoff volume. Moreover, opportunities to use ARCD practices or site design principles not modeled in this analysis have the potential to further increase runoff retention volume.

Standard 3 (retain 90 percent of the average annual post-development runoff volume) would be the most environmentally protective standard. Meeting or coming as close as possible to meeting, but not exceeding, this standard was estimated to lead to 66-90 percent of total runoff retention and pollutant loading reduction on B and C soils and 37-66 percent runoff retention on D soils. Standard 2 (retain the runoff produced by the 95th percentile, 24-hour precipitation event) would yield equivalent protection on D soils and only slightly less protection with B and C soils. The outcome with this standard would also be more consistent region to region than with the alternative standard 1, based on the 85th instead of the 95th percentile precipitation event. Sites located on B or C soils were able to retain the runoff produced by the 85th percentile storm in 24 of 25 cases modeled (in 18 of the 25 cases by using infiltrating bioretention alone), and were able to retain the runoff produced by the 95th percentile storm in 22 of 25 cases modeled.

Standards 4 and 5, based on the differential between pre- and post-development runoff volume, are inconsistent in retaining runoff and reducing pollutants, in that they are relatively protective where pre-development runoff is estimated to be low relative to post-development flow, but result in progressively lower retention and pollutant loading reduction as pre- and post-development volumes converge, such as in several cases on D soils. Standard 5 is especially weak in this regard. The potentially low level of retention and pollutant loading reduction renders these standards based on the change in pre- versus post-development runoff volume poor candidates for national application, at least as formulated in these terms.

In summary, standards 2 and 3 are clearly superior to the other three options from both a volume and pollutant load reduction standpoint. Standard 3 is entirely consistent from place to place in degree of environmental protection, and standard 2 does not deviate much. Analysis of the five development cases on two soil groups in each of four regions demonstrated the two standards are virtually identical in the runoff retention and pollutant loading reduction they would bring about. Of the remaining standards, standard 1 (retention of the runoff produced by the 85th percentile storm event) remains more consistent across regions and more protective of water quality for development on D soils than either standard 4 or 5, and is preferable to those standards in this regard.

INTRODUCTION

GENERAL STUDY DESCRIPTION

Study Design

This purpose of this study was to investigate the degree to which low-impact development (LID)¹ practices can meet or exceed the requirements of various potential stormwater management facility design standards and to determine the environmental benefits that can be realized by applying these techniques. The investigation was performed by estimating the stormwater retention possible with full application of low-impact options under a range of conditions broadly representative of different regions within the United States and then determining the implications of the findings for achieving various standards and for providing benefits. Retention is defined as preventing the conversion of precipitation to surface runoff from urbanized land uses through infiltration, evapotranspiration, and/or harvesting for some water supply purpose. Retaining runoff from impervious and pollutant generating pervious surfaces prevents the introduction of urban runoff pollutants to receiving waters as well as reduces runoff volume to prevent stream channel and habitat damage, flooding, and loss of groundwater recharge. Benefits were assessed with respect to reduction of the potential developed land surface runoff volume, the associated maintenance of pre-development groundwater recharge, and water quality improvement achieved through preventing discharge to receiving waters of pollutants generated with developed land uses.

The potential regulatory standards investigated were capture and retention of, at minimum:

- Standard 1—The runoff produced by the 85th percentile, 24-hour precipitation event,² a standard commonly used in California;
- Standard 2—The runoff produced by the 95th percentile, 24-hour precipitation event, the standard adopted under Section 438 of the Energy Independence and Security Act;
- Standard 3—90 percent of the average annual post-development runoff volume;
- Standard 4—The difference between the post- and pre-development³ average annual runoff volumes; and
- Standard 5—The difference between the post- and pre-development runoff volumes for all events up to and including the 85th percentile, 24-hour precipitation event.

Conditions broadly representative of the nation were selected by, first, considering the climate regions defined in USEPA's (1983) Nationwide Urban Runoff Project (NURP) report. For full analysis, climate regions 1 (Northeast-Upper Midwest), 3 (Southeast), 5 (South Central), and 6 (Southwest) were chosen as providing a wide range of climatological conditions and geographic distribution. Once the four regions were picked, a metropolitan area and a specific city in each were chosen to serve as typical models of development circumstances in the general area, as

¹ The National Research Council (NRC, 2009) renamed LID, also known as green infrastructure, as aquatic resources conservation design (ARCD), the term used henceforth in this report.

² The 85th percentile, 24-hour event represents the precipitation quantity in a 24-hour period not exceeded in 85 percent of all events in an extended record.

³ In this study the pre-development state is taken as the typical land cover existing before European settlement of an area.

detailed in the Case Studies discussion below. In addition, region 7 (Pacific Northwest) was identified as an additional location to be discussed. This region is the site of a considerable amount of ARCD application in an area somewhat different climatologically than other selected regions, in having persistent winter rainfall totaling annually, in the major urban areas, intermediately among the other regions. Results of research on ARCD conducted in this region are discussed at several points in this report.

Soils and topography were the next considerations in developing broadly representative conditions. U.S. Department of Agriculture websites were the source of general soil characterizations for the study regions and specific soil survey data in and around the representative metropolitan areas. Soils generally represented some range in textural classes and associated hydraulic conductivities. For each region, a soil type predominating among those representing hydraulic conductivities relatively high and low for the region were selected to serve as a basis for the analyses. The effect of slope was also investigated but ultimately found not to affect results substantially.

Five types of urban development were selected to represent breadth in land use: (1) multi-family residential, (2) small-scale single-family residential, (3) large-scale single-family residential, (4) large-scale commercial, and (5) infill redevelopment. Building permit data from each region were consulted to determine typical distributions of site features for each (e.g., land cover by buildings, parking areas, roadways, walkways, driveways, landscaping).

Case studies thus comprised four climate regions, each with two soil conditions and five land use types, for a total of 40 permutations. For each, the ability of the site to accommodate soil- and vegetation-based ARCD practices was investigated. Runoff quantities were estimated and compared to the five potential regulatory standards. Annual mass loading discharges were estimated for four pollutants: total suspended solids (TSS), total recoverable copper (TCu) and zinc (TZn), and total phosphorus (TP). In any case where soil- and vegetation-based ARCD infiltration techniques appeared not to be able to attenuate all runoff, specific roof runoff management strategies were investigated as possible measures to achieve additional retention. Runoff quantities and pollutant discharges were recalculated based on use of these additional practices in place.

This report covers the methods employed in the investigation, data sources, and references for both. It then presents the results, discusses their consequences, draws conclusions, and makes recommendations relative to the feasibility of utilizing low-impact development practices to meet the respective potential regulatory standards.

AQUATIC RESOURCES CONSERVATION DESIGN PRACTICES

General Description

As the stormwater management field developed, it passed through several stages. First, it was thought that the key to success was to match post-development with pre-development peak flow rates, while also reducing a few common pollutants (usually, TSS) by a set percentage. Finding that these efforts generally required large ponds, but that they did not forestall impacts, stormwater managers next deduced that runoff volumes and high discharge durations would also have to decrease. Almost simultaneously, although not necessarily in concert, the idea of low-impact development arose to offer a way to achieve actual avoidance, or at least minimization, of discharge quantity and pollutant increases reaching far above pre-development levels. These methods reduce storm runoff and its contaminants by decreasing their generation

at sources, infiltrating into the soil or evaporating or transpiring⁴ storm flows before they can enter surface receiving waters, and treating flow remaining on the surface through contact with vegetation and soil, or a combination of these strategies.

The National Research Council (“NRC”) (2009) renamed LID as Aquatic Resources Conservation Design (ARCD) for several reasons. First, this term signifies that the principles and many of the methods apply not only to building on previously undeveloped sites, but also to redeveloping and retrofitting existing development. Second, incorporating aquatic resources conservation in the title is a direct reminder of the central reason for improving stormwater regulation and management. ARCD encompasses the complete range of practices to counteract all negative urban runoff impacts; i.e., the full suite of practices that emphasize and accomplish retention as defined above. These practices aim at decreasing surface runoff peak flow rates, volumes, and elevated flow durations, as well as avoiding or at least minimizing the introduction of pollutants to any surface runoff produced. Reducing the concentration of pollutants, together with runoff volume decrease, cuts the cumulative mass loadings (mass per unit time) of pollutants entering receiving waters over time.

The menu of ARCD practices begins with conserving, as much as possible, existing trees, other vegetation, and soils, as well as natural drainage features (e.g., depressions, dispersed sheet flows, swales). Clustering development to affect less land is a fundamental practice advancing this goal. Conserving natural features would further entail performing construction in such a way that vegetation and soils are not needlessly disturbed and soils are not compacted by heavy equipment. Using less of polluting materials, isolating contaminating materials and activities from contact with rainfall or runoff, and reducing the introduction of irrigation and other non-stormwater flows into storm drain systems are essential. Many ARCD practices fall into the category of minimizing impervious areas through decreasing building footprints and restricting the widths of streets and other pavements to the minimums necessary. Another important category of ARCD practices involves directing runoff from roofs and pavements onto pervious areas as sheet flow, where all or much of the runoff can infiltrate or evaporate in many situations.

Water can be harvested from impervious surfaces, especially roofs, and put to use for irrigation, non-potable indoor water supply. Harvesting is a standard technique for Leadership in Energy and Environmental Design (LEED) buildings (U.S. Green Building Council, 2008). Many successful systems of this type are in operation, with examples such as the Natural Resources Defense Council offices (Santa Monica, CA), the King County Administration Building (Seattle, WA), and two buildings on the Portland State University campus (Portland, OR). Harvesting is feasible at the small scale using rain barrels and at larger scales using larger collection cisterns and piping systems. These small-scale applications have been used throughout the world for centuries and are rapidly spreading in the United States today (See, e.g., Texas Water Development Board, 2005; Georgia Department of Community Affairs, 2009).

If these practices are used but runoff is still produced, ARCD offers an array of techniques to retain it on-site through infiltration and evapotranspiration (ET). The bioretention cell (rain garden) is the workhorse practice in this category, but swales conveying flow slowly, filter strips set up for sheet flows, and other modes are also important. Relatively low traffic areas can be constructed with permeable surfaces such as porous asphalt, open-graded Portland cement concrete, coarse granular materials, concrete or plastic unit pavers, or plastic grid systems to allow for infiltration.

⁴ Transpiration refers to vaporization of water from plant tissue, while evaporation applies to vaporization from a liquid (e.g., pool) or solid (e.g., leaf) surface. The terms are often combined to form the compound evapotranspiration (ET).

ARCD practices should be selected and applied as close to sources as possible to stem runoff and pollutant production near the point of potential generation. However, these practices must also work well together and, in many cases, must be supplemented with strategies operating farther downstream. For example, the City of Seattle, in its “natural drainage system” retrofit initiative, built serial bioretention cells flanking relatively flat streets. “Cascades” of vegetated stepped pools created by weirs were installed along more sloping streets. In some cases the cells drain to downstream cascades. The upstream components are highly effective in attenuating most or even all runoff. Flowing at higher velocities on sloped surfaces, the cascades do not perform at such a high level, although under favorable conditions they can still infiltrate or evapotranspire the majority of the incoming runoff (Chapman 2006, Chapman and Horner 2010). Even if not as impressive statistically, cascades can actually decrease storm discharge to streams more than the cells do, because of their generally greater size. Also, the cascades extract pollutants from remnant runoff through mechanisms mediated by vegetation and soils. The success of Seattle’s natural drainage systems demonstrates that well designed ARCD practices can mimic natural landscapes hydrologically, and thereby avoid raising discharge quantities.

A watershed-based program emphasizing ARCD practices would convey significant benefits beyond greatly improved stormwater management. ARCD techniques overall would advance water conservation, and infiltrative practices would increase recharge of groundwater resources. ARCD practices can be made attractive and thereby improve neighborhood aesthetics and property values. Retention of more natural vegetation can both save wildlife habitat and provide recreational opportunities. Municipalities could use the program in their general urban improvement initiatives, giving incentives to property owners to contribute to goals in that area while also protecting water resources.

A Catalogue of ARCD Practices

ARCD practices are numerous and expanding as existing configurations are applied in new ways. Table 1 presents a catalogue adapted from USEPA (2007) and NRC (2009). This catalogue contains practices that are not equally applicable in all settings; e.g., nevertheless, each category offers practices applicable in a broad variety of circumstances.

The best strategy for choosing among and implementing these practices is a decentralized, integrated one; i.e., selecting practices that fit together as a system, starting at or near sources and working through the landscape until management objectives are met. This strategy makes maximum possible use of practices in the first three categories, which prevent stormwater quantity and quality problems, and then selects among the remaining classifications in relation to the localized and overall site conditions. Source control and preservation of existing vegetation and soils obviously avoid post-development runoff quantity and pollutant increases from any portion of the site that can be so treated. Among all strategies, these best maintain natural infiltration and ET patterns and yield of materials flowing from the site. This preventive strategy is supplemented by strategies to create as little impervious cover as possible. The remaining practices then contend with the excess runoff and pollutants over pre-development levels generated by the development.

For the practices that infiltrate water, a site’s soil characteristics and depth to groundwater can and should be determined through infiltration rate testing and excavation to determine the infiltration capability. Because of the often substantial variability of conditions around a site, these determinations should be made at multiple points. If the natural infiltration rate is low, generally < 0.5 inch/hour (< 1.25 cm/h, Geosyntec 2008), in many situations the soil can be amended, usually with organic compost, to apply an infiltrative practice.

In addition to soil characteristics, the position of the groundwater table is a crucial determinant of whether or not stormwater infiltration should be promoted by applying ground-based ARCD

practices. A seasonal high water table too close to the surface results in rapid saturation of a thin soil column and retarded infiltration. Ponding water longer than 72 hours can permit mosquito growth, damage vegetation, and promote clogging of the facility by microorganism growths and polysaccharide organic materials that form in the reduced-oxygen environment accompanying excessive ponding time (Mitchell and Nevo 1964, Ronner and Wong 1996). Also, storm runoff flow through a short soil column or very rapidly through a coarse-textured soil can convey contaminants to groundwater.

Evidence gathering from available performance data is that evapotranspiration (ET) can be a substantial factor in water retention (discussed below) but may be difficult to quantify at a given site without more research. A conservative approach is to design on the basis of infiltration rate, calculated to include consideration of soil amendments, if any. Together with careful investigation of soils and hydrogeologic conditions, this means of proceeding is very likely to produce facilities that retain at least as much runoff as predicted, and almost certainly more as a result of unquantified ET.

Table 1. A Catalogue of Aquatic Resources Conservation Design Practices (USEPA [2007] and NRC [2009])

Category	Definition	Examples
Source control	Minimizing pollutants or isolating them from contact with rainfall or runoff	<ul style="list-style-type: none"> ● Substituting less for more polluting products ● Segregating, covering, containing, and/or enclosing pollutant-generating materials, wastes, and activities ● Avoiding or minimizing fertilizer and pesticide applications ● Removing animal wastes deposited outdoors ● Conserving water to reduce non-stormwater discharges
Conservation site design	Minimizing the generation of runoff by preserving open space and reducing the amount of land disturbance and impervious surface	<ul style="list-style-type: none"> ● Clustering development ● Preserving wetlands, riparian areas, forested tracts, and porous soils ● Reducing pavement widths (streets, sidewalks, driveways, parking lot aisles) ● Reducing building footprints
Conservation construction	Retaining vegetation and avoiding removing topsoil or compacting soil	<ul style="list-style-type: none"> ● Minimizing site clearing ● Minimizing site grading ● Prohibiting heavy vehicles from driving anywhere unnecessary
Runoff harvesting	Capturing rainwater, generally from roofs, for a beneficial use	<ul style="list-style-type: none"> ● Using storage and distribution systems (rain barrels or cisterns) for irrigation and/or indoor supply for public and private buildings
Natural runoff conveyance practices	Maintaining natural drainage patterns (e.g., depressions, natural swales) as much as possible, and designing drainage paths to increase the time before runoff leaves the site	<ul style="list-style-type: none"> ● Emphasizing sheet instead of concentrated flow ● Eliminating curb-and-gutter systems in favor of natural drainage systems ● Roughening land surfaces ● Creating long flow paths over landscaped areas ● When flow must be concentrated, using vegetated channels with flow controls (e.g., check dams)
Practices for temporary runoff storage followed by infiltration and/or evapotranspiration ^a	Use of soil pore space and vegetative tissue to increase the opportunity for runoff to percolate to groundwater or vaporize to the atmosphere	<ul style="list-style-type: none"> ● Bioretention cells (rain garden) ● Vegetated swales (channel flow) ● Vegetated filter strips (sheet flow) ● Planter boxes ● Tree pits ● Infiltration basins ● Infiltration trenches ● Roof downspout surface or subsurface dispersal ● Permeable pavement ● Vegetated (green) roofs
ARCD landscaping ^b	Soil amendment and/or plant selection to increase storage, infiltration, and evapotranspiration	<ul style="list-style-type: none"> ● Organic compost soil amendments ● Native, drought-tolerant plantings ● Reforestation ● Turf conversion to meadow, shrubs, and/or trees

^a Some of these practices are also conventional stormwater BMPs but are ARCD practices when ARCD landscaping methods are employed as necessary to maximize storage, infiltration, and evapotranspiration. The first five examples can be constructed with an impermeable liner and an underdrain connection to a storm sewer, if full retention is technically infeasible (see further discussion later). Vegetated roofs store and evapotranspire water but offer no infiltration opportunity, unless their discharge is directed to a secondary, ground-based facility.

^b Selection of landscaping methods depends on the ARCD practice to which it applies and the stormwater management objectives, but amending soils unless they are highly infiltrative and planting several vegetation canopy layers (e.g., herbaceous growth, shrubs, and trees) are generally conducive to increasing storage, infiltration, and evapotranspiration.

Application of ARCD Practices in This Study

The investigation performed for this study first assessed the capacity of each case study site to infiltrate the full average annual post-development storm runoff volume and thereby reduce pollutant releases to zero. The report terms this initial evaluation as the “Basic ARCD Analysis”. The means of infiltration was not distinguished at this level of analysis. For example, it was not specified if runoff would be distributed in sheet flow across a pervious area or channeled into a rain garden. As detailed later in the Methods of Analysis section, this analysis was limited to the estimated infiltration capacity of the case study soil type, possibly compost-amended, and the available pervious area.

Critically, there was no attempt to estimate the loss of surface runoff through ET in the Basic ARCD analysis (ET is considered, to address rooftop runoff only, as part of our “Full ARCD analysis,” discussed below). In general, the estimated mean annual evapotranspiration in the Southeast is about 70 percent of the precipitation, or roughly 35 inches per year. For large areas of the Southwest, evapotranspiration is virtually equal to 100 percent of the precipitation, which is only about 10 inches per year. The ratio of estimated mean annual evapotranspiration to precipitation is least in the mountains of the Pacific Northwest and New England where evapotranspiration is about 40 percent of the precipitation (Hanson, 1991). By leaving out these substantial losses, generally 40 percent of precipitation or more, the retention estimates in this study can be considered quite conservative.

Additionally, there was no consideration of many ARCD practices in the Table 1 catalogue that could be applied in site-specific design. For example, there were no refinements of the prevailing building standards to reduce street widths or cluster buildings and reduce their footprints. Further, green roofs were not considered in this study, although they are already making a contribution to runoff reduction around the nation and reflect a significant additional opportunity to retain runoff on-site. The U.S. EPA has stated that “a 3.5-4 in. (8 -10 cm) deep green roof can retain 50% or more of the annual precipitation.” (U.S. EPA, 2009a). For water quality, we did not assume any source control implementation. Thus, actual site design could take advantage of substantial additional capabilities not considered in this study.

In cases where the practices incorporated in the initial level of analysis (infiltration through bioretention) did not, according to the estimates, fully attenuate post-development pollutant discharges, specific attention was directed at ways of extracting additional water from surface discharge by managing roof runoff. This assessment is called the “Full ARCD Analysis” in the report. The options broadly divide into harvesting water for a purpose such as irrigation and/or non-potable indoor supply, or making special provisions to infiltrate or evapotranspire roof runoff even if soil conditions are limiting. Harvesting applies best to relatively large developments having sufficient demand for the collected water. While single-family residences can harvest water into rain barrels or cisterns for lawn and garden watering, these containers may be small in volume relative to runoff production; and though opportunity exists, no credit was taken for them in this study. However, even in poorly infiltrating soils, options exist to disperse house roof runoff as sheet flow for storage in vegetation and soil until evapotranspiration and some infiltration occurs.

CASE STUDIES

CLIMATE REGIONS

Basis of Selection

The Nationwide Urban Runoff Project divided the nation into nine regions based on differences in volume, intensity, and duration of precipitation and interval between precipitation events (USEPA 1983). For broad representation of the U.S. generally this study chose regions 1 (Northeast-Upper Midwest), 3 (Southeast), 5 (South Central), and 6 (Southwest) for analysis. Table 2 provides the annual precipitation statistics from the NURP compilation.

Table 2. Precipitation Statistics (Means) for Four NURP Regions Selected for Study (USEPA 1983)

Region	Volume (inch)	Intensity (inch/hour)	Duration (hours)	Interval (hours)
1—Northeast-Upper Midwest	0.26	0.051	5.8	73
3—Southeast	0.49	0.102	5.2	89
5—South Central	0.33	0.080	4.0	108
6—Southwest	0.17	0.045	3.6	277

The selected regions represent a volume differential of about a factor of three, intensity variation of approximately two times, and inter-storm interval varying by almost four times. The NURP report shows coefficients of variation (mean/standard deviation) of greater than 1.0 for all of these means, indicating an overall high degree of dispersion.

Figure 1 visually depicts variation in mean annual precipitation across the continental United States. It shows that the selected regions are overall representative of the broadly prevailing range across the nation, particularly its major urban and still urbanizing areas.

Region 7 (Pacific Northwest) was also identified for discussion of research results on ARCD, although not full analysis. It has less intense (mean 0.024 inch/hour) but much more extended (mean 20.0 hours) precipitation compared to any other region in the nation. Mean storm volume ranks with region 3 (mean 0.48 inch); but fewer storms, especially in the summer, yield overall less total annual precipitation in lowland areas holding all urban development in region 7. It was of interest because of the already occurring use of ARCD techniques in a relatively rainy part of the country.

Representative Metropolitan Areas and Cities

Once the regions were identified, a metropolitan area within each area was chosen as a basis for assigning specific precipitation and development characteristics. The areas considered were USEPA-designated Urban Areas: "An urbanized area is a land area comprising one or more places – central place(s) – and the adjacent densely settled surrounding area – urban fringe – that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile" (USEPA 2007). Stormwater regulations would have the most impact in areas that are being quickly developed, redeveloped, or both. Five of the twenty fastest growing counties in the nation from 2000 to 2009 were near Atlanta, GA and five were in the state of Texas (U.S. Census Bureau 2010). These statistics factored into the decision to focus on records from these regions.

Each selected metropolitan area is generally representative of its region in precipitation and development characteristics. Each is also undergoing relatively active new development and redevelopment, offering candidate locations where a prospective stormwater standard would frequently be applied. These metropolitan areas are: region 1—Boston, MA, region 3—Atlanta, GA, region 5—Austin, TX, and region 6—San Diego, CA



Figure 1. Precipitation of the Conterminous States of the United States, National Atlas of the United States, 2011.

Finally, a city with a high rate of development (and often redevelopment) was picked in each metropolitan area for investigation of building patterns and standards. The intent was to match regional patterns of climate, soils (see discussion on physiographic data, below), and land use and land cover realistically. After substantial investigation, the conclusion was that building standards, how land is used, and the relative allocation of impervious and pervious lands do not vary in any systematic way across the nation and cannot be regionally distinguished. Therefore, the variables of interest came down to precipitation and soils.

Alpharetta, about 30 miles north of Atlanta, represents that metropolitan area. In 1981 it was a small town of approximately 3,000 residents but grew to 51,243 by 2007. During the workday, the city swells to more than 120,000 residents, workers, and visitors. Alpharetta is home to large corporations such as AT&T (3500 employees), Verizon Wireless (3000 employees), and ADP, Inc./National Account Services (2100 employees). Infill redevelopment projects are anticipated in the downtown area (City of Alpharetta, 2011).

Round Rock is a typical developing city located 15 miles to the north of Austin, TX. In 1970 there were only 2,700 residents in this town, while today the population exceeds 100,000. Round Rock is the eighth-fastest growing city in the nation and the location of several large corporate campuses.

The Town of Framingham, 20 miles west of Boston, represents the northeastern climate zone. At nearly 67,000 inhabitants, Framingham is the largest entity designated as a “town” in the Commonwealth of Massachusetts. It is home to three large corporations and overall 2200 businesses providing 45,000 jobs. Differing greatly from the representative communities in

other regions, Framingham was incorporated in 1700 and developed early in the nation's history. Today's activity includes redevelopment of brownfields and downtown revitalization, although some agricultural land still remains within the town limits (Town of Framingham, 2011).

San Marcos, representing the San Diego area and located about 35 miles north of the city, grew from a population of 17,479 in 1980 to 82,743 by 2008. Major institutions in the city include California State University San Marcos and Palomar Community College. At this stage the city is only approximately 72 percent built out, and thus new development continues (City of San Marcos, 2011).

Precipitation Data

Average monthly precipitation data were obtained from the NOAA Hourly Precipitation Data Rainfall Event Statistics⁵ for one station with a long-term record in each region: Southeast—Atlanta/Hartsfield International Airport (Station #90451), South Central—Austin/Robert Mueller Municipal Airport (410428), Northeast—Boston/Logan International Airport (190770), and Southwest—San Diego/San Diego International Airport (Lindbergh Field) (47740). Atlanta receives the most precipitation, averaging about 49 inches per year, followed by Boston (47 inches/year), Austin (33 inches/year), and San Diego (10 inches/year). Figure 2 depicts precipitation variations over more than 50 years.

Values for either the 85th and 95th percentile, 24-hour storms were available in a number of state-specific resources, including the Georgia Stormwater Standards Supplement (Center for Watershed Protection 2009) and the Integrated Stormwater Management Program (North Central Texas Council of Governments 2010), as well as national publications such as an USEPA's technical guidance documents (USEPA 2009). However, few references had values for both 85th and 95th percentile storms. Therefore, these values were calculated following the methodology outlined in the USEPA's Technical Guidance on Implementing the Stormwater Runoff Requirements (USEPA 2009, page 30). Daily precipitation and temperature data from the National Climatic Data Center's TD Summary of the Day data set were collected and analyzed for the four stations over a time period of 60 years, January 1, 1950 to January, 31 2010.

⁵ National Climatic Data Center, Hourly Precipitation Data Rainfall Event Statistics (<http://cdo.ncdc.noaa.gov/cgi-bin/HPD/HPDStats.pl>, last accessed December 15, 2011).

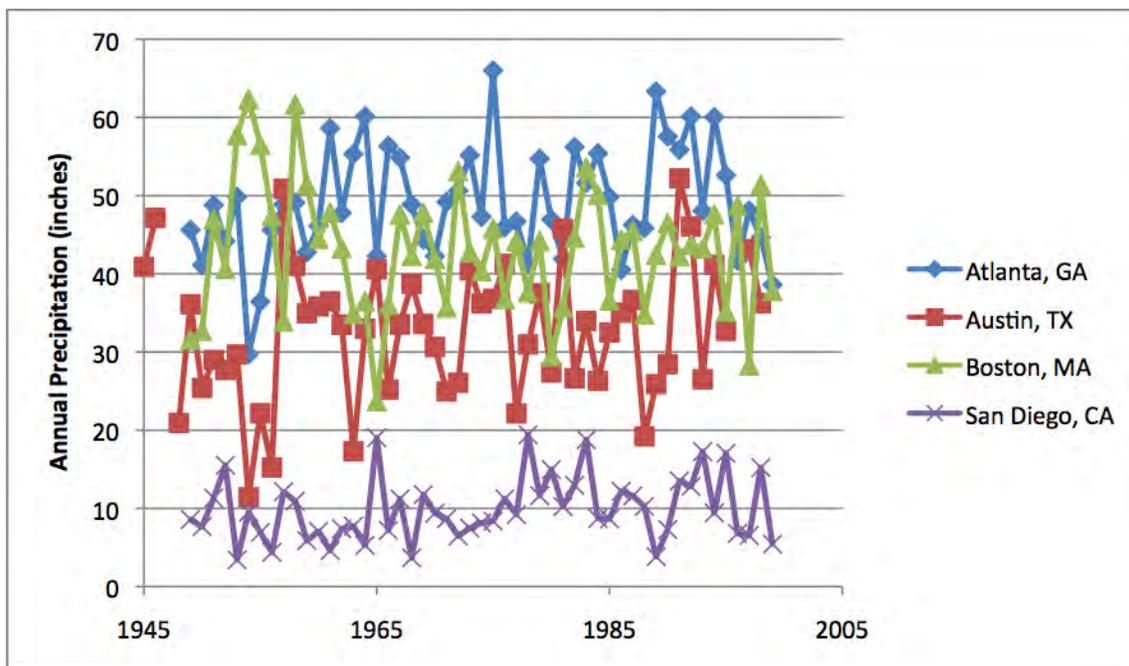


Figure 2. Average Annual Precipitation for Four Climate Regions over the Latter Part of the Twentieth Century (from NOAA Hourly Precipitation Data Rainfall Event Statistics, <http://cdo.ncdc.noaa.gov/cgi-bin/HPD/HPDStats.pl>)

For snowfall days, snow water equivalent (SWE) was calculated according to the guidelines provided by a National Climate Data Center’s (NCDC) document, Estimating the Water Equivalent of Snow, utilizing the reported mean temperature for the day (National Climatic Data Center, accessed December 16, 2011). The NCDC tables calculate that the SWE is at most, about 10 percent of the total snowfall depth. In the methodology for determining the 85th and 95th percentile events, all days with < 0.1 inch precipitation are removed, lowering the impact of snow on the results. Snowfall had no effect in the Southwest region, a very minor effect in the Southeast and South Central, and still a relatively small effect in the Northeast, as follows: San Diego—0 snow days; Atlanta—74 of 4600 total days having ≥ 0.1 inch (1.6 percent), with a contribution ranging 0.01-0.79 inch precipitation; Austin—32 of 2418 days (1.3 percent), contributing 0.01-0.50 inch; and Boston—993 of 4783 days (20.8 percent), contributing 0.01-2.24 inch. Since snow does add to runoff that must be managed in a location like the Northeast, these snow water equivalents were left in the records. Table 3 summarizes precipitation data used in the analyses for the four regions.

Table 3. Precipitation Summary for Study Regions

Region	Average Annual Precipitation (inches)	85 th Percentile, 24-Hour Event		95 th Percentile, 24-Hour Event	
		Depth (inch) ^a	Fraction Covered ^b	Depth (inch) ^a	Fraction Covered ^b
Southeast	49.02	1.13	0.63	1.79	0.87
South Central	32.67	1.19	0.58	1.99	0.82
Northeast	47.03	1.07	0.81	1.72	0.89
Southwest	9.68	0.76	0.62	1.26	0.83

^a Calculated from National Climatic Data Center’s TD Summary of the Day, for all precipitation days >0.1 inch for period January 1, 1950 – December 31, 2009

^b Fraction of total annual precipitation covered by event standard

Physiographic Data

General Methods

This section of the report covers the soils, groundwater, and topographic data underlying the analyses. Soil characteristics are largely a product of climate, geology and topography. The characteristics of most interest for this study were those controlling infiltration of surface water and percolation to an aquifer. Although there is variation within each climate region, the major soil orders can be used to identify regional characteristics. The Natural Resources Conservation Service (NRCS) website⁶ describing the major soil orders and their locations was the initial source of these data. Maps generated by Miller and White (1998) gave information from the State Soil Geographic Database (STATSGO), including characteristics such as soil texture and hydrologic soil group. These resources were employed to gain a broad view of the soils in each of the four regions.

To extend the scope of the study, soils were investigated in the Upper Midwest, in addition to the Southeast, South Central, Northeast, and Southwest climate regions. Upper Midwest and Northeast soils share general similarities. Both regions also have temperate, seasonal, humid climates. While average annual precipitation is overall somewhat greater in the Northeast compared to the Upper Midwest, the two regions were deemed similar enough physiographically and climatologically to be considered together. This report henceforth groups them as the Northeast – Upper Midwest climate region.

To validate the regional patterns emerging from the general sources, custom “soil resource” reports for four cities were generated using the NRCS Web Soil Survey⁷ tool. These reports collected characteristics related to infiltration rates and runoff including soil texture, hydrologic soil group, drainage classification, representative slope, and depth to water table. Using this tool requires selecting an “area of interest”. This examination utilized a size of at least 8,000 acres (10,000 acres is the maximum allowed) to insure a representative sample of soil and related conditions.

Hydrologic soil group assignment is a means of generally categorizing soils according to their tendency to admit and transmit water. The hydrologic soil group (HSG) is determined with respect to the water-transmitting soil layer with the lowest saturated hydraulic conductivity and depth to any layer that is more or less water impermeable (such as a fragipan or duripan) or depth to a water table. Box 1 summarizes the characteristics of the four HSGs (NRCS 2007).

The position of the groundwater table is a crucial determinant of whether or not stormwater infiltration should be promoted by applying ground-based ARCD practices. A seasonal high water table too close to the surface results in rapid saturation of a thin soil column and retarded infiltration. Ponding water longer than 72 hours can permit mosquito growth, damage vegetation, and promote clogging of the facility by microorganism growths and polysaccharide organic materials that form in the reduced-oxygen environment accompanying excessive ponding time (Mitchell and Nevo 1964, Ronner and Wong 1996). Also, storm runoff flow through a short soil column or very rapidly through a coarse-textured soil can potentially convey contaminants to groundwater. To avoid entertaining stormwater management strategies threatening development of these problems, data on depth to groundwater was obtained from the U.S. Geological Survey’s (USGS) Groundwater-Level Annual Statistics (USGS 2011).

⁶ Natural Resources Conservation Service, Distribution Maps of Dominant Soil Orders (<http://soils.usda.gov/technical/classification/orders/>, last accessed December 16, 2011).

⁷ Natural Resources Conservation Service, 2011, Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>).

Topographic slope influences runoff production by setting incident precipitation in motion downslope, thus producing a horizontal component of velocity vector partially counteracting the tendency to penetrate the soil vertically. This study investigated that importance of that effect by considering two slopes typical of urban development sites. As discussed during the presentation of results, below, this factor did not have a large effect on the analysis.

Box 1. Summary of Hydrologic Soil Groups (NRCS 2007)

Group A—Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil. Group A soils typically have less than 10 percent clay and more than 90 percent sand or gravel and have gravel or sand textures. Some soils having loamy sand, sandy loam, loam or silt loam textures may be placed in this group if they are well aggregated, of low bulk density, or contain greater than 35 percent rock fragments. The saturated hydraulic conductivity of all soil layers exceeds 5.67 inches per hour. The depth to any water-impermeable layer is greater than 20 inches. The depth to the water table is greater than 24 inches. Soils deeper than 40 inches to a water-impermeable layer are in group A if the saturated hydraulic conductivity of all soil layers within 40 inches of the surface exceeds 1.42 inch per hour.^a

Group B—Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded. Group B soils typically have between 10 percent and 20 percent clay and 50 percent to 90 percent sand and have loamy sand or sandy loam textures. Some soils having loam, silt loam, silt, or sandy clay loam textures may be placed in this group if they are well aggregated, of low bulk density, or contain greater than 35 percent rock fragments. The saturated hydraulic conductivity in the least transmissive layer between the surface and 20 inches ranges from 10.0 1.42 to 5.67 inches per hour. The depth to any water-impermeable layer is greater than 20 inches. The depth to the water table is greater than 24 inches. Soils deeper than 40 inches to a water-impermeable layer or water table are in group B if the saturated hydraulic conductivity of all soil layers within 40 inches of the surface exceeds 0.57 inch per hour but is less than 1.42 inch per hour.

Group C—Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted. Group C soils typically have between 20 percent and 40 percent clay and less than 50 percent sand and have loam, silt loam, sandy clay loam, clay loam, and silty clay loam textures. Some soils having clay, silty clay, or sandy clay textures may be placed in this group if they are well aggregated, of low bulk density, or contain greater than 35 percent rock fragments. The saturated hydraulic conductivity in the least transmissive layer between the surface and 20 inches is between 0.14 and 1.42 inch per hour. The depth to any water-impermeable layer is greater than 20 inches. The depth to the water table is greater than 24 inches. Soils deeper than 40 inches to a restriction or water table are in group C if the saturated hydraulic conductivity of all soil layers within 40 inches of the surface exceeds 0.06 inch per hour but is less than 0.57 inch per hour.

Group D—Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted. Group D soils typically have greater than 40 percent clay, less than 50 percent sand, and have clayey textures. In some areas, they also have high shrink-swell potential. All soils with a depth to a water-impermeable layer less than 20 inches and all soils with a water table within 24 inches of the surface are in this group, although some may have a dual classification if they can be adequately drained. For soils with a water-impermeable layer at a depth between 20 and 40 inches, the saturated hydraulic conductivity in the least transmissive soil layer is less than or equal to 0.14 inch per hour. For soils deeper than 40 inches to a restriction or water table, the saturated hydraulic conductivity of all soil layers within 40 inches of the surface is less than or equal to 0.06 inch per hour.

^a While Group A soils are present across large areas of the country, our analysis considers only Group B, C, and D soils to provide a conservative assessment of infiltration potential in urban areas, and to account for potential issues such as soil compaction that may occur for lawn and other landscaping in urban and suburban development.

Southeast Climate Region

The major soil order found throughout the southeastern United States is Ustisols, sub-order Udufts. The humid climate with frequent rainfall gives the soils an udic moisture regime; soils are rarely dry for more than 45 consecutive days. Ustisols are highly weathered and are deficient in calcium and other bases. Georgia is known for its red soils, which are the unhydrated iron oxides left in the weathered material. Pre-European contact, these soils supported mixed conifer and deciduous woodlands. Due to its relatively flat topography and warmer temperatures, Florida has primarily Spodosols, Alphisols and Histosols (Soil Survey Staff, NRCS 2011).

This region has a variety of soil textures, ranging from sand and sandy loam throughout Mississippi, Alabama, and Georgia; silty loam soils near the Appalachian Mountains; and some areas with significant organic materials in Florida. The major soil hydrologic groups of the region are varied as well, with C and D soils dominating the Georgia coastline and most of Florida. Group A and B soils are more prevalent in the interior parts of the region, in central Georgia and Alabama (Miller and White 1998).

A NRCS web soil survey was conducted for an area of interest (AOI) centered in Alpharetta, GA. The selected AOI did not have complete soil survey coverage, and findings were compared with another AOI of 8990.5 acres north of the city in Fulton County. In both AOIs, the leading HSG is B (86 percent of AOI), followed by group C (11 percent of AOI). Approximately 97 percent of the AOI has a sandy loam soil texture. The leading drainage classification was well drained (86 percent of AOI), followed by somewhat poorly drained (10 percent of AOI). The selected AOI was moderately steep, with approximately 70 percent of the AOI having slopes between 8 and 12 percent.

Fulton County, Georgia has four wells in the USGS record, three with depth-to-groundwater data. Two wells have only one recorded depth: site 08CC08 had a depth of 2.447 ft in 1986, and site 10DD01 had a depth of 16.131 ft in 1968. Site 10DD02 has been monitored annually from 1977-2010 and has an annual well-depth average in this time period of 6.292 ft.

South Central Climate Region

The major soil order in Texas is Mollisols, sub-order ustolls. These soils span the sub-humid and semiarid climate zones, and are common on the western Great Plains and throughout the Rocky Mountain States. These soils originally supported grasslands and (in mountainous regions) forests, and now are ranched or farmed. Houston black soils are also characteristic of the region and are important in agriculture and urban areas, occurring throughout central Texas. Dry soils in the Order Aridisols, sub-orders Argids and Calcids, are found in west Texas and large portions of New Mexico as well. These soils were formerly sparsely vegetated areas, now used for rangeland or wildlife habitat (Soil Survey Staff, NRCS 2011).

Soil characteristic maps generated by Miller & White (1998) indicate that the majority of soil types in the South Central climate region are diverse: sandy loam and clay dominate eastern Texas, clay soils are prevalent in central parts of the state and loam soils are in western Texas and New Mexico. Most soils tend to be in the C and D hydrologic groups, however B soils are found in bands in New Mexico (Miller & White, 1998).

A web soil survey was conducted for an area of interest of 8267.5 acres centered in Round Rock, TX. The leading HSG is D (68 percent of AOI), followed by group C (22 percent of AOI) and group B (10 percent). Primary soil textures are clay (33 percent), silty clay (27 percent), extremely stony clay (17 percent), and silty clay loam (10 percent). The leading drainage classification is well drained (79 percent of AOI) followed by moderately well drained (21

percent). The selected AOI is relatively flat; approximately 70 percent of the AOI has slopes under 2 percent, and 20 percent has slopes of 3-4 percent.

Travis County, Texas had three wells that were measured in 2003 and recorded by USGS (site YD-58-50-216) and 2004 (sites YD-58-50-216 and YD-58-25-907). Groundwater is very deep in each location, averaging 220 ft below the ground surface.

Northeast – Upper Midwest Climate Region

This climate region has significant variation in dominant soil orders. The Spodosols order, sub-order Orthods, dominates the northern portions (northern Minnesota, Wisconsin, Michigan, Vermont, and Maine) and is generally considered infertile without soil amendments. Inceptisols, sub-order Udepts, are also prevalent in the region, especially in New England states, through the Appalachian Mountains and northeastern Minnesota. Alfisols, sub-order Udalfs, too are prevalent in the region, extending from Minnesota east to New York. These two soils both have an udic moisture regime, and are rarely dry for more than 45 consecutive days due to the year-round precipitation in the area (Soil Survey Staff, NRCS 2011). The state soil of Massachusetts is the Paxton fine sandy loam and also extends into New Hampshire, New York and Vermont. These deep soils were formed in acid subglacial till and are derived from schist, gneiss and granite (NRCS undated).

Based on maps generated by Miller and White (1998), sandy loam and silt loam soils tend to dominate the region, with small areas of clay and silty clay soils. Hydrologic soil group B is most prevalent in the Midwestern states (Minnesota, Wisconsin, Illinois), and Group C is most common in the rest of the region, spanning from Indiana to Maine. The region primarily supported forest ecosystems before development.

A web soil survey was conducted for an area of interest centered in Framingham, MA with an AOI of 8645.6 acres. The region has relatively equal amounts of each HSG: 20 percent of the AOI in Group A, 19 percent in group B, 20 percent in Group C, and 24 percent in Group D. Soil textures represented are fine sandy loam (49 percent), muck (10 percent), loamy sand (9 percent), and moderately decomposed plant material (8 percent). The leading drainage classification is well drained (32 percent of AOI) followed by very poorly drained (16 percent), somewhat excessively drained (12 percent), and moderately well drained (11 percent). Fourteen percent of the AOI has slopes of 1 percent or less, with 18 percent at 2-5 percent, 23 percent at 6-8 percent, and another 23 percent at 8-12 percent slopes.

There are three wells in the USGS record for Middlesex County, MA including 5 years of record for an Acton well averaging 17.75 ft, 6 years for the Wakefield well with an average depth of 6.59 ft, and 11 years at the Wilmington well with an average of 8.09 ft.

Southwest Climate Region

There are multiple soil orders in California due to its variation in climate, topography and geologic history. Entisols occur in the southern parts of the state; sub-order Psamments is a frequently found sandy soil that makes productive rangeland. Order Mollisols, sub-order Xerolls, are freely drained and dry soils found in the Mediterranean climate along the coast of California. Pre-settlement ecosystems supported by these soils include oak savanna, grasslands, and chaparral. Current soils may be used as cropland or rangeland (Soil Survey Staff, NRCS 2011).

A web soil survey was conducted for an 8267.5-acre area of interest centered in San Marcos, CA. The leading HSG is D (58 percent of AOI), followed by group C (26 percent) and group B (14 percent). Soil texture include sandy loam (19 percent), coarse sandy loam (17 percent), silt loam (15 percent), very fine sandy loam (14 percent), loamy fine sand (12 percent), loam (7

percent), and clay (5 percent). The leading drainage classification is well drained (51 percent of AOI), followed by moderately well drained (34 percent). Approximately 10 percent of the AOI has slopes \leq 5 percent, and 66 percent has slopes of 5-10 percent.

There are no groundwater records for San Diego County available on the USGS website. Data were collected from the California Department of Water Resource Water Data Library⁸. Ten wells west of San Marcos near Escondido were sampled in 1987. The depth to groundwater ranged from 2.0 to 28.1 ft for an average of 11.6 ft.

Summary of Physiographic Characteristics

Due to the large area of land encompassed in each climate region, it is difficult to select one location that is truly “representative” of the entire region. By selecting four cities that are spaced throughout the country with different climate and soil characteristics, however, this study can demonstrate the different potential for ARCD strategies in regions around the nation. Table 4 summarizes the major soils, groundwater, and topographic characteristics for these regions. Figure 3 shows the distributions of hydrologic soil groups in areas of interest investigated in the four metropolitan areas.

Table 4. Summary of Physiographic Data

Characteristic	Southeast	South Central	Northeast – Upper Midwest	Southwest
Main soil types	Sandy loam	Clay, clay loam	Sandy loam, silt loam	Sandy loam, loam
Hydrologic soil group near study site	B (GA, AL, SC)	D (TX)	C (Northeastern states)	D
Other hydrologic soil group in climate region	D (FL)	C (NM)	B (MN, WI, IL, MI)	C
Predominant pre-development land cover	Woods	Semi-arid herbaceous	Woods	Narrow-leaved chaparral
Predominant slopes	70% @ 8-12%	90% < 4%	65% < 12%	76% < 10%

LAND USE CASES

Five cases were selected to represent a range of urban development types considered to be representative of the nation. These cases involved: a multi-family residential complex (MFR), a relatively small-scale (23 homes) single-family residential development (Sm-SFR), a relatively large (1000 homes) single-family residential development (Lg-SFR), a sizeable commercial retail installation (COMM), and an urban redevelopment (REDEV).

Building permit records from the City of San Marcos in San Diego County, California provided data on total site areas for the first three cases, including numbers of buildings, building footprint areas (including porch and garage for Sm-SFR), and numbers of parking spaces associated with the development projects. Information was not as complete for cities in other regions, but what data was available indicated no substantial difference in these site features. Therefore, the San Marcos data were used for all regional case studies. This uniformity had the advantage of placing comparisons completely on the basis of the major variables of interest, climatological and soils characteristics.

⁸ <http://www.water.ca.gov/waterdatalibrary> (last accessed December 16, 2011).

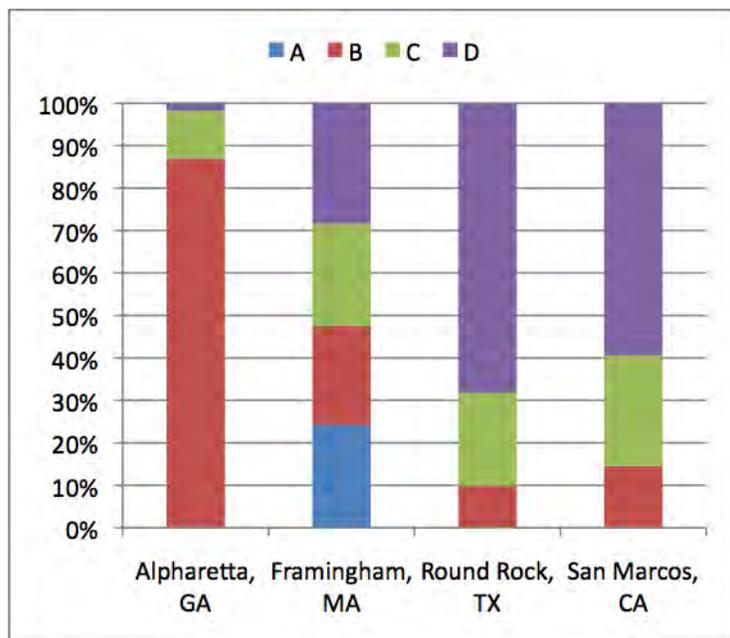


Figure 3. Distribution of Hydrologic Soil Groups in Four Study Cities

The REDEV case was taken from an actual project in Berkeley, California involving conversion of an existing structure, built originally as a corner grocery store, to apartments and addition of a new building to create a nine-unit, mixed-use, urban infill project. Space remained for a large side yard.

Larger developments were not represented in the sampling of building permits from the San Marcos database. To take larger development projects into account in the subsequent analysis, the two larger scale cases were hypothesized. The Lg-SFR scenario scaled up all land use estimates from the Sm-SFR case in the ratio of 1000:23. The hypothetical COMM scenario consisted of a building with a 2-acre footprint and 500 parking spaces. As with the smaller-scale cases, these hypothetical developments were assumed to have roadways, walkways, and landscaping, as described below.

While the building permit records made no reference to features such as roadways, walkways, and landscaping normally associated with development projects, these features were taken into account in the case studies using assumptions described herein. Parking spaces were estimated to be 176 square ft in area, which corresponds to 8 ft width by 22 ft length dimensions. Code requirements vary by jurisdiction, with the tendency now to drop below the traditional 200 square ft average. About 180 square ft is common, but various standards for full- and compact-car spaces, and for the mix of the two, can raise or lower the average (Gibbons, 2009). The 176 square ft size is considered to be a reasonable value for conventional practice.

Roadways and walkways assume a wide variety of patterns. Exclusive of the two SFR cases, simple, square parking lots with roadways around the four sides and square buildings with walkways also around the four sides were assumed. Roadways and walkways were taken to be 20 ft and 6 ft wide, respectively.

Each single-family residences (SFR) was assumed to have a lot area of 5749 square ft., and a driveway 20 ft wide and 30 ft long. Assuming a square lot, each would have a sidewalk 76 feet by 4 feet wide, and a walkway that is 40 feet by 4 feet. .

Exclusive of the COMM case, the total area for all of these impervious features was subtracted from the total site area to estimate the pervious area, which was assumed to have conventional landscaping cover (grass, small herbaceous decorative plants, bushes, and a few trees). For the COMM scenario, an additional 10 percent was added to the building, parking lot, access road, and walkway area to represent the landscaping, on the belief that a typical retail commercial establishment would be mostly impervious.

Table 5 summarizes the characteristics of the five land use cases. The table also provides the recorded or estimated areas in each land use and cover type.

Table 5. Summary of Cases with Land Use and Land Cover Areas

	MFR ^a	Sm-SFR ^a	Lg-SFR ^a	COMM ^a	REDEV ^a
No. buildings	11	23	1000	1	2
Total area (ft ²)	476,982	132,227	5,749,000	226,529	5,451
Roof area (ft ²)	184,338	34,949	1,519,522	87,120	3,435
No. parking spaces ^b	438	-	-	500	2
Parking area (ft ²) ^b	77,088	-	-	88,000	316
Access road area (ft ²)	22,212	-	-	23,732	-
Walkway area (ft ²)	33,960	10,656	463,289	7,084	350
Driveway area (ft ²)	-	13,800	600,000	-	650
Landscape area (ft ²)	159,384	72,822	3,166,190	20,594	700

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; Lg-SFR—large-scale single-family residential; COMM—retail commercial; REDEV—redevelopment

^b Uncovered

METHODS OF ANALYSIS

AVERAGE EVENT AND ANNUAL STORMWATER RUNOFF VOLUMES

Calculation Methods

Surface runoff volumes produced were estimated for both pre- and post-development conditions for each case study. The pre-development state was considered to be the predominant land cover for each region prior to European settlement.

For impervious areas, average event and annual runoff volumes were computed as the product of event or average annual precipitation, contributing drainage area, and a runoff coefficient (ratio of runoff produced to precipitation received) according to the familiar Rational Method equation. The runoff coefficient was determined from the equation $C = (0.009) I + 0.05$, where I is the impervious percentage. This equation was derived by Schueler (1987) from Nationwide Urban Runoff Program data (USEPA 1983). With $I = 100$ percent for fully impervious surfaces, C is 0.95.

The basis for pervious area runoff coefficients, for both the pre-development state and landscaped areas in developments, was the NRCS's Urban Hydrology for Small Watersheds (NRCS 1986, as revised from the original 1975 edition). This model estimates storm event runoff (R , inch) as a function of precipitation (P , inch) and a variable representing land cover and soil, termed the curve number (CN , dimensionless). CN enters the calculation via a variable S , which is the potential maximum soil moisture retention after runoff begins. The equations for English units of measurement are:

$$R = \frac{(P - 0.2S)^2}{P + 0.8S} \qquad S = \frac{1000}{CN} - 10$$

The runoff equation is valid for $P > 0.2S$, which represents the initial abstraction, the amount of water retained before runoff begins by vegetative interception and infiltration (NRCS 1986). According to this model, larger events are forecast to produce a greater amount of runoff in relation to amount of precipitation, because they more fully saturate the soil. Therefore, use of the model to estimate annual runoff requires selecting some event or group of events to compute an average runoff coefficient representing the year.

Average pre- and post-development pervious area average runoff coefficients were derived by computing runoff from a series of precipitation events ranging from 0.1 inch up to the 95th percentile, 24-hour event for the respective metropolitan areas, dividing by the associated precipitation, and averaging for all event amounts $> 0.2S$. Average annual runoff volumes for pervious areas were estimated based on these runoff coefficients and average annual precipitation quantities recorded at the respective gauging locations.

Curve Number Selection

Pre-development curve numbers were determined from existing studies and NRCS (1986) CN tables based on pre-European settlement land cover. Before development, woods predominated in Georgia and Massachusetts. Pre-development Texas had principally arid and semi-arid range with herbaceous cover. Chaparral was the predominant land cover in the San Diego area, however, this land cover type is not listed in the NRCS tables. For that region the selection came from a study by Easterbrook (undated) on curve numbers and associated soil hydrologic groups in an investigation of mainly chaparral lands before and after wildfires in the San Diego area.

Conversion to landscaping typical of development modifies soil and water infiltration characteristics by removing topsoil and even subsoil, compacting the remaining soil, and changing the vegetative cover. For pervious landscaping after development, CN was based on 1/8-acre urban development for all building types.

To demonstrate a range of results, runoff estimates were made for two soils in each region falling in B and C, B and D, or C and D HSGs. The more infiltrative soil was assumed to be in “good” condition and the less permeable one in “poor” condition, differentiations made in the NRCS tables. Table 6 summarizes the curve numbers used in the analyses. The paragraphs following the table detail how the selections were made for each region.

Table 6. Summary of Curve Numbers for Study Regions

Hydrologic soil group-condition	Southeast		South Central		Northeast – Upper Midwest		Southwest	
	B-good	D-poor	C-good	D-poor	B-good	C-poor	C-good	D-poor
Pre-development	55	83	74	93	55	77	77	90
Post-development	85	92	90	93	85	90	91	93

The Georgia Stormwater Manual Supplement recommends that watershed managers select curve numbers proposed by the NRCS based on hydrologic soil groups A through D and hydrologic condition of the site (Center for Watershed Protection 2009). As aforementioned, the pre-European land cover of the southeastern United States was forested. A study by Dyke (2001) in Forsyth and Hall Counties northeast of Atlanta confirmed that, immediately prior to development, approximately 50 percent of urban lands were forested, with 22 percent in agricultural use.

Because the region includes B soils in the interior of Alabama and Georgia, and poorly draining D soils in Florida and along the coasts, it was decided, for the purpose of demonstrating a range of results, to base NRCS Curve number values on B soils in good condition and D soils in poor condition. The corresponding pre- and post-development curve numbers are 55 and 83 and 85 and 92, respectively.

Prior to human development, approximately 80 percent of Texas, mostly in the central part, was covered in short and tall grassland communities; the western 10 percent of the state was desert grassland; and the eastern 10 percent was forested (University of Texas 2000). McLendon (2002) conducted a study on the observed and predicted curve numbers in 107 watersheds in Texas. For rural watersheds the CNs ranged from 48 to 88. The range in Austin was 49-89 and in Dallas 60-90. The Texas Department of Transportation’s (2001) Hydraulic Design Manual Section 7 lists values for pre-development curve numbers for arid and semi-arid rangelands. Based on these sources, the respective pre- and post-development CN choices were 74 (C—good soil) and 93 (D—poor soil) and 90 (C—good soil) and 93 (D—poor soil).

Before European development, most of the Northeast – Upper Midwest region was covered in mixed hardwood and coniferous forests. A recent USGS report confirms that most urban development in the region from 1973 to 2000 has converted forestland (47 percent of all changes), followed by farmland (11 percent) (Auch undated). For this study’s pre-development curve number, the woods cover type, soil group B in good condition and C soil in poor condition gave corresponding curve numbers of 55 and 77, respectively. Post-development curve numbers for these soil types at 1/8-acre development size were 85 and 90 for the good B and poor C soils, respectively. These post-development curve numbers are similar to a recent study in the Aberjona River watershed, an urban catchment northwest of Boston, where the authors used an overall CN of 89 to represent the more impervious parts of the watershed (Perez-Pedini et al. 2005).

With the lack of NRCS data for chaparral, CN selection for the San Diego area was based on an analysis performed in the area of the 2003 Cedar Fire in San Diego County by Easterbrook (undated). For pre-development C soils in good condition and D soils in poor condition, the choices were 77 and 90, respectively. Post-development curve numbers were selected from Easterbrook's estimation of CN after a high-burn fire; for good C soils CN = 91, and for poor D soils CN = 93.

Effect of Slope on Curve Number

NRCS documents developing the curve number concept and associated methods did not cover the effect of land slope. Independent researchers have given some attention to the question though. Sharpley and Williams (1990) introduced the empirical equation that has been most often used to adjust CN relative to slope:

$$CN_s = 0.333(CN_w - CN)(1 - 2e^{-13.86s}) + CN$$

where CN is the curve number reported in NRCS tables for an average soil moisture condition and assumed slope ≤ 5 percent, CN_s = slope-adjusted CN, CN_w = CN in an initially wet soil condition, and s = slope (ft/ft). Ward and Trimble provided factors to adjust tabulated CN values to obtain CN_w . Carrying through the analysis in this manner demonstrated that results deviated between two assessed slopes (5 and 10 percent) by only around 2-6 percent. This small difference was considered minimal in the context of the approximations and assumptions inherent in the modeling process. While the results presentation gives some additional data on slope effects, full coverage is given only for 5 percent, the topographic basis of the NRCS model and by far the subject of its greatest application.

ESTIMATING INFILTRATION CAPACITY OF THE CASE STUDY SITES

Infiltration Rates

Infiltrating sufficient runoff to maintain pre-development hydrologic characteristics and prevent pollutant transport is the most effective way to protect surface receiving waters. Successfully applying infiltration requires soils and hydrogeological conditions that will pass water sufficiently rapidly to avoid overly-lengthy ponding, while not allowing percolating water to reach groundwater before the soil column captures pollutants.

The study assumed that infiltration would occur in surface facilities and not in below-ground trenches. The use of trenches is certainly possible. However, the intent of this investigation was to determine the ability of pervious areas to manage the site runoff, and their exclusion is consistent with the conservative approach to modeling taken in this analysis. This inquiry was accomplished by evaluating the ability of the predominant soil types identified for each region to provide an infiltration rate of at least 0.5 inch/hour, the rate often regarded in the stormwater management field as the minimum for the use of infiltration practices (e.g., Geosyntec Consultants 2008). The assessment considered soils that either would provide this rate, at a minimum, in their original condition or could be organically amended to augment soil water storage and increase infiltration, while also safeguarding groundwater. Therefore, prevailing groundwater depths were assessed in relation to runoff percolation times generally regarded as safe.

Infiltration rates were based on saturated hydraulic conductivities (obtained from Leij et al. 1996) typical of the basic soil types incorporated in the U.S. Department of Agriculture (USDA, 1987) soil textural triangle. Sand, loamy sand, sandy loam have conductivities well above 0.5 inch/hour. As Table 4 indicates, three of the four regions have a sandy loam as the dominant soil type. For such a soil in the B HSG in these regions, the infiltration rate was taken as 1.74

inch/hour (Leij et al. 1996). Other textures represented that would generally fall in the C group are mostly loam and silt loam. These soil types either have conductivities in excess of 0.5 inch/hour or, in the first author's experience, can be and have been successfully organically amended to produce such a rate and infiltrate accumulated water within 72 hours, and usually less time. The D soils in some study regions, silty clay and clay, were regarded as not amendable to reach 0.5 inch/hour conductivity to host conventional or ARCD-type facilities designed specifically for infiltration. Still, locations with these soils could distribute sheet flow over pervious areas for evapotranspiration and some infiltration at slow rates and could utilize roof downspout surface or subsurface dispersal.

Groundwater Protection Assessment

Avoidance of groundwater contamination was assessed by assuming a hydraulic conductivity generally regarded as the maximum rate for the use of infiltration practices, 2.4 inches/hour (e.g., Geosyntec Consultants 2008), and a minimum spacing to seasonal high groundwater from the bed of an infiltration facility of 4 ft. These conditions would provide a travel time of 20 hours, during which contaminant capture would occur through soil contact. This 20-hour travel time was regarded as a minimum for any soil type. For example, infiltrating on loamy sand with a hydraulic conductivity of 5.7 inches/hour would require minimum spacing from the infiltration surface to groundwater of 10 ft. This consideration did not actually become an issue for analyses in any region in this study, because all predominant soil types have infiltration rates under 2.4 inches/hour and groundwater spacings that exceed 4 ft.

Site Infiltration Capacities

Runoff volumes were estimated for the 85th and 95th percentile, 24-hour events as described previously. Bioretention cell surface area to accommodate these volumes was calculated based on a method in the City of Santa Barbara's Storm Water BMP Guidance Manual (Geosyntec Consultants 2008) (adapted from the Georgia Stormwater Manual (Atlanta Regional Commission, 2001)):

$$A = \frac{(V_{\text{design}})(l)}{(t)(k_{\text{design}})(d + l)}$$

where:

V_{design} = design volume of runoff to be infiltrated (ft³);

k_{design} = design infiltration rate (in/hr), taken as 0.5 times the typical rate for the soil type naturally or amended as a safety factor;

d = ponding depth (ft), assumed as 0.25 ft for a shallow landscape feature on the recommendation of the Georgia manual;

l = depth of planting media (ft), assumed as 4 ft on the recommendation of the Georgia manual;

t = required drawdown time (hr), taken as 48 hours.

The design variable selections are conservative in applying a safety factor to hydraulic conductivity, using minimum depths for economy and limiting site disruption, and applying a drain time lower than the maximum of 72 hours.

In considering the long-term capacity of a facility designed to infiltrate, the potential for groundwater mounding below or aside the unit is a concern. To avoid this problem a basic analysis was made using a groundwater rise equation from Zomorodi (2005):

$$\text{Rise} = 0.86 \frac{(K_v)(W)}{(K_h - K_v)}$$

where:

Rise = mounding occurring in a year of use (ft);

K_v = vertical saturated hydraulic conductivity (ft/year);

W = bioretention cell width (ft); and

K_h = horizontal saturated hydraulic conductivity (ft/year).

This equation was solved for K_v for computation of the allowable annual infiltration rate, assuming a rise limited to 1 ft. It was assumed that the bioretention surface area would be broken up to have no more than one basin for each 5 acres of total site area, another measure safeguarding against groundwater mounding. Also assumed was a square cell (i.e., W was computed as the square root of the surface area calculated according to the equation for A above). Horizontal hydraulic conductivities for loams such as represented among the B and C soils in the study regions tend to run in the range of 10 to 1000 meters/year (0.1 to 9 ft/day). A conservative value of 3 ft/day was used in the analysis.

The yearly rate of infiltration from a bioretention cell can be expressed in terms of volume of runoff per unit infiltrating surface area, acre-ft/acre-year, which is equivalent to K_v expressed as ft/year. The K_v value avoiding groundwater monitoring was therefore used to assess maximum annual infiltration capacity by multiplying by the total available pervious surface area. However, the K_v value was capped at a rate found in a study of infiltration capacity and benefits for Los Angeles' San Fernando Valley by Chralowicz et al. (2001). The Los Angeles study posited providing 0.1-0.5 acre for infiltration basins to serve each 5 acres of contributing drainage area. At 2-3 ft deep, it was estimated that such basins could infiltrate 0.90-1.87 acre-ft/year of runoff in San Fernando Valley conditions. Three types of soils predominate in the study area: sandy loams (35 percent of the area), a clay loam (23 percent), and a silty clay loam (29 percent). The balance of 13 percent includes small amounts at both ends of the textural spectrum, a clay and loamy sands. Infiltration rates are in the approximate range of 0.5-2.0 inches/hour, within the span generally regarded as ideal for successful infiltration without threatening groundwater. Computing the ratios of the rate and basin size data of Chralowicz et al. (2001), K_v maximized at approximately 20 acre-ft of runoff/acre infiltration surface-year under the most limiting conditions of soils and basin dimensions. This value was applied in this study if calculated rates were higher, another conservative feature to obtain the most realistic projections of infiltration potential.

In some cases analyzed, the maximum annual infiltration capacity was estimated at greater than post-development runoff volume production. In these instances complete retention would be possible with excess capacity left, and only a fraction of the available pervious area would have to be devoted to bioretention. That fraction was expressed as the ratio of annual runoff production to infiltration capacity.

STORMWATER RUNOFF VOLUME AND POLLUTANT DISCHARGES

Urban Land Use Pollutant Yields

Annual pollutant mass loadings prior to application of any stormwater management practices were estimated as the product of annual runoff volumes produced by the various land use and cover types and pollutant concentrations typical of those areas. General land use types (e.g., single-family residential, commercial) have typically been the basis for measuring and reporting stormwater pollutant data. However, an investigation of ARCD practices of the type of interest in this study demands data on specific land coverages. The literature offers few data on this basis. Those available and used herein were assembled by a consultant to the City of Seattle for a project in which the author participated. They appear in Attachment A (Herrera Environmental Consultants, Inc. undated). Table 7 summarizes the representative values used in the analysis.

Table 7. Pollutant Concentrations in Runoff from Developed Land Uses (after Herrera Environmental Consultants, Inc. undated)

Land Use	Total Suspended Solids (mg/L)	Total Copper (µg/L)	Total Zinc (µg/L)	Total Phosphorus (µg/L)
Residential roof	25	13	159	110
Commercial roof	18	14	281	140
Access road/driveway	120	22	118	660
Parking	75	36	97	140
Walkway	25	13	59	110
Landscaping	213	13	59	2040

Pollutant concentrations expected to occur typically in the mixed runoff from the several land use and cover types making up a development were estimated by mass balance; i.e., the concentrations from the different areas of the sites were combined in proportion to their contribution to the total runoff.

Estimating Retention

The principal interest of this study was to estimate how much of the post-development runoff volume for the various land use cases could be retained by ARCD measures and prevented from discharging from the site on the surface. The analyses initially evaluated the runoff volume that could potentially be infiltrated by using a portion or all of the available pervious area for bioretention facilities. In some instances judicious use of the pervious area could infiltrate the full volume. In other cases use of the pervious area for as much infiltration as possible plus special management of roof runoff would fully attenuate post-development runoff.

Complete retention would, of course, exceed any ordinary regulatory standard intended to govern discharge quantity and quality. To the extent that full retention could not be expected, the study was interested in assessing the degree to which bioretention and roof runoff management could meet the specific potential standards outlined earlier. Performance was estimated in terms of volume retained versus released, the extent to which pre-development groundwater recharge would be preserved, and the pollutant loading reduction accompanying volume retention in comparison to the quantities that would enter receiving waters with no stormwater management actions. These measures expressed in equation form are:

$$\text{Runoff retention (\%)} = \frac{(\text{Volume with no practices} - \text{Volume with ARCD practices})}{\text{Volume with no practices}} \times 100$$

(expresses amount of the theoretical maximum post-development runoff prevented from discharging by ARCD)

$$\text{Recharge retention (\%)} = \left[1 - \frac{(\text{Predevelopment recharge} - \text{Postdevelopment recharge with ARCD})}{\text{Predevelopment recharge}} \right] \times 100$$

Pre-development recharge = Rainfall volume – Predevelopment runoff volume

Post-development recharge = The smaller of rainfall volume or post-development infiltration volume

$$\text{Loading reduction (\%)} = \frac{(\text{Loading with no practices} - \text{Loading with ARCD practices})}{\text{Loading with no practices}} \times 100$$

It should be noted that runoff retention and recharge retention express different quantities and are not equal numerically.

When infiltration alone (Basic ARCD) could not accomplish full retention, roof runoff management strategies were selected as appropriate for the land use case (Full ARCD). For the retail commercial development (COMM), roof runoff management was assumed to be accomplished by harvesting, temporarily storing, and applying water to use in the building. To this end, the assumption was made that the commercial development would be able to manage and would have capacity to store and make use of the entire roof runoff volume. While this particular assumption is, on its own, speculative, the commercial development would, as discussed in the section on Application of ARCD Practices, earlier, see a reduction in runoff as a result of evapotranspiration, and would have the option to employ ARCD site design principles to reduce impervious surface area, to install a green roof to retain runoff, or to implement any of a number of other ARCD practices designed to reduce runoff volume and pollutant loading. As a result, the overall analysis of the commercial site remains conservative in its assessment of the potential to retain runoff onsite.

In the three multi-family and single-family residential cases it was assumed that the roof water would be dispersed on or within the pervious area according to accepted and standardized practices. For example, the Washington Department of Ecology's (2005) Stormwater Management Manual for Western Washington provides design criteria for two methods: splash blocks followed by vegetated dispersion areas and gravel-filled trenches. These devices can be used wherever space is sufficient regardless of infiltration rates, as they operate by evapotranspiration and slow infiltration. Even clay can infiltrate at an approximate rate of 0.2 inch/hour or higher (Leij et al. 1996; Pitt, Chen, and Clark 2002). Care was taken to assure that pervious area already allocated to infiltration would not also be counted upon for dispersion. While dispersion was assumed for simplification of the study analyses, in reality a site designer would have the option of using rain barrels, cisterns, and/or green roofs instead of or along with ground dispersion to manage roof water. Analyses for the final case, the redevelopment scenario (REDEV), assumed dispersion and/or small-scale harvesting of roof runoff above whatever level of infiltration could be accomplished given the soil condition.

Additional Analyses When Full Retention Cannot Be Expected

Retaining runoff from impervious and pollutant generating pervious surfaces is the best stormwater management policy, because it prevents the introduction of urban runoff pollutants

to receiving waters as well as serves quantity discharge control requirements. Maintaining pre-development peak flow rates, volumes, and elevated flow durations prevents stream channel and habitat damage, flooding, and loss of groundwater recharge. When conditions were expected to render full retention technically infeasible for the study cases, estimates were made of the volume and pollutant loadings that would be discharged assuming the remaining surface runoff is released to a receiving water with and without treatment. Treatment was assumed to be provided by bioretention discharging either directly on the surface or via an underdrain. While not as environmentally beneficial as retention, such treatment is superior to conventional stormwater management practices like ponds and sand filters. It captures pollutants through a number of mechanisms as contaminants are held for a time in the facility and contact vegetation and soil, such as sedimentation, filtration by plants, and adsorption and ion exchange in soil.

The effectiveness of bioretention in removing pollutants from surface runoff was estimated according to measurements by Chapman and Horner (2010). This study was performed on a linear bioretention device located on a slope and made up of a number of cells separated by weirs (termed a “cascade”). While an estimated 74 percent of all entering runoff infiltrated or evapotranspired before discharging, the flows reaching the end in the larger storms would have less residence time in the facility than in a unit on flat ground percolating water through soil before surface discharge via an underdrain. Therefore, pollutant concentrations exiting such a unit could be less yet. On the other hand, some bioretention facilities bypass the relatively rare higher flows, affording no treatment, while the cascade was designed to convey all runoff, even beyond its water quality design storm flow, and provide some treatment. On balance between the advantage and disadvantage of the facility providing the data, the discharge concentrations are considered to be representative of bioretention.

Chapman and Horner (2010) computed volume-weighted average discharge pollutant concentrations by multiplying concentrations times flow volumes for each monitored storm, summing, and dividing by total volume. The resulting values for the contaminants considered in this study are: total suspended solids (TSS)—30 mg/L, total copper—6.3 µg/L, total zinc—47 µg/L, and total phosphorus—133 µg/L. In a few instances these concentrations are higher than those in Table 7, an expression of the observation sometimes made in stormwater management that treatment cannot reduce concentrations in relatively “clean” flows below certain minimum values. In these situations the concentrations in Table 8 were also used in computing discharge loadings; i.e., no concentration reduction was applied in estimating discharge loadings, although flow volume would still be decreased to the extent infiltration could occur.

RESULTS OF THE ANALYSIS

ASSESSMENT OF MAXIMUM ARCD CAPABILITIES

Runoff Retention and Groundwater Recharge

Basic ARCD

One goal of this exercise was to determine if ARCD practices could eliminate post-development runoff production, and the pollutants it transports, and maintain pre-development groundwater recharge. The first assessment, termed the Basic ARCD analysis in this report, was to estimate if each site's pervious area is sufficient for full infiltration if given to this purpose to the extent necessary without compromising other uses. Accordingly, shallow, unobtrusive bioretention cells (i.e., rain gardens) are envisioned, dispersed through sites at no more than one for each 5 acres. It bears reemphasis that no credit was taken for water loss through evapotranspiration in this assessment, although a substantial, but not necessarily easily quantifiable, amount would undoubtedly occur. Estimates of runoff retention are therefore conservative.

Table 8 presents comparisons, for the Southeast climate region, between estimated annual runoff volumes generated before development and then post-development with and without Basic ARCD stormwater management. The table also gives annual groundwater recharge estimates for these same conditions.

Table 8. Runoff and Groundwater Recharge Volumes with Basic ARCD: Southeast Climate Region^a

Period	Volume (acre-ft) or Percentage Measure	MFR	Sm-SFR	Lg-SFR	COMM	REDEV
B soil						
Pre-dev.	Runoff	0.046	0.013	0.56	0.022	0.001
	Recharge	44.7	12.4	539	21.2	0.51
Post-dev.	Runoff without stormwater practices	29.5	6.85	298	18.7	0.45
	Runoff retained with Basic ARCD	29.5	6.85	298	8.30	0.21
	Runoff released with Basic ARCD	0	0	0	10.4	0.25
	Runoff retention (%)	100%	100%	100%	44%	45%
	Recharge without stormwater practices	15.3	5.55	241	2.53	0.06
	Recharge with Basic ARCD	44.7	12.4	539	8.30	0.21
	Recharge retention (%)	100%	100	100%	39%	40%
Pervious area needed (%) ^b	36%	22%	22%	100%	100%	
D soil						
Pre-dev.	Runoff	13.5	3.76	163	6.43	0.16
	Recharge	31.2	8.64	376	14.8	0.36
Post-dev.	Runoff without stormwater practices	Full ARCD needed to maximize retention on D soil				
	Runoff retained with Basic ARCD					
	Runoff released with Basic ARCD					
	Runoff retention (%)					
	Recharge without stormwater practices	11.6	4.17	181	2.12	0.05
	Recharge with Basic ARCD	Full ARCD needed to maximize retention on D soil				
	Recharge retention (%)	37%	48%	48%	14%	14%
Pervious area needed (%) ^b	Full ARCD needed to maximize retention on D soil					

^a Pre-dev.—pre-development; post-dev.—post-development; ARCD—aquatic resources conservation design; MFR—multi-family residential; Sm-SFR—small-scale single-family residential; Lg-SFR—large-scale single-family residential; COMM—retail commercial; REDEV—infill redevelopment; Basic ARCD—infiltrating bioretention; runoff—quantity of water discharged from the site on the surface; recharge—quantity of water infiltrating the soil

^b Proportion of the total pervious area on the site required for bioretention to achieve given results

In all cases the majority of the infiltration that would recharge groundwater in the undeveloped state would be lost to surface runoff after development. These losses would approach 90 percent in the most impervious developments. The greatly increased surface flow would raise peak flow rates and volumes in receiving water courses, increase flooding risk, and transport pollutants.

Basic ARCD could retain all post-development runoff and pre-existing groundwater recharge in the three residential cases on the B soils, using from less than one-fourth to just over one-third of the available pervious area for bioretention cells. Taking all available pervious area for the more highly impervious COMM and REDEV cases on B soil, bioretention would retain about 45 percent of the runoff generated and save about 40 percent of the pre-development recharge. To illustrate the relatively small role that slope increase from 5 to 10 percent plays in runoff retention, full retention would still be expected in the three residential cases and for the remaining two cases (COMM and REDEV) would decrease from 44-45 percent only slightly to 40-41 percent (not shown in table).

On the D soil, infiltrating bioretention may not be technically feasible and was not relied upon for retention estimates. Without the use of additional measures in the Full ARCD category, only incidental post-development runoff would be retained; and most pre-development recharge would be lost.

Tables 9-11 are companions to Table 8 for the South Central, Northeast – Upper Midwest, and Southwest climate regions, respectively. Results for the Northeast - Upper Midwest B soil are very close to those for the Southeast B soil, as would be expected given the similar precipitation quantities and soil characteristics. In the three regions having C soils, Basic ARCD can retain all runoff for the MFR, Sm-SFR, and Lg-SFR residential cases. With these soils, except in the Southwest, achieving full retention requires more of the available pervious area than with B soils, up to 69 percent, but is still fully attainable.

The effect of lower rainfall is evident in the South Central and, especially, the Southwest regions. In the latter location, not only the residential cases but also the COMM and REDEV scenarios can achieve full runoff retention with Basic ARCD on the C soil. The residential cases need much smaller percentages of the available pervious area for bioretention than for the same cases on C and even B soils elsewhere. Applying Basic ARCD to the South Central, C soil, REDEV case results in higher runoff retention than for the B soil cases in higher rainfall regions.

The study cases demonstrated two interesting points about groundwater recharge. First, with effective infiltrating bioretention it is possible for post-development annual recharge to exceed the pre-development quantity. This phenomenon is most evident in comparing the two amounts for cases with 100 percent runoff retention on C soils, which in the natural state produce much less recharge in relation to runoff than B soils. The B soils have a recharge-to-runoff ratio of about 500, whereas that ratio is only 4-6 for the C soils studied. One reason for higher post-compared to pre-development recharge is that bioretention is set up to hold water, increasing the time for infiltration to occur, instead of letting it run off. Another is that soils, especially in the C HSG, are often improved by organic amendments to yield both more water storage capacity and higher infiltration rates than the pre-existing soils.

A related point is that the percentage of pre-development recharge retained after development can be higher with C than B soils. This situation can best be seen in cases without full runoff retention, COMM and sometimes REDEV. In terms of recharge, installing bioretention conveys a greater advantage to the C than the B soils, which already have more pore space for water storage and higher infiltration and recharge rates.

Table 9. Runoff and Groundwater Recharge Volumes with Basic ARCD: South Central Climate Region^a

Period	Volume (acre-ft) or Percentage Measure	MFR	Sm-SFR	Lg-SFR	COMM	REDEV
C soil						
Pre-dev.	Runoff	4.10	1.14	49.4	1.95	0.05
	Recharge	25.7	7.13	310	12.2	0.29
Post-dev.	Runoff without stormwater practices	21.2	5.15	224	12.7	0.31
	Runoff retained with Basic ARCD	21.2	5.15	224	4.33	0.21
	Runoff released with Basic ARCD	0	0	0	8.32	0.10
	Runoff retention (%)	100	100	100	34	67
	Recharge without stormwater practices	8.62	3.11	135	1.51	0.03
	Recharge with Basic ARCD	29.8	8.3	359	4.33	0.21
	Recharge retention (%)	100	100	100	38	70
	Pervious area needed (%) ^b	51	23	30	100	100
D soil						
Pre-dev.	Runoff	18.5	5.14	223	8.80	0.21
	Recharge	11.3	3.13	136	5.36	0.13
Post-dev.	Runoff without stormwater practices	Full ARCD needed to maximize retention on D soil				
	Runoff retained with Basic ARCD					
	Runoff released with Basic ARCD					
	Runoff retention (%)					
	Recharge without stormwater practices	7.23	7.59	112	1.35	0.03
	Recharge with Basic ARCD	Full ARCD needed to maximize retention on D soil				
	Recharge retention (%)	64	83	83	25	24
	Pervious area needed (%) ^b	Full ARCD needed to maximize retention on D soil				

Table 10. Runoff and Groundwater Recharge Volumes with Basic ARCD: Northeast – Upper Midwest Climate Region^a

Period	Volume (acre-ft) or Percentage Measure	MFR	Sm-SFR	Lg-SFR	COMM	REDEV
B soil						
Pre-dev.	Runoff	0.04	0.01	0.54	0.02	0.001
	Recharge	42.9	11.9	517	20.4	0.49
Post-dev.	Runoff without stormwater practices	28.3	6.68	286	18.0	0.44
	Runoff retained with Basic ARCD	28.3	6.68	286	8.53	0.21
	Runoff released with Basic ARCD	0	0	0	9.43	0.23
	Runoff retention (%)	100	100	100	48	47
	Recharge without stormwater practices	14.6	5.32	231	2.42	0.06
	Recharge with Basic ARCD	42.9	11.9	517	8.53	0.21
	Recharge retention (%)	100	100	100	42	42
	Pervious area needed (%) ^b	34	21	21	100	100
C soil						
Pre-dev.	Runoff	7.87	2.18	94.8	3.74	0.09
	Recharge	35.1	9.72	422	16.6	0.40
Post-dev.	Runoff without stormwater practices	30.5	7.42	323	18.2	0.44
	Runoff retained with Basic ARCD	30.5	7.42	323	4.57	0.21
	Runoff released with Basic ARCD	0	0	0	13.6	0.24
	Runoff retention (%)	100	100	100	25	47
	Recharge without stormwater practices	12.4	4.48	195	2.17	0.05
	Recharge with Basic ARCD	42.9	11.9	517	4.57	0.21
	Recharge retention (%)	100	100	100	27	51
	Pervious area needed (%) ^b	69	31	40	100	100

Table 11. Runoff and Groundwater Recharge Volumes with Basic ARCD: Southwest Climate Region^a

Period	Volume (acre-ft) or Percentage Measure	MFR	Sm-SFR	Lg-SFR	COMM	REDEV
C soil						
Pre-dev.	Runoff	1.62	0.45	19.5	0.77	0.02
	Recharge	7.22	2.00	87.0	3.43	0.08
Post-dev.	Runoff without stormwater practices	6.41	1.57	68.5	3.77	0.09
	Runoff retained with Basic ARCD	6.41	1.57	68.5	3.77	0.09
	Runoff released with Basic ARCD	0	0	0	0	0
	Runoff retention (%)	100	100	100	100	100
	Recharge without stormwater practices	2.43	0.88	38.1	0.43	0.01
	Recharge with Basic ARCD	8.84	2.45	107	4.20	0.10
	Recharge retention (%)	100	100	100	100	100
	Pervious area needed (%) ^b	12	5	7	69	44
D soil						
Pre-dev.	Runoff	4.47	1.24	53.8	2.12	0.05
	Recharge	4.37	1.21	52.7	2.08	0.05
Post-dev.	Runoff without stormwater practices	Full ARCD needed to maximize retention on D soil				
	Runoff retained with Basic ARCD					
	Runoff released with Basic ARCD					
	Runoff retention (%)					
	Recharge without stormwater practices	2.14	0.77	33.3	0.40	0.01
	Recharge with Basic ARCD	Full ARCD needed to maximize retention on D soil				
	Recharge retention (%)	49	63	63	19	18
	Pervious area needed (%) ^b	Full ARCD needed to maximize retention on D soil				

Full ARCD

Infiltration is one of a wide variety of ARCD-based source reduction techniques. Where site conditions such as soil quality or available area limit a site's infiltration capacity, other ARCD measures can enhance a site's runoff retention capability. Such practices can also be used where infiltration capacity is adequate, but the developer desires greater flexibility for land use on-site. Among those techniques, this study considered special management of roof water in those cases where bioretention could not infiltrate all post-development runoff.

Specifically, water harvesting for supply of irrigation and/or non-potable indoor uses was investigated for the retail commercial development. In residential cases with insufficient capacity for infiltrative bioretention but remaining space not already devoted to infiltration, efficiently directing roof runoff into the soil through downspout dispersion systems was the method of choice. Such cases invariably occurred with HSG D soils. The Full-ARCD scenario applied to the redevelopment case was roof water dispersion, harvesting, or a combination of the two practices. Generally speaking, infiltration consumed all available pervious area in the REDEV cases on B and C soils, making roof runoff harvesting the mechanism to retain more water. With no bioretention facility on D soil, the pervious area would be available for dispersion. Of course, harvesting could be applied instead of or along with dispersion. Again, it was assumed that the commercial and, as needed, redevelopment sites had capacity to harvest and make use of the full volume of roof runoff generated, however, the analysis remains conservative in terms of the potential for onsite retention as it does not consider the use of ARCD site design principles to reduce impervious surfaces, green roofs, and evaporation/evapotranspiration from surfaces other than rooftops.

Table 12 gives Southeast climate region results with the addition of Full ARCD techniques: roof runoff management, consisting of harvesting for reuse in the COMM case, dispersion on or within pervious land for the three residential cases, and a combination of these measures for REDEV. On the B soil runoff retention would approximately double for the retail commercial

land use and reach 100 percent for the redevelopment. Groundwater recharge would not be expected to increase over the Basic ARCD case, though; because harvesting still keeps water out of the soil system.

For development on the D soil, use of roof runoff management techniques was estimated to increase runoff retention from zero to about one-third to two-thirds of the post-development runoff generated, depending on the land use case. Groundwater recharge would not materially benefit, however; because harvest does not contribute to it. Also, no recharge credit was taken for dispersion, since infiltration is restricted and loss by ET would tend to occur before infiltration. Some small amount of recharge would still be likely though. To illustrate further the small role of topography, in this D soil, Full ARCD scenario runoff retention is forecast to decrease by only 1-2 percent at a 10 percent slope compared to a 5 percent slope (not shown in table).

Table 12. Runoff and Groundwater Recharge Volumes with Full ARCD: Southeast Climate Region^a

Period	Volume (acre-ft) or Percentage Measure	MFR	Sm-SFR	Lg-SFR	COMM	REDEV
B soil						
Pre-dev.	Runoff	0.046	0.013	0.56	0.022	0.001
	Recharge	44.7	12.4	539	21.2	0.51
Post-dev.	Runoff without stormwater practices	Complete retention possible with Basic ARCD			18.7	0.45
	Runoff retained with Full ARCD				16.1	0.45
	Runoff released with Full ARCD				2.66	0
	Runoff retention (%)				86%	100%
	Recharge without stormwater practices				2.53	0.06
	Recharge with Full ARCD				8.30	0.21
	Recharge retention (%)				39%	40%
Pervious area needed (%) ^b	100%	100%				
D soil						
Pre-dev.	Runoff	13.5	3.76	163	6.43	0.16
	Recharge	31.2	8.64	376	14.8	0.36
Post-dev.	Runoff without stormwater practices	33.1	8.23	358	19.1	0.46
	Runoff retained with Full ARCD	16.4	3.11	135	7.76	0.31
	Runoff released with Full ARCD	16.7	5.12	222	11.4	0.16
	Runoff retention (%)	50%	38%	38%	41%	66%
	Recharge without stormwater practices	11.6	4.17	181	2.12	0.05
	Recharge with Full ARCD	11.6	4.17	181	2.12	0.05
	Recharge retention (%)	37.2%	48.3%	48.3%	14.3%	13.6%
Pervious area needed (%) ^b	100%	100%	100%	100%	100%	

^a Pre-dev.—pre-development; post-dev.—post-development; ARCD—aquatic resources conservation design; MFR—multi-family residential; Sm-SFR—small-scale single-family residential; Lg-SFR—large-scale single-family residential; COMM—retail commercial; REDEV—infill redevelopment; Full ARCD—infiltrating bioretention, roof runoff harvesting, and/or roof runoff dispersion; runoff—quantity of water discharged from the site on the surface; recharge—quantity of water infiltrating the soil

^b Proportion of the total pervious area on the site required for bioretention to achieve given results

Tables 13-15 give data analogous to Table 12 for the South Central, Northeast – Upper Midwest, and Southwest climate regions, respectively. Results are similar to those reported for the Southeast region. Full ARCD can approximately double runoff retention from the Basic ARCD level for the COMM case and extend runoff retention to 100 percent for the redevelopment on both B and C soils. Once again, application of Full ARCD to the D soil cases increases runoff retention from zero to one-third to two-thirds of the volume produced, depending on land use case.

Table 13. Runoff and Groundwater Recharge Volumes with Full ARCD: South Central Climate Region^a

Period	Volume (acre-ft) or Percentage Measure	MFR	Sm-SFR	Lg-SFR	COMM	REDEV
C soil						
Pre-dev.	Runoff	4.10	1.14	49.4	1.95	0.05
	Recharge	25.7	7.13	310	12.2	0.29
Post-dev.	Runoff without stormwater practices	Complete retention possible with Basic ARCD			12.7	0.31
	Runoff retained with Full ARCD				9.51	0.31
	Runoff released with Full ARCD				3.15	0
	Runoff retention (%)				75	100
	Recharge without stormwater practices				1.51	0.03
	Recharge with Full ARCD				4.33	0.21
	Recharge retention (%)				35	72
	Pervious area needed (%) ^b				100	100
D soil						
Pre-dev.	Runoff	18.5	5.14	223	8.80	0.21
	Recharge	11.3	3.13	136	5.36	0.13
Post-dev.	Runoff without stormwater practices	22.6	5.68	247	12.8	0.31
	Runoff retained with Full ARCD	11.0	2.08	90.3	5.17	0.20
	Runoff released with Full ARCD	11.6	3.60	157	7.63	0.11
	Runoff retention (%)	49	37	37	40	66
	Recharge without stormwater practices	7.23	2.59	112	1.35	0.03
	Recharge with Full ARCD	7.23	2.59	112	1.35	0.03
	Recharge retention (%)	64	83	83	25	24
	Pervious area needed (%) ^b	100	100	100	100	100

Table 14. Runoff and Groundwater Recharge Volumes with Full ARCD: Northeast – Upper Midwest Climate Region^a

Period	Volume (acre-ft) or Percentage Measure	MFR	Sm-SFR	Lg-SFR	COMM	REDEV
B soil						
Pre-dev.	Runoff	0.04	0.01	0.54	0.02	0.001
	Recharge	42.9	11.9	51.7	20.4	0.49
Post-dev.	Runoff without stormwater practices	Complete retention possible with Basic ARCD			18.0	0.44
	Runoff retained with Full ARCD				16.0	0.44
	Runoff released with Full ARCD				2.00	0
	Runoff retention (%)				89	100
	Recharge without stormwater practices				2.42	0.06
	Recharge with Full ARCD				8.53	0.21
	Recharge retention (%)				42	43
	Pervious area needed (%) ^b				100	100
C soil						
Pre-dev.	Runoff	7.87	2.18	94.8	3.74	0.09
	Recharge	35.1	9.72	422	16.6	0.40
Post-dev.	Runoff without stormwater practices	Complete retention possible with Basic ARCD			18.2	0.44
	Runoff retained with Full ARCD				12.0	0.44
	Runoff released with Full ARCD				6.19	0
	Runoff retention (%)				66	100
	Recharge without stormwater practices				2.17	0.05
	Recharge with Full ARCD				4.57	0.21
	Recharge retention (%)				28	43
	Pervious area needed (%) ^b				100	100

Table 15. Runoff and Groundwater Recharge Volumes with Full ARCD: Southwest Climate Region^a

Period	Volume (acre-ft) or Percentage Measure	MFR	Sm-SFR	Lg-SFR	COMM	REDEV
C soil						
Pre-dev.	Runoff	1.62	0.45	19.5	0.77	0.02
	Recharge	7.22	2.00	87.0	3.43	0.08
Post-dev.	Runoff without stormwater practices	Complete retention possible with Basic ARCD				
	Runoff retained with Full ARCD					
	Runoff released with Full ARCD					
	Runoff retention (%)					
	Recharge without stormwater practices					
	Recharge with Full ARCD					
	Recharge retention (%)					
Pervious area needed (%) ^b						
D soil						
Pre-dev.	Runoff	4.47	1.24	53.8	2.12	0.05
	Recharge	4.37	1.21	52.7	2.08	0.05
Post-dev.	Runoff without stormwater practices	6.70	1.68	73.2	3.80	0.09
	Runoff retained with Full ARCD	3.25	0.62	26.8	1.53	0.06
	Runoff released with Full ARCD	3.45	1.07	46.5	2.26	0.03
	Runoff retention (%)	49	37	37	40	66
	Recharge without stormwater practices	2.14	0.77	33.3	0.40	0.01
	Recharge with Full ARCD	2.14	0.77	33.3	0.40	0.01
	Recharge retention (%)	49	63	63	19	18
Pervious area needed (%) ^b	100	100	100	100	100	

Pollutant Loading Reductions

The examination of maximum ARCD capabilities considered the reductions of annual mass loadings of four water pollutants that would accompany runoff retention. Since retention means no surface discharge, these loading reductions are, at a minimum, equal to the percentages of runoff retention. In those cases with less than full runoff retention, there is good reason to expect pollutant loading reductions higher than the percentage of runoff retained. The early runoff ("first flush"), occurring when the soils are least saturated, is more likely to be retained than later runoff. It is frequently observed that the first flush has higher pollutant concentrations than later runoff, particularly in the wash off after relatively extended dry periods.

For the B and D soil and the residential cases on C soils, the reductions were very consistent among regions:

- B and C soils, Basic ARCD, residential cases—100%;
- B soil, Basic ARCD, COMM and REDEV cases—44-45%;
- B soil, Full ARCD, COMM and REDEV cases—86-100%;
- D soil, Full ARCD, SFR and COMM cases—38-41%;
- D soil, Full ARCD, MFR case—50%; and
- D soil, Full ARCD, REDEV case—66%.

For the most highly impervious cases, COMM and REDEV, on C soils reduction was variable and dependent on precipitation. With Basic ARCD the range was from 25 to 100 percent, going from relatively high to low precipitation. Full ARCD is expected to raise the lowest reductions to 100 percent for REDEV and at least 66 percent for COMM.

Therefore, taking the greatest advantage of what ARCD offers could prevent the addition to receiving waters of all or almost all pollutant mass that would otherwise discharge from a range

of urban developments on B and C soils. With D soils, Full ARCD can accomplish loading reductions approaching or somewhat exceeding 50 percent.

ABILITY TO MEET POTENTIAL STANDARDS

General Summary

This section evaluates the ability of the Basic and Full ARCD strategies to meet each of the five potential stormwater management standards enumerated in the beginning of the report. It also examines the extent of pollutant loading reduction if the standards are just met; i.e., if runoff is retained at the minimum needed to meet the standard. It has already been demonstrated that retention of all post-development runoff and full pollutant attenuation is possible in some circumstances. Table 16 summarizes the results for all regions and cases and both ARCD strategies.

Ability to Meet Standards

The projected ability to meet the standards overall varies mostly in relation to soil type (B or C versus D) and the relative imperviousness of development, and much less across climate regions. The one exception to this generality is that implementing Basic ARCD practices on the Southwest region C soil would meet all five standards. This uniformity does not occur elsewhere on either B or C soils, and is apparently primarily a function of the relatively low precipitation in the region.

Setting aside the Southwest region, success in complying with standards is mostly comparable among the various B and C soils, with a small number of instances where a development type meets a standard on B but not on C soil. Basic ARCD methods invariably can meet all standards on B and C soils for the residential development cases (MFR and Sm- and Lg-SFR). Full ARCD practices are forecast to meet all standards for the redevelopment case on B soils but only standards 1 and 5 consistently on C soils. The combination of infiltration and roof runoff management applied to the retail commercial development allows meeting these same two standards on B soils but only the latter on both of the C soils occurring outside the Southwest region. The only standards that cannot be met on B and C soils by the ARCD methods considered are standards 2-4 for the COMM case. Therefore, of the 125 standards assessments, ARCD practices are projected to meet 113 (90.4 percent) with B and C soils.

The ability to meet these standards is much reduced on D soils. Standard 1 can be met occasionally with Full ARCD used in the redevelopment. All cases with Full ARCD comply with standard 4 on this soil where pre-development runoff is estimated to be relatively high, reflecting a low overall requirement for retention volume. Standard 5 can be met with Full ARCD with the exception of one COMM case. Standards 2 and 3 were never estimated to be met in any D soil case. All in all, with this soil 26 of the 75 scenarios (34.7 percent) are expected to meet a standard.

Table 16. Ability to Meet Potential Regulatory Standards with Basic/Full ARCD Practices

Region-Case ^a	Standards Met— Basic ARCD ^b	Standards Met— Full ARCD ^b	Runoff Retention and Pollutant Loading Reduction (%) ^{b, c}				
			Std. 1	Std. 2	Std. 3	Std. 4	Std. 5
SE(B)-MFR Sm-SFR Lg-SFR COMM REDEV	1, 2, 3, 4, 5		63	87	90	>99	63
	1, 2, 3, 4, 5		63	87	90	>99	63
	1, 2, 3, 4, 5		63	87	90	>99	63
		1, 5	63	86	86	86	63
		1, 2, 3, 4, 5	63	87	90	>99	63
SE(D)-MFR Sm-SFR Lg-SFR COMM REDEV		5	50	50	50	50	37
		5	38	38	38	38	34
		5	38	38	38	38	34
			41	41	41	41	41
		1, 5	63	66	66	66	42
SC(C)-MFR Sm-SFR Lg-SFR COMM REDEV	1, 2, 3, 4, 5		58	82	90	81	47
	1, 2, 3, 4, 5		58	82	90	78	45
	1, 2, 3, 4, 5		58	82	90	78	45
		1, 5	58	75	75	75	49
		1, 2, 3, 4, 5	58	82	90	84	49
SC(D)-MFR Sm-SFR Lg-SFR COMM REDEV		4, 5	49	49	49	18	10
		4, 5	37	37	37	10	6
		4, 5	37	37	37	10	6
		4, 5	40	40	40	31	18
		1, 4, 5	58	66	66	32	18
NM(B)-MFR Sm-SFR Lg-SFR COMM REDEV	1, 2, 3, 4, 5		81	89	90	>99	81
	1, 2, 3, 4, 5		81	89	90	>99	81
	1, 2, 3, 4, 5		81	89	90	>99	81
		1, 2, 5	81	89	89	89	81
		1, 2, 3, 4, 5	81	89	90	>99	81
NM(C)-MFR Sm-SFR Lg-SFR COMM REDEV	1, 2, 3, 4, 5		81	89	90	74	60
	1, 2, 3, 4, 5		81	89	90	71	57
	1, 2, 3, 4, 5		81	89	90	71	57
		5	66	66	66	66	64
		1, 2, 3, 4, 5	81	89	90	80	64
SW(C)-MFR Sm-SFR Lg-SFR COMM REDEV	1, 2, 3, 4, 5		62	83	90	75	46
	1, 2, 3, 4, 5		62	83	90	72	44
	1, 2, 3, 4, 5		62	83	90	72	44
	1, 2, 3, 4, 5		62	83	90	80	49
	1, 2, 3, 4, 5		62	83	90	80	49
SW(D)-MFR Sm-SFR Lg-SFR COMM REDEV		4, 5	49	49	49	33	21
		4, 5	37	37	37	27	16
		4, 5	37	37	37	27	16
		5	40	40	40	40	27
		1, 4, 5	62	66	66	44	28

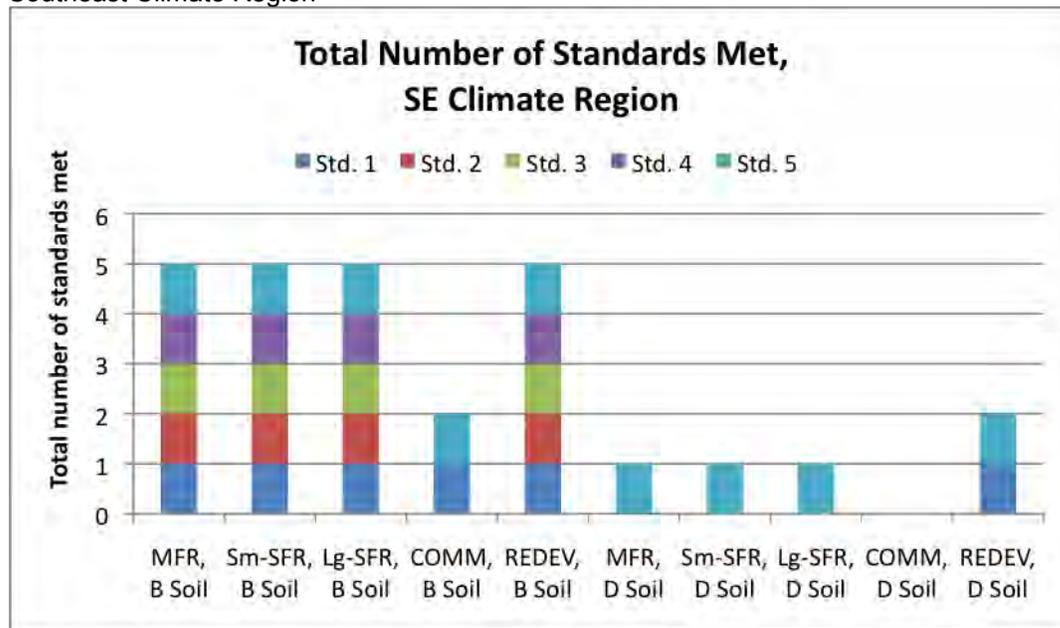
^a Region (hydrologic soil group)—land use; regions: SE—Southeast, SC—South-central, NM—Northeast-Upper Midwest, SW—Southwest; land uses: MFR—multi-family residential, Sm-SFR—small single-family residential, Lg-SFR—large single-family residential, COMM—retail commercial, REDEV—redevelopment

^b Standard (Std.) 1—Retain the runoff produced by the 85th percentile, 24-hour precipitation event
 Standard 2—Retain the runoff produced by the 95th percentile, 24-hour precipitation event
 Standard 3—Retain 90 percent of the average annual post-development runoff volume
 Standard 4—Retain the difference between the post- and pre-development average annual runoff volumes

Standard 5—Retain the difference between the post- and pre-development runoff volumes for all events up to and including the 85th percentile, 24-hour precipitation event

^c Reduction estimated to result from meeting the standard, to the extent it can be met (fully met if so indicated in preceding columns), without treatment of remaining discharge. Where a standard can be met using Basic or Full ARCD application it is indicated in black, where a standard cannot be met using Basic or Full ARCD it is highlighted red.

Figure 4a. Ability to Meet Potential Regulatory Standards with Basic/Full ARCD Practices for Southeast Climate Region



MFR—multi-family residential, Sm-SFR—small single-family residential, Lg-SFR—large single-family residential, COMM—retail commercial, REDEV—redevelopment. Standard (Std.) 1—Retain the runoff produced by the 85th percentile, 24-hour precipitation event; Standard 2—the 95th percentile, 24-hour precipitation event; Standard 3—90 percent of the average annual post-development runoff volume; Standard 4—the difference between the post- and pre-development average annual runoff volumes; and, Standard 5—the difference between the post- and pre-development runoff volumes for all events up to and including the 85th percentile, 24-hour precipitation event

Figure 4b. Ability to Meet Potential Regulatory Standards with Basic/Full ARCD Practices for South Central Climate Region

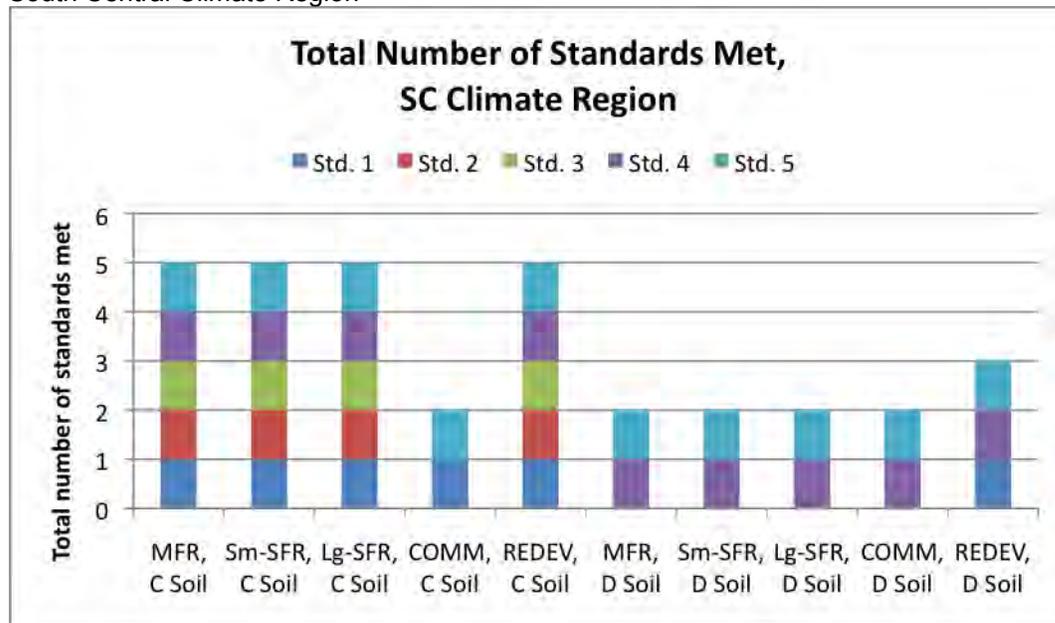


Figure 4c. Ability to Meet Potential Regulatory Standards with Basic/Full ARCD Practices for Northeast-Midwest Climate Region

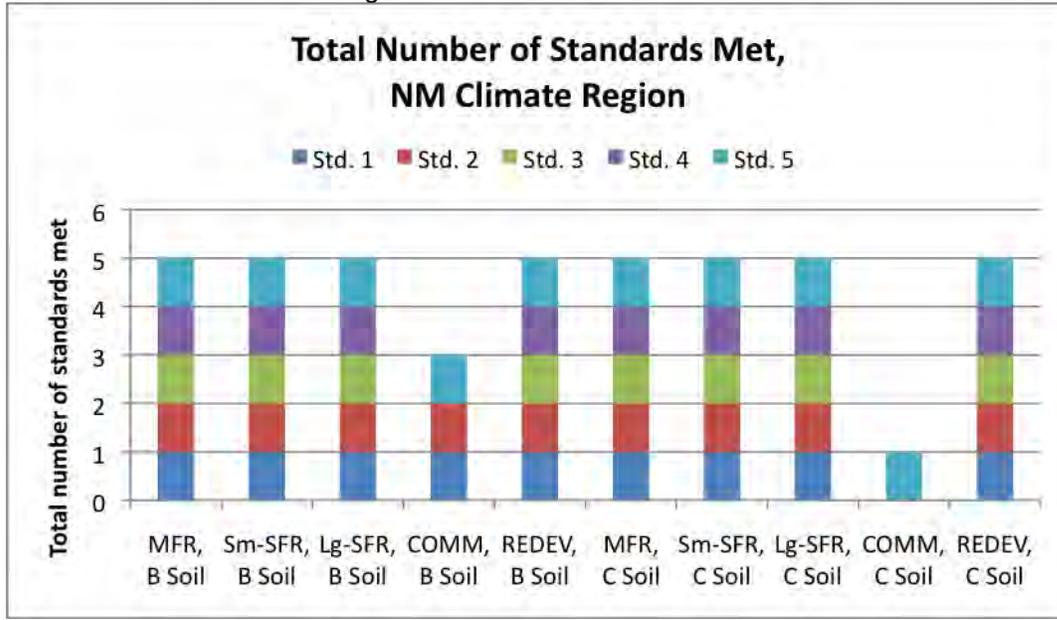


Figure 4d. Ability to Meet Potential Regulatory Standards with Basic/Full ARCD Practices for Southwest Climate Region

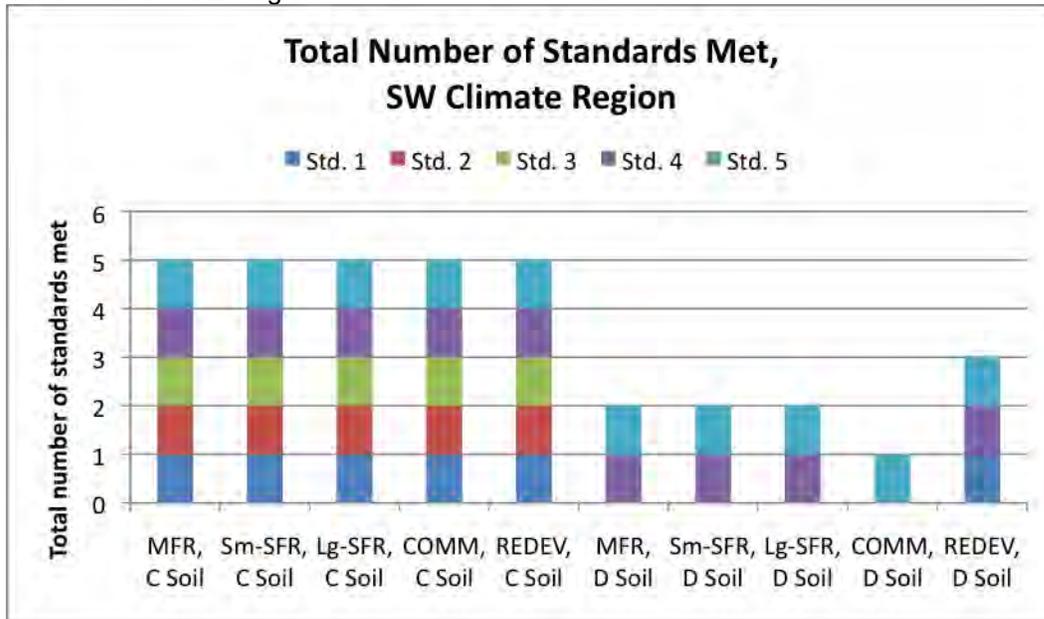
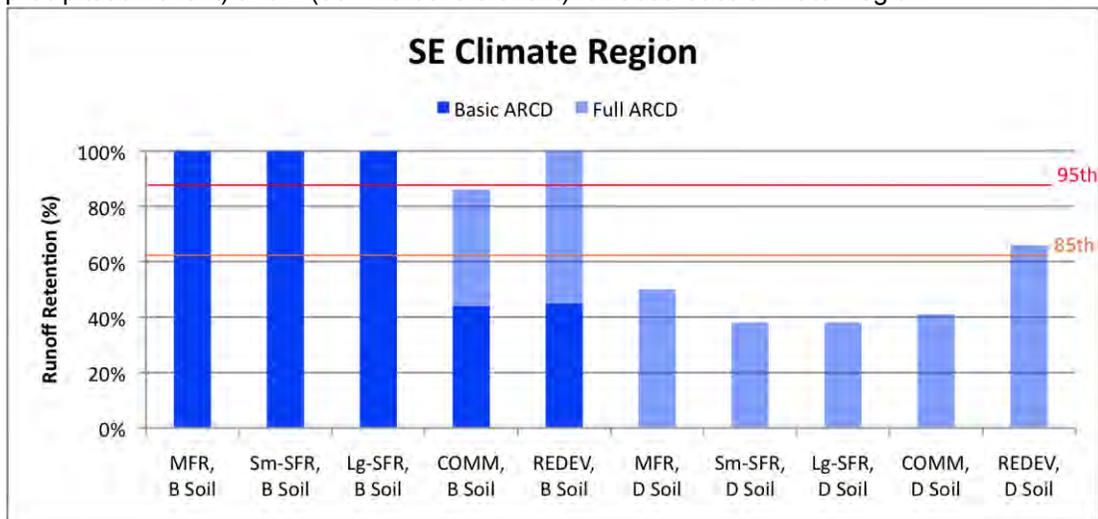


Figure 5a. Percentage of Runoff Retained Relative to Standards 1 (85th Percentile, 24-hour precipitation event) and 2 (95th Percentile event) for Southeast Climate Region



MFR—multi-family residential, Sm-SFR—small single-family residential, Lg-SFR—large single-family residential, COMM—retail commercial, REDEV—redevelopment. Standard (Std.) 1—Retain the runoff produced by the 85th percentile, 24-hour precipitation event; Standard 2—the 95th percentile, 24-hour precipitation event; Standard 3—90 percent of the average annual post-development runoff volume; Standard 4—the difference between the post- and pre-development average annual runoff volumes; and, Standard 5—the difference between the post- and pre-development runoff volumes for all events up to and including the 85th percentile, 24-hour precipitation event

Figures 5a-d show the percentage of runoff that can be retained for each development type, in each region, using either Basic or Full ARCD practices, in comparison with Standard 1 (retention of the 85th percentile, 24-hour precipitation event) and Standard 2 (retention of the 95th percentile, 24 hour event). Even where Standards 1 and 2 cannot be met in full, ARCD practices can still result in substantial compliance, and retention of significant runoff volume.

Figure 5b. Percentage of Runoff Retained Relative to Standards 1 (85th Percentile, 24-hour precipitation event) and 2 (95th Percentile event) for South Central Climate Region

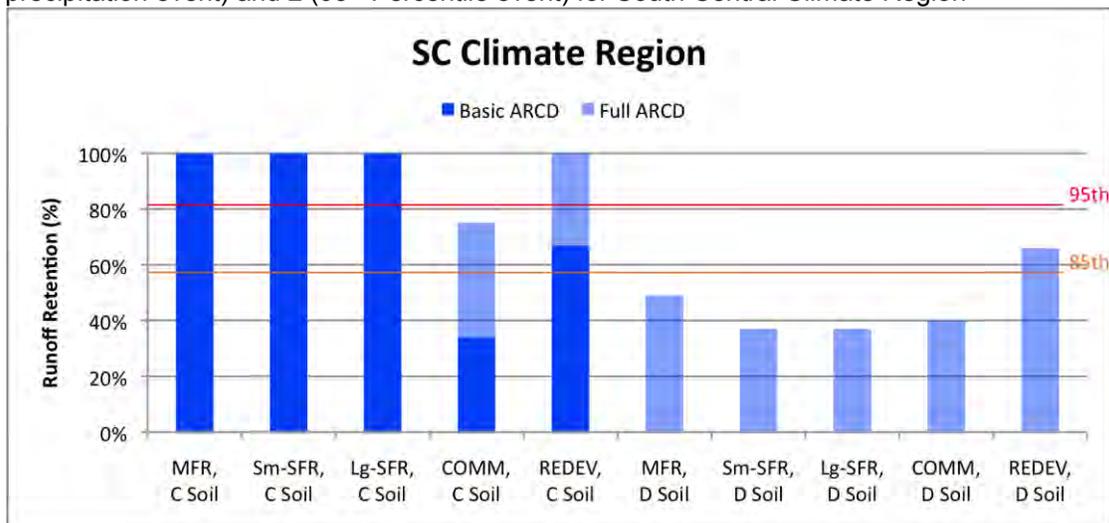


Figure 5c. Percentage of Runoff Retained Relative to Standards 1 (85th Percentile, 24-hour precipitation event) and 2 (95th Percentile event) for Northeast-Midwest Region

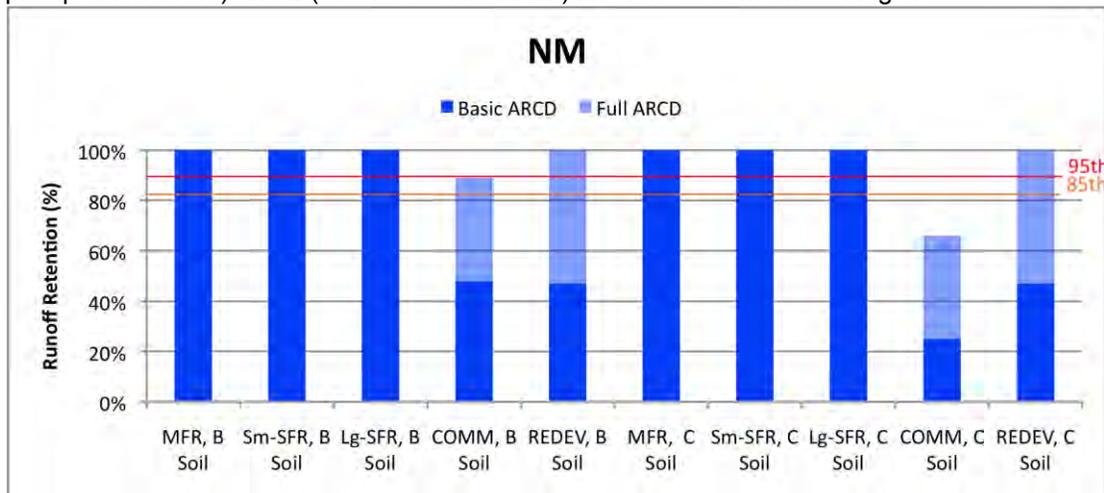
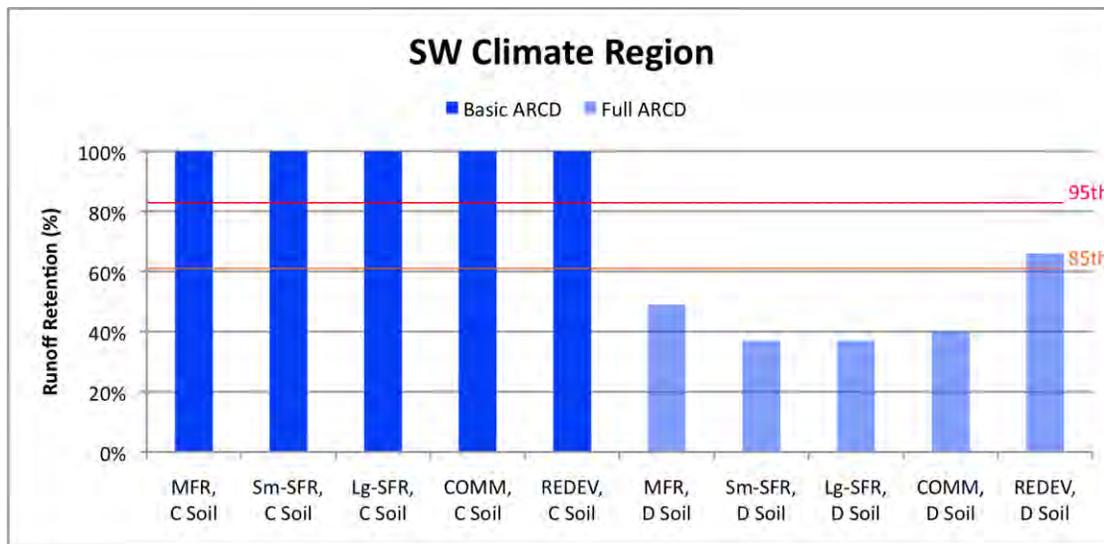


Figure 5d. Percentage of Runoff Retained Relative to Standards 1 (85th Percentile, 24-hour precipitation event) and 2 (95th Percentile event) for Southwest Region



Effectiveness of Standards in Environmental Protection

Standard 3 (retain 90 percent of the average annual post-development runoff volume) would be the most protective standard. Meeting or coming as close as possible to meeting, but not exceeding, this standard is estimated to lead to 66-90 percent runoff retention and pollutant loading reduction on B and C soils and 37-66 percent on D soil. Standard 2 (retain the runoff produced by the 95th percentile, 24-hour precipitation event) would yield only slightly less protection with B and C soils and, with D soil, retention and loading reduction equivalent to standard 3.

Standards 4 and 5, based on the differential between pre- and post-development runoff volume, are highly inconsistent in retaining runoff and reducing pollutants, in that they are relatively protective where pre-development runoff is estimated to be very low relative to post-development flow, but result in progressively lower retention and pollutant loading reduction as pre- and post-development volumes converge, such as in several cases on D soils. Standard 5 is especially weak in this regard. The potentially low level of retention and pollutant loading reduction renders these standards based on the change in pre- versus post-development runoff volume poor candidates for national application, at least as formulated in these terms.

Fully meeting standard 1 (retain the runoff produced by the 85th percentile, 24-hour precipitation event) would yield runoff retention and pollutant mass reduction ranging from 58 to 81 percent, depending on climate region. This level of inconsistency decreases the utility of this standard for widespread use. Standard 2, based on the 95th percentile event, is much better in this respect, with variability in runoff retention and loading reduction across the nation in the much narrower 82-89 percent range. However, standard 1 remains more consistent across regions, and more protective of water quality for development on D soils than either standard 4 or 5, and is preferable to those standards in this regard.

In summary, standards 2 and 3 are clearly superior to the other three options. Standard 3 is entirely consistent from place to place in degree of environmental protection, and standard 2 does not deviate much. Analysis of the five development cases on two soil groups in each of four regions demonstrated the two standards are virtually identical in the runoff retention and pollutant loading reduction they would bring about.

Management of Runoff in Excess of Standards Requirements

All of the analysis reported above assumed that any remaining runoff after the application of ARCD and meeting, or coming as close as possible to meeting a standard, would discharge with no treatment. In fact, additional treatment could further decrease pollutant loadings. Treatment without further runoff retention could be accomplished by many conventional or ARCD methods designed to lower contaminant concentrations. The most effective of the alternatives is probably bioretention discharging non-retained runoff either on the surface or through an underdrain, assumed in the analysis conducted for this study according to the methods cited above. Treatment of all remaining runoff with underdrained bioretention cells where space remains but all infiltration capacity is used can raise the pollutant removals given in Table 16 to the levels in Table 17. These estimates apply to the four pollutants considered, TSS and total copper, zinc, and phosphorus. Space would most likely be available in the three MFR and SFR cases but not the COMM and REDEV scenarios.

While there is substantial variability in these results, they demonstrate that discharging effluent of relatively consistent, high quality can be accomplished with a comprehensive ARCD strategy. This strategy would embrace, first, retaining as much urban runoff as possible and then utilizing treatment based on soil and vegetative media to capture contaminants from the remainder.

Table 17. Estimated Pollutant Loading Reduction Benefits of Bioretention Treatment of Runoff Remaining After ARCD Implemented to Meet or Approach Standards

Range of Table 16 Values (%)	Approximate Pollutant Removal Increase (%)	Total Estimated Pollutant Removal Range (%)
35-45	30-45	65-90
45-55	25-35	70-90
55-65	20-30	75-95
65-75	15->20	80->95
75-85	10->15	85->95
>85	5->10	90->95

SUMMARY AND CONCLUSIONS

STUDY DESIGN

This study was performed to investigate the degree to which low-impact development ARCD practices can meet or exceed the requirements of various potential stormwater management facility design standards and the resulting environmental benefits. The investigation was performed by estimating the stormwater retention possible with full application of ARCD practices to five land use cases in four representative climatic regions in the United States on two prominent soil types in each region. Retention is defined as preventing the conversion of precipitation to surface runoff. Retaining runoff from impervious and pollutant generating pervious surfaces prevents the introduction of urban runoff pollutants to receiving waters as well as reduces runoff volume to prevent stream channel and habitat damage, flooding, and loss of groundwater recharge. Infiltrating bioretention was first applied in the analysis of each case, a strategy termed Basic ARCD. When Basic ARCD could not fully retain post-development runoff, a Full ARCD strategy was added, involving roof runoff harvesting in the most impervious development cases and roof water dispersion in those with substantial pervious area. Benefits were assessed with respect to reduction of the annual average surface runoff volume from the quantity estimated without any stormwater management practices, and associated maintenance of pre-development groundwater recharge and water quality improvement through preventing discharge to receiving waters of pollutants generated with developed land uses.

A number of conservative assumptions were built into the analysis to ensure that the capabilities and benefits of ARCD would not be over-estimated. In summary, these assumptions are:

- No retention credit for evapotranspiration in the Basic ARCD strategy, although generally a substantial amount would occur, and consideration of evapotranspiration only for roof runoff in the Full ARCD strategy;
- Letting aside many available ARCD practices and site design principles that could be employed to reduce the runoff quantity, and the pollutants it transports, by reducing impervious surface area or directing the runoff to bioretention, harvesting, and dispersion facilities;
- The assumption of no infiltration on hydrologic soil group D soils, although some infiltration occurs at finite rates even on clay;
- Application of a safety factor to estimated infiltration rates;
- Minimum bioretention cell depths, so that these facilities would not be disruptive to site design and could be put to other uses;
- Requiring a 48-hour drawdown time for bioretention, instead of the 72-hour maximum;
- An analysis to guard against groundwater mounding under bioretention cells, with conservative assumptions for horizontal and vertical hydraulic conductivity rates; and
- An analysis demonstrating that doubling topographic slope changes results by only a few percent.

CAPABILITIES OF FULL ARCD APPLICATION

Comparison of estimated runoff production in the pre- and post-development states demonstrated that the majority of the infiltration that would recharge groundwater in the undeveloped state would be lost to surface runoff after development with no stormwater management practices. These losses would approach 90 percent in the most impervious developments. These observations apply in all climate regions and with the full range of soil conditions.

Basic ARCD could retain all post-development runoff and pre-existing groundwater recharge, as well as attenuate all pollutant transport, in the three residential cases on B soils in the two climate regions where these soils were analyzed. Bioretention cells to accomplish this retention would use from less than one-fourth to just over one-third of the available pervious area for infiltration. Taking all available pervious area for the more highly impervious COMM and REDEV cases, bioretention would retain about 45 percent of the runoff and pollutants generated and save about 40 percent of the pre-development recharge. Adding Full ARCD measures in these cases would approximately double retention and pollutant reduction for the retail commercial land use and raise it to 100 percent for the redevelopment. Groundwater recharge would not increase, however, because the additional retention is accomplished by harvesting or dispersion.

In the three regions having C soils, Basic ARCD can again retain all runoff and reduce urban runoff pollutant mass loading to zero for the MFR and Sm-SFR and Lg-SFR residential cases, although generally requiring more of the available pervious area to do so than in B soil cases. The effect of lower rainfall is evident in the South Central and, especially, the Southwest regions. In the latter location, not only the residential cases but also the COMM and REDEV scenarios can achieve full runoff and groundwater recharge retention and pollutant loading attenuation with Basic ARCD on C soil. Full ARCD can approximately double runoff retention and pollutant removal from the Basic ARCD level for the COMM case and extend these measures to 100 percent for the redevelopment.

For development on the D soils in all climate regions, use of roof runoff management techniques was estimated to increase runoff retention and pollutant reduction from zero to between about one-third to two-thirds of the post-development runoff generated, depending on the land use case. These strategies would offer little groundwater recharge benefit with this soil condition, but would still have the potential to significantly reduce runoff volume and pollutant loading.

Therefore, taking the greatest advantage of what ARCD offers is expected to retain the great majority of post-development runoff and pre-development groundwater recharge. This strategy would also prevent the addition to receiving waters of all or almost all pollutant mass that would otherwise discharge from a range of urban developments on B and C soils. With D soils, Full ARCD can accomplish runoff retention and loading reductions approaching or somewhat exceeding 50 percent, and opportunities to use ARCD practices or site design principles not modeled in this analysis can further increase runoff retention volume.

ABILITY TO MEET STANDARDS

ARCD methods were assessed for their ability to meet five potential regulatory standards, the first two pertaining to retention of the 85th and 95th percentile, 24-hour precipitation events, the third to retain 90 percent of the post-development runoff, and the last two to retain the difference between the post- and pre-development runoff, the final standard capped at the 85th percentile, 24-hour event. The projected ability to meet the five standards varies mostly in relation to soil type (B or C versus D) and the relative imperviousness of development, and much less across climate regions, except for the relatively arid Southwest.

The only standards that cannot be fully met on B and C soils by the ARCD methods considered are standards 2-4 for the COMM case. Of the 125 standards assessments, ARCD practices are projected to meet 113 (90.4 percent) with B and C soils. The ability to meet these standards is much reduced on D soils. Only standards 1 (85th percentile, 24-hour precipitation event, and 4 and 5 (related to the difference between the post- and pre-development runoff) can be met occasionally and under limited conditions using Full ARCD methods. However, even on D soils, all cases for Standard 1 were able to retain greater than 50 percent of the required runoff volume.

Standard 3 (retain 90 percent of the average annual post-development runoff volume) would be the most environmentally protective standard. Meeting or coming as close as possible to meeting, but not exceeding, this standard was estimated to lead to 66-90 percent runoff retention and pollutant loading reduction on B and C soils and 37-66 percent on D soil. Standard 2 (retain the runoff produced by the 95th percentile, 24-hour precipitation event) would yield equivalent protection on D soils and only slightly less protection with B and C soils.

Standards 4 and 5, based on the differential between pre- and post-development runoff volume, are very inconsistent in retaining runoff and reducing pollutants. They are highly protective where pre-development runoff is estimated to be very low relative to post-development flow, and then to result in progressively lower retention and loading reduction as pre- and post-development volumes converge. Standard 5 is especially weak in this regard. This inconsistency makes these standards poor candidates for national application, at least as formulated in these terms.

Fully meeting standard 1 (retain the runoff produced by the 85th percentile, 24-hour precipitation event) would yield runoff retention and pollutant mass reduction ranging from 58 to 81 percent, depending on climate region. This level of inconsistency decreases the utility of this standard to some degree. Standard 2, based on the 95th percentile event, is much better in this respect, with variability in runoff retention and loading reduction across the nation in the much narrower 82-89 percent range. However, standard 1 remains more consistent across regions, and more protective of water quality for development on D soils than either standard 4 or 5, and is preferable to those standards in this regard.

In summary, standards 2 and 3 are clearly superior to the other three options. Standard 3 is entirely consistent from place to place in degree of environmental protection, and standard 2 does not deviate much. Analysis of the five development cases on two soil groups in each of four regions demonstrated the two standards are virtually identical in the runoff retention and pollutant loading reduction they would bring about.

All five standards are based on some stipulated runoff retention. Pollutant mass loading reduction is at least equal to the amount of retention that occurs. It is possible to decrease loadings further by treating excess runoff. Analysis showed that subjecting that runoff to bioretention treatment before discharge could reduce loadings of TSS and total copper, zinc, and phosphorus by at least two-thirds and as much as over 95 percent. This conclusion applies to all climate regions and soil types for land use cases where space is available for the additional bioretention cells. The three residential cases are in this group but not the COMM or REDEV cases, where all pervious land would have already been used for retentive or roof water dispersion practices.

REFERENCES

- Askar, G, D. Ahlfeld, and E. Winkler. 2001. Final Report Addendum, Assessment of the Relative Importance of Hydraulic Parameters on Infiltration Performance. University of Massachusetts, Amherst, MA.
- Atlanta Regional Commission, 2001, Georgia Stormwater Management Manual, Volume 2 (Technical Handbook, section 3.2.3, at <http://www.georgiastormwater.com/vol2/3-2-3.pdf>).
- Auch, R.F. Undated. Northeastern Coastal Zone, U.S. Geological Survey Land Cover Trends Project. Accessed 4/11/11 at <http://landcover.trends.usgs.gov/east/eco59Report.html>.
- California Department of Transportation. 2004. BMP Retrofit Pilot Program Final Report. California Department of Transportation, Sacramento, CA.
- Center for Watershed Protection. 2009. Coastal Stormwater Supplement to the Georgia Stormwater Management Manual. 1st Ed. Accessed 3/15/11 at <http://www.gaepd.org/Documents/CoastalStormwaterSupplement.html>.
- Chapman, C. 2006. Performance Monitoring of an Urban Stormwater Treatment System. M.S.C.E. thesis, Department of Civil and Environmental Engineering, University of Washington, Seattle, WA.
- Chapman, C. and R.R. Horner. 2010. Performance Assessment of a Street-Drainage Bioretention System. *Water Environment Research* 82(2):109-119.
- Chralowicz, D., T. Goff, M. Mascali, and E. Taylor. 2001. Infiltration of Urban Stormwater Runoff to Recharge Groundwater Used for Drinking Water: A Study of the San Fernando Valley, California. Master of Environmental Science and Management Report, University of California at Santa Barbara, Santa Barbara, CA.
- City of Alpharetta, Georgia, 2011, Official Website of the City of Alpharetta, Georgia, at <http://www.alpharetta.ga.us/index.php?m=publications&id=14>.
- City of Alpharetta, Georgia. 2011a. Demographics. Accessed 3/15/11 at <http://alpharetta.ga.us/index.php?p=21>.
- City of Round Rock, Texas, 2011, City of Round Rock profile, at <http://www.roundrocktexas.gov/about/>.
- City of San Marcos, California, 2011, About Us, at <http://www.ci.san-marcos.ca.us/index.aspx?page=2>.
- Dyke, H. 2001. Accurate Land Cover Development for Rapidly Growing Watersheds. Proceedings of the 2001 Georgia Water Resources Conference, March 26-27, 2001. Kathryn Hatcher, ed. Institute of Ecology, University of Georgia, Athens, GA. Accessed on 4/11/11 at www.gwri.gatech.edu/uploads/proceedings/2001/DykeH-01.pdf.
- Easterbrook, R. Undated. Predicting Post-Wildfire Watershed Runoff Using ArcGIS Modelbuilder. Accessed on 4/20/11 at http://proceedings.esri.com/library/.../docs/predicting_wildfire_runoff.pdf (see also <http://www.ufe.org/files/pubs/SanDiegoUrbanEcosystemAnalysis-PostCedarFire.pdf>).
- Geosyntec Consultants. 2008. Post-Construction BMP Technical Guidance Manual. City of Santa Barbara, CA.

- Georgia Department of Community Affairs, 2009, Georgia Rainwater Harvesting Guidelines, 2009, at http://www.dca.state.ga.us/development/constructioncodes/programs/downloads/GeorgiaRainWaterHarvestingGuidelines_2009.pdf.
- Gibbons, J., 2009, *Parking Lots, Nonpoint Education for Municipal Officers, Technical Paper No. 5*, at http://nemo.uconn.edu/tools/publications/tech_papers/tech_paper_5.pdf.
- Hanson, Robert L., 1991, *Evapotranspiration and Droughts*, U.S. Geological Survey, at <http://geochange.er.usgs.gov/sw/changes/natural/et/>.
- Herrera Environmental Consultants, Inc. Undated. Pollutant Concentrations for Urban Source Areas, unpublished data table.
- Leij, F.J., W.J. Alves, M.Th. van Genuchten, and J.R. Williams. 1996. The UNSODA Unsaturated Soil Hydraulic Database; User's Manual, Version 1.0. EPA/600/R-96/095, National Risk Management Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, OH.
- McLendon, D. 2002. Hydrologic Investigation of the NRCS Curve Number for Texas Watersheds Using Historical Records of Rainfall and Runoff. M.S. thesis, Texas Tech University. Accessed on 3/15/11 at <http://etd.lib.ttu.edu/theses/available/etd-07312008-31295017084442/unrestricted/31295017084442.pdf>.
- Miller, D.A. and R.A. White. 1998. A Conterminous United States Multilayer Soil Characteristics Dataset for Regional Climate and Hydrology Modeling. *Earth Interactions*, Paper ID EI0111.
- Mitchell, R. and Z. Nevo. 1964. Effect of Bacterial Polysaccharide Accumulation on Infiltration of Water Through Sand. *Applied Microbiology* 12(3):219-223.
- National Atlas of the United States. 2011. Printable Maps: Precipitation of the Conterminous States of the United States. Accessed on 5/7/11 at <http://www.nationalatlas.gov/printable/climatemap.html#list>.
- National Climatic Data Center, Estimating the Water Equivalent of Snow, at www.ncdc.noaa.gov/oa/climate/conversion/newsnowfall.pdf, last accessed December 16, 2011.
- National Oceanic and Atmospheric Administration. Undated. Estimating the Water Equivalent of Snow. Figure 11-8, New Snowfall to Estimated Meltwater Conversion Table. Accessed on 4/7/11 at www.ncdc.noaa.gov/oa/climate/conversion/newsnowfall.pdf.
- National Research Council. 2009. *Urban Stormwater Management in the United States*. The National Academies Press, Washington, DC.
- Natural Resources Conservation Service. 1986. Urban Hydrology for Small Watersheds, Technical Release-55. U.S. Department of Agriculture, Washington, DC.
- Natural Resource Conservation Service. 2007. Part 630, Hydrology, National Engineering Handbook, Chapter 7, Hydrologic Soil Groups. U.S. Department of Agriculture, Washington, DC.

- Natural Resources Conservation Service. 2011. Distribution Maps of Dominant Soil Orders. U.S. Department of Agriculture, Washington, DC. Accessed on 3/15/11 at <http://soils.usda.gov/technical/classification/orders/>.
- Natural Resources Conservation Service. Undated. State Soil – Paxton Fine Sandy Loam. Massachusetts NRCS office. Accessed on 3/15/11 at http://www.ma.nrcs.usda.gov/technical/soils/soils_paxton.html.
- North Central Texas Council of Governments. 2010. Integrated Stormwater Management, iSWM, Technical Manual, Water Quality Protection, Volume and Peak Flow. Accessed on 4/2/11 at iswm.nctcog.org/Documents/technical_manual/Water_Quality_4-2010.pdf.
- Perez-Pedini, C., J. Lumbrunner, and R.M. Vogel. 2005. Optimal Location of Infiltration-Based Best Management Practices for Storm Water Management. *Journal of Water Resources Planning and Management* 131:441-448.
- Pitt, R., S. Chen, and S. Clark. 2002. Compacted Urban Soils Effects on Infiltration and Bioretention Stormwater Control Designs. Presented at the 9th International Conference on Urban Drainage. IAHR, IWA, EWRI, and ASCE. Portland, OR, September 8-13, 2002.
- Ronner, A.B. and A.C.L. Wong. 1996. Microbial Clogging of Wastewater Infiltration Systems. College of Agricultural and Life Sciences, University of Wisconsin, Madison, WI.
- Schueler, T.R. 1987. Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs. Metropolitan Washington Council of Governments, Washington, DC.
- Sharpley, A.N. and J.R. Williams. 1990. EPIC- Erosion/Productivity Impact Calculator: 1. Model Determination, Technical Bulletin, No. 1768. U.S. Department of Agriculture, Washington, DC.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture, Official Soil Series Descriptions. Accessed on 4/1/11 at <http://soils.usda.gov/technical/classification/osd/index.html>.
- Texas Department of Transportation. 2001. Hydraulic Design Manual. Accessed on 4/11/11 at http://onlinemanuals.txdot.gov/txdotmanuals/hyd/nrcs_runoff_curve_number_methods.htm.
- Texas Water Development Board, 2005, *The Texas Manual on Rainwater Harvesting, 3d ed.*, 2005, at http://www.twdb.state.tx.us/publications/reports/rainwaterharvestingmanual_3rdedition.pdf.
- Town of Framingham, Massachusetts, 2011, About Framingham, at <http://www.framinghamma.gov/index.aspx?NID=58>.
- University of Texas at Austin. 2000. Vegetation/Cover Types of Texas 2000 Information Sheet. Accessed on 4/11/11 at <http://www.lib.utexas.edu/geo/fieldguides/vegetationmap2.html>.
- U.S. Census Bureau. 2010. Table 8, Resident Population Estimates for the 100 Fastest Growing U.S. Counties with 10,000 or More Population in 2009: April 1, 2000 to July 1, 2009 (CO-EST2009-08). Population Division, U.S. Census Bureau, Washington, DC.
- U.S. Department of Agriculture. 1987. Soil Mechanics Level 1, Module 3 – USDA Textural Soil Classification Study Guide. Soil Conservation Service, U.S. Department of Agriculture, Washington, DC.

- U.S. Environmental Protection Agency. 1983. Results of the Nationwide Urban Runoff Program: Volume 1 - Final Report, Report No. 832R83112. Office of Water, Washington, DC.
- U.S. Environmental Protection Agency (USEPA). 2007. Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices. USEPA, Nonpoint Source Control Branch, Washington, DC.
- U.S. Environmental Protection Agency. 2007. Urban Area Maps. Accessed on 3/15/11 at <http://cfpub.epa.gov/npdes/stormwater/urbanmaps.cfm>.
- U.S. Environmental Protection Agency. 2009. Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act. EPA Doc. No. 841-B-09-001. Accessed on 4/15/11 at www.epa.gov/owow/nps/lid/section438.
- U.S. Environmental Protection Agency, February 2009a, *Green Roofs for Stormwater Runoff Control*, at <http://www.epa.gov/nrmrl/pubs/600r09026/600r09026.pdf>.
- U.S. Geological Survey. 2011. Surface Water Data for USA: USGS Groundwater-Level Annual Statistics. Accessed on 4/7/11 at <http://waterdata.usgs.gov/nwis/annual>.
- U.S. Green Building Council, November 2008 (updated November 2011), *LEED 2009 for New Construction and Major Renovations, with Alternative Compliance Paths for Projects Outside the United States*, at <http://www.usgbc.org/ShowFile.aspx?DocumentID=8868>.
- Ward, A.D. and S.W. Trimble. 2004. *Environmental Hydrology*, 2nd Ed. Lewis Publishers, Boca Raton, FL.
- Washington Department of Ecology. 2005. Stormwater Management Manual for Western Washington. Washington Department of Ecology, Olympia, WA.
- Zomorodi, K. 2005. Simplified Solutions for Groundwater Mounding Under Stormwater Infiltration Facilities. AWRA 2005 Annual Water Resources Conference, Seattle, Washington.

ATTACHMENT A

POLLUTANT CONCENTRATIONS FOR URBAN SOURCE AREAS (HERRERA ENVIRONMENTAL CONSULTANTS, INC. UNDATED)

Source Area	Study	Location	Sample Size (n)	TSS (mg/L)	TCu (µg/L)	TPb (µg/L)	TZn (µg/L)	TP (mg/L)	Notes
Roofs									
Residential	Steuer, et al. 1997	MI	12	36	7	25	201	0.06	2
Residential	Bannerman, et al. 1993	WI	~48	27	15	21	149	0.15	3
Residential	Waschbusch, et al. 2000	WI	25	15	n.a.	n.a.	n.a.	0.07	3
Residential	FAR 2003	NY		19	20	21	312	0.11	4
Residential	Gromaire, et al. 2001	France		29	37	493	3422	n.a.	5
Representative Residential Roof Values				25	13	22	159	0.11	
Commercial	Steuer, et al. 1997	MI	12	24	20	48	215	0.09	2
Commercial	Bannerman, et al. 1993	WI	~16	15	9	9	330	0.20	3
Commercial	Waschbusch, et al. 2000	WI	25	18	n.a.	n.a.	n.a.	0.13	3
Representative Commercial Roof Values				18	14	26	281	0.14	
Parking Areas									
Res. Driveways	Steuer, et al. 1997	MI	12	157	34	52	148	0.35	2
Res. Driveways	Bannerman, et al. 1993	WI	~32	173	17	17	107	1.16	3
Res. Driveways	Waschbusch, et al. 2000	WI	25	34	n.a.	n.a.	n.a.	0.18	3
Driveway	FAR 2003	NY		173	17		107	0.56	4
Representative Residential Driveway Values				120	22	27	118	0.66	
Comm./ Inst. Park. Areas	Pitt, et al. 1995	AL	16	110	116	46	110	n.a.	1
Comm. Park. Areas	Steuer, et al. 1997	MI	12	110	22	40	178	0.2	2
Com. Park. Lot	Bannerman, et al. 1993	WI	5	58	15	22	178	0.19	3
Parking Lot	Waschbusch, et al. 2000	WI	25	51	n.a.	n.a.	n.a.	0.1	3
Parking Lot	Tiefenthaler, et al. 2001	CA	5	36	28	45	293	n.a.	6
Loading Docks	Pitt, et al. 1995	AL	3	40	22	55	55	n.a.	1
Highway Rest Areas	CalTrans 2003	CA	53	63	16	8	142	0.47	7

Park and Ride Facilities	CalTrans 2003	CA	179	69	17	10	154	0.33	7
Comm./ Res. Parking	FAR 2003	NY		27	51	28	139	0.15	4
Representative Parking Area/Lot Values				75	36	26	97	0.14	
Landscaping/Lawns									
Landscaped Areas	Pitt, et al. 1995	AL	6	33	81	24	230	n.a.	1
Landscaping	FAR 2003	NY		37	94	29	263	n.a.	4
Representative Landscaping Values				33	81	24	230	n.a.	
Lawns - Residential	Steuer, et al. 1997	MI	12	262	n.a.	n.a.	n.a.	2.33	2
Lawns - Residential	Bannerman, et al. 1993	WI	~30	397	13	n.a.	59	2.67	3
Lawns	Waschbusch, et al. 2000	WI	25	59	n.a.	n.a.	n.a.	0.79	3
Lawns	Waschbusch, et al. 2000	WI	25	122	n.a.	n.a.	n.a.	1.61	3
Lawns - Fertilized	USGS 2002	WI	58	n.a.	n.a.	n.a.	n.a.	2.57	3
Lawns - Non-P Fertilized	USGS 2002	WI	38	n.a.	n.a.	n.a.	n.a.	1.89	3
Lawns - Unfertilized	USGS 2002	WI	19	n.a.	n.a.	n.a.	n.a.	1.73	3
Lawns	FAR 2003	NY	3	602	17	17	50	2.1	4
Representative Lawn Values				213	13	n.a.	59	2.04	

Notes:

Representative values are weighted means of collected data. Italicized values were omitted from these calculations.

- 1 - Grab samples from residential, commercial/institutional, and industrial rooftops. Values represent mean of DETECTED concentrations
- 2 - Flow-weighted composite samples, geometric mean concentrations
- 3 - Geometric mean concentrations
- 4 - Citation appears to be erroneous - original source of data is unknown. Not used to calculate representative value
- 5 - Median concentrations. Not used to calculate representative values due to site location and variation from other values.
- 6 - Mean concentrations from simulated rainfall study
- 7 - Mean concentrations. Not used to calculate representative values due to transportation nature of land use.

INITIAL INVESTIGATION OF THE FEASIBILITY AND BENEFITS OF LOW-IMPACT SITE DESIGN PRACTICES (“LID”) FOR THE SAN FRANCISCO BAY AREA

Richard R. Horner[†]

ABSTRACT

The Clean Water Act NPDES permit that regulates municipal separate storm sewer systems (MS4s) in the San Francisco Bay Area, California will be reissued in 2007. The draft permit includes general provisions related to low impact development practices (LID) for certain kinds of development and redevelopment projects. Using six representative development project case studies, based on California building records, the author investigated the practicability and relative benefits of LID options for the majority of the region having soils potentially suitable for infiltration either in their natural state or after amendment using well recognized LID techniques. The results showed that (1) LID site design and source control techniques are more effective than conventional best management practices (BMPs) in reducing runoff rates; and (2) in each of the case studies, LID methods would reduce site runoff volume and pollutant loading to zero in typical rainfall scenarios.

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INTRODUCTION

The Assessment in Relation to Municipal Permit Conditions

This purpose of this study is to investigate the relative water quality and water reuse benefits of three levels of storm water treatment best management practices (BMPs): (1) basic “treat-and-release” BMPs (e.g., drain inlet filters, CDS units), (2) commonly used BMPs that expose runoff to soils and vegetation (extended-detention basins and biofiltration swales and filter strips), and (3) low impact development (LID) practices. The factors considered in the investigation are runoff volume, pollutant loading, and the availability of water for infiltration or other reuse. In order to assess the differential impact of storm water reduction approaches on these factors, this study examines six case studies typical of development covered by the proposed Municipal Regional Urban Runoff Phase I NPDES Stormwater Permit (MRP).

This report covers locations in the Bay Area most amenable to soil infiltration of stormwater runoff, those areas having soils in Natural Resources Conservation Service (NRCS) Hydrologic Soil Groups A, B, or C as classified by the Natural Resources Conservation Service (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>). Depending on site-specific conditions, A and B soils would generally effectively infiltrate water without modification, whereas C soils could require organic amendments according to now standard LID methods. This report does not cover locations with group D soils, which are generally not amenable to infiltration, again depending on the specific conditions on-site. A subsequent report will examine options in these locations, which include other LID techniques (e.g., roof runoff harvesting for irrigation or gray water supply) and state-of-the-art conventional stormwater

management practices. A minority but still substantial fraction of the Bay Area has group D soils (39.3, 68.0, 18.3, and 50.1 percent of the mapped areas of Alameda, Contra Costa, San Mateo, and Santa Clara Counties, respectively). Regarding any mapped soil type, it is important to keep in mind that soils vary considerably within small distances. Characteristics at specific locations can deviate greatly from those of the major mapped unit, making infiltration potential either more or less than may be expected from the mapping.

Low impact development methods reduce storm runoff and its contaminants by decreasing their generation at sources, infiltrating into the soil or evaporating storm flows before they can enter surface receiving waters, and treating flow remaining on the surface through contact with vegetation and soil, or a combination of these strategies. Soil-based LID practices often use soil enhancements such as compost, and thus improve upon the performance of more traditional basins and biofilters. The study encompassed vegetated swales (channels for conveyance at some depth and velocity), vegetated filter strips (surfaces for conveyance in thin sheet flow), and bioretention areas (shallow basins with a range of vegetation types in which runoff infiltrates through soil either to groundwater or a subdrain for eventual surface discharge). Application of these practices in a low impact site design mode requires either determination that existing site soils can support runoff reduction through infiltration or that soils will be amended using accepted LID techniques to attain this objective. Finally, the study further broadened implementation options to include water harvesting (collection and storage for use in, for example, irrigation or gray water systems), roof downspout infiltration trenches, and porous pavements.

The investigation also considered whether typical development patterns and local conditions in the Bay Area would enable LID implementation as required by a new standard proposed for the 2007 Ventura County Municipal Storm Water Permit. This standard requires management of effective impervious area (EIA), limiting it to 5%, as well as other impervious area (what might be termed Not-Connected Impervious Area, NCIA), and pervious areas.

Where treatment control BMPs are required to manage runoff from a site, Volume or Flow Hydraulic Design Bases commonly used in California were assumed to apply. The former basis applies to storage-type BMPs, like ponds, and requires capturing and treating either the runoff volume from the 85th percentile, 24-hour rainfall event for the location or the volume of annual runoff to achieve 80 percent or more volume treatment. The calculations in this analysis used the 85th percentile 24-hour rainfall event basis. The Flow basis applies to flow-through BMPs, like swales, and requires treating the runoff flow rate produced from a rain event equal to at least 0.2 inches per hour intensity (or one of two other approximately equivalent options).

Scope of the Assessment

With respect to each of the six development case studies, three assessments were undertaken: a baseline scenario incorporating no stormwater management controls; a second scenario employing conventional BMPs; and a third development scenario employing LID stormwater management strategies.

To establish a baseline for each case study, annual stormwater runoff volumes were estimated, as well as concentrations and mass loadings of four pollutants: (1) total suspended solids (TSS), (2) total recoverable copper (TCu), (3) total recoverable zinc (TZn), and (4) total phosphorus (TP). These baseline estimates were based on the anticipated land use and cover with no stormwater management efforts.

Two sets of calculations were then conducted using the parameters defined for the six case studies. The first group of calculations estimated the extent to which basic BMPs reduce runoff volumes and pollutant concentrations and loadings, and what impact, if any, such BMPs have on recharge rates or water retention on-site.

The second group of calculations estimated the extent to which commonly used soil-based BMPs and LID site design strategies ameliorate runoff volumes and pollutant concentrations and loadings, and the effect such techniques have on recharge rates. When evaluating LID strategies in the context of the EIA concept employed in the draft Ventura County MS4 permit, it was presumed that EIA would be limited to three percent. It was also assumed that pervious surfaces on a site receiving runoff from other areas on the site would be sized and prepared to manage (through infiltration or storage) the volume directed there in addition to precipitation falling directly on those areas. The assessment of basins, biofiltration, and low impact design practices analyzed the expected infiltration capacity of the case study sites. It also considered related LID techniques and practices, such as source reduction strategies, that could work in concert with infiltration to serve the goals of: (1) preventing increase in annual runoff volume from the pre- to the post-developed state, (2) preventing increase in annual pollutant mass loadings between the two development states, and (3) avoiding exceedances of the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) criteria for copper and zinc.

The results of this analysis show that:

- A full-range of typical development categories common in the Bay Area, from single family residential to restaurants, housing developments, and commercial uses like office buildings, can feasibly implement standard LID techniques to achieve no stormwater discharge during rain events equal to, and in some cases greater than, design storm conditions. This conclusion is based on an analysis that used actual building records in California and annual rainfall records in two rainfall zones in the Bay Area to show that site conditions support this level of performance. In addition, site conditions typical at a wide range of development projects are more than sufficient to attain compliance with a three percent EIA limit, as is being contemplated in other MS4 re-issuance proceedings in California presently.
- Developments implementing no post-construction BMPs result in storm water runoff volume and pollutant loading that are substantially increased, and recharge rates that are substantially decreased, compared to pre-development conditions.
- Developments implementing basic post-construction treatment BMPs achieve reduced pollutant loading compared to developments with no BMPs, but stormwater runoff volume and recharge rates are similar to developments with no BMPs.
- Developments implementing traditional basins and biofilters, and even more so low impact post-construction BMPs, achieve significant reduction of pollutant loading and runoff volume as well as greatly enhanced recharge rates compared to both developments with no BMPs and developments with basic treatment BMPs.

This report covers the methods employed in the investigation, data sources, and references for both. It then presents the results, discusses their consequences, draws conclusions, and makes recommendations relative to the feasibility of utilizing low-impact development practices in Bay Area developments.

CASE STUDIES

Six case studies were selected to represent a range of urban development types considered to be representative of the Bay Area. These case studies involved: a multi-family residential complex (MFR), a relatively small-scale (23 homes) single-family residential development (Sm-SFR), a restaurant (REST), an office building (OFF), a relatively large (1000 homes) single-family residential development (Lg-SFR), and a single home (SINGLE).¹

Parking spaces were estimated to be 176 sq ft in area, which corresponds to 8 ft width by 22 ft length dimensions. Code requirements vary by jurisdiction, with the tendency now to drop below the traditional 200 sq ft average. About 180 sq ft is common, but various standards for full- and compact-car spaces, and for the mix of the two, can raise or lower the average.² The 176 sq ft size is considered to be a reasonable value for conventional practice.

Roadways and walkways assume a wide variety of patterns. Exclusive of the two SFR cases, simple, square parking lots with roadways around the four sides and square buildings with walkways also around the four sides were assumed. Roadways and walkways were taken to be 20 ft and 6 ft wide, respectively.

Single-family residences were assumed each to have a driveway 20 ft wide and 30 ft long. It was further assumed that each would have a sidewalk along the front of the lot, which was calculated to be 5749 sq ft in area. Assuming a square lot, the front dimension would be 76 ft. A 40-ft walkway was included within the property. Sidewalks and walkways were taken to be 4 ft wide. For each case study the total area for all of these impervious features was subtracted from the total site area to estimate the pervious area, which was assumed to have conventional landscaping cover (grass, small herbaceous decorative plants, bushes, and a few trees).

¹ Building permit records from the City of San Marcos in San Diego County provided data on total site areas for the first four case studies, including numbers of buildings, building footprint areas (including porch and garage for Sm-SFR), and numbers of parking spaces associated with the development projects. While the building permit records made no reference to features such as roadways, walkways, and landscaping normally associated with development projects, these features were taken into account in the case studies using assumptions described herein. Larger developments and redevelopment were not represented in the sampling of building permits from the San Marcos database. To take these types of projects into account in the subsequent analysis, the Lg-SFR scenario scaled up all land use estimates from the Sm-SFR case in the ratio of 1000:23. The single home case (SINGLE) was derived from Bay Area records obtained at http://www.ppic.org/content/other/706EHEP_web_only_appendix.pdf, which showed 8000 ft² as a rough average for a single home lot in the region. As with the other cases, these hypothetical developments were assumed to have roadways, walkways, and landscaping, as described herein.

² J. Gibbons, *Parking Lots*, NONPOINT EDUCATION FOR MUNICIPAL OFFICERS, Technical Paper No. 5 (1999) (http://nemo.uconn.edu/tools/publications/tech_papers/tech_paper_5.pdf).

Table 1 summarizes the characteristics of the six case studies. The table also provides the recorded or estimated areas in each land use and cover type.

Table 1. Case Study Characteristics and Land Use and Land Cover Areas

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
No. buildings	11	23	1	1	1000	1
Total area (ft ²)	476,982	132,227	33,669	92,612	5,749,000	8,000
Roof area (ft ²)	184,338	34,949	3,220	7,500	1,519,522	2114
No. parking spaces	438	-	33	37	-	-
Parking area (ft ²)	77,088	-	5808	6512	-	-
Access road area (ft ²)	22,212	-	6097	6456	-	-
Walkway area (ft ²)	33,960	10,656	1362	2078	463,289	518
Driveway area (ft ²)	-	13,800	-	-	600,000	835
Landscape area (ft ²)	159,384	72,822	17,182	70,066	3,166,190	4533

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; REST—restaurant; OFF—office building; Lg-SFR—large-scale single-family residential; SINGLE—single-family home

METHODS OF ANALYSIS

Annual Stormwater Runoff Volumes

Annual surface runoff volumes produced were estimated for both pre- and post-development conditions for each case study site. Runoff volume was computed as the product of annual precipitation, contributing drainage area, and a runoff coefficient (ratio of runoff produced to rainfall received). For impervious areas the following equation was used:

$$C = (0.009) I + 0.05$$

where I is the impervious percentage. This equation was derived by Schueler (1987) from Nationwide Urban Runoff Program data (U.S. Environmental Protection Agency 1983). With $I = 100$ percent for fully impervious surfaces, C is 0.95.

The basis for pervious area runoff coefficients was the Natural Resource Conservation Service's (NRCS) Urban Hydrology for Small Watersheds (NRCS 1986, as revised from the original 1975 edition). This model estimates storm event runoff as a function of precipitation and a variable representing land cover and soil, termed the curve number (CN). Larger events are forecast to produce a greater amount of runoff in relation to amount of rainfall because they more fully saturate the soil. Therefore, use of the model to estimate annual runoff requires selecting some event or group of events to represent the year. The 85th percentile, 24-hour rainfall event was used in the analysis here for the relative comparison between pre- and post-development and applied to deriving a runoff coefficient for annual estimates, recognizing that smaller storms would produce less and larger storms more runoff.

A memorandum titled Rainfall Data Analysis and Guidance for Sizing Treatment BMPs (http://www.cccleanwater.org/construction/Publications/CCCWPBasinSizingMemoFINAL_4-20-05.pdf) prepared for the Contra Costa Clean Water Program demonstrated a linear relationship between unit basin storage volume for 80 percent capture (which is related to the 85th

percentile event) and mean annual precipitation. Rainfall for Bay Area 85th percentile, 24-hour events could thus be determined from locations where events have been established in direct proportion to mean annual rainfall.

In order to obtain appropriate regional estimates of annual precipitation, rainfall records were obtained from a number of sites in the four counties, plus the city of Vallejo, covered by the permit.³ The mean annual range is from 13.73 to 24.30 inches, with quantities close to either 14 or 20 inches predominating. The study was performed for both of these rainfall totals. These figures were used in conjunction with 85th percentile, 24-hour event amounts of 0.75 for Los Angeles and 0.92 for Santa Rosa (<http://ci.santa-rosa.ca.us/pworks/other/SW/SRSWManualFinalDraft.pdf>), respectively, and mean annual totals of 12 and 31 inches for the respective cities to estimate 85 percentile, 24-hour event quantities of 0.77 and 0.82 inch for the 14 and 20-inch Bay Area rainfall zones, respectively.

Pre- and post-development runoff quantities were computed with selected CN values and the 0.77- and 0.82-inch rainfalls. The CN choices based on tabulated data in NRCS (1986) and professional judgment were 83 before development and 86 after land modification. Estimate runoff amounts were then divided by the rainfall totals to obtain runoff coefficients. The results were about the same for the two rainfall zones at 0.07 and 0.12 before and after development, respectively. Finally, total annual runoff volumes were estimated based on the two average annual precipitation figures.

Stormwater Runoff Pollutant Discharges

Annual pollutant mass discharges were estimated as the product of annual runoff volumes produced by the various land use and cover types and pollutant concentrations typical of those areas. Again, the 0.75-inch precipitation event was used as a basis for volumes. Stormwater pollutant data have typically been measured and reported for general land use types (e.g., single-family residential, commercial). However, an investigation of low impact development practices of the type this study sought to conduct demands data on specific land coverages. The literature offers few data on this basis. Those available and used herein were assembled by a consultant to the City of Seattle for a project in which the author participated. They appear in Attachment A (Herrera Environmental Consultants, Inc. undated).

Pollutant concentrations expected to occur typically in the mixed runoff from the several land use and cover types making up a development were estimated by mass balance; i.e., the concentrations from the different areas of the sites were combined in proportion to their contribution to the total runoff.

The Effect of Conventional Treatment BMPs on Runoff Volume, Pollutant Discharges, and Recharge Rates

The first question in analyzing how BMPs reduce runoff volumes and pollutant discharges was, What BMPs are being employed in Bay Area developments under the permit now in force? These county permits provide regulated entities with a large number of choices and few fixed requirements regarding the selection of stormwater BMPs. (See Contra Costa County NPDES Municipal Stormwater Permit, Order No. 99-058; see also Santa Clara County NPDES Municipal Stormwater Permit, Order No. 01-024, at C.3.a.). Clean Water Program Available options presumably include manufactured BMPs, such as drain inlet inserts (DIIs) and continuous deflective separation (CDS) units. Developments may also select such non-

³ <http://www.census.gov/stab/ccdb/cit7140a.txt>,
http://www.acwd.org/dms_docs/76d0b026b60d97830492079a48b1cb88.pdf,
<http://www.ci.berkeley.ca.us/aboutberkeley/weather.html>, <http://www.usbr.gov/dataweb/dams/ca10168.htm>,
<http://www.redwoodcity.org/about/weather.html>.

proprietary devices as extended-detention basins (EDBs) and biofiltration swales and filter strips. EDBs hold water for two to three days for solids settlement before releasing whatever does not infiltrate or evaporate. Biofiltration treats runoff through various processes mediated by vegetation and soil. In a swale, runoff flows at some depth in a channel, whereas a filter strip is a broad surface over which water sheet flows. Each of these BMP types was applied to each case study, although it is not clear that these BMPs, in actuality, have been implemented consistently within the Bay Area to date.

The principal basis for the analysis of BMP performance was the California Department of Transportation's (CalTrans, 2004) BMP Retrofit Pilot Program, performed in San Diego and Los Angeles Counties. One important result of the program was that BMPs with a natural surface infiltrate and evaporate (probably, mostly infiltrate) a substantial amount of runoff, even if conditions do not appear to be favorable for an infiltration basin. On average, the EDBs, swales, and filter strips lost 40, 50 and 30 percent, respectively, of the entering flow before the discharge point. DIIIs and CDS units do not contact runoff with a natural surface, and therefore do not reduce runoff volume.

The CalTrans program further determined that BMP effluent concentrations were usually a function of the influent concentrations, and equations were developed for the functional relationships in these cases. BMPs generally reduced influent concentrations proportionately more when they were high. In relatively few situations influent concentrations were constant at an "irreducible minimum" level regardless of inflow concentrations.

In analyzing the effects of BMPs on the case study runoff, the first step was to reduce the runoff volumes estimated with no BMPs by the fractions observed to be lost in the pilot study. The next task was estimating the effluent concentrations from the relationships in the CalTrans report. The final step was calculating discharge pollutant loadings as the product of the reduced volumes and predicted effluent concentrations. As before, typical pollutant concentrations in the mixed runoff were established by mass balance.

Estimating Infiltration Capacity of the Case Study Sites

Infiltrating sufficient runoff to maintain pre-development hydrologic characteristics and prevent pollutant transport is the most effective way to protect surface receiving waters. Successfully applying infiltration requires soils and hydrogeological conditions that will pass water sufficiently rapidly to avoid overly-lengthy ponding, while not allowing percolating water to reach groundwater before the soil column captures pollutants.

The study assumed that infiltration would occur in surface facilities and not in below-ground trenches. The use of trenches is certainly possible, and was judged to be an approved BMP by CalTrans after the pilot study. However, the intent of this investigation was to determine the ability of pervious areas to manage the site runoff. This was accomplished by determining the infiltration capability of the pervious areas in their original condition for each development case study, and further assessing the pervious areas' infiltration capabilities if soils were modified according to low impact development practices.

The chief basis for this aspect of the work was an assessment of infiltration capacity and benefits for Los Angeles' San Fernando Valley (Chralowicz et al. 2001). The Chralowicz study posited providing 0.1-0.5 acre for infiltration basins to serve each 5 acres of contributing drainage area. At 2-3 ft deep, it was estimated that such basins could infiltrate 0.90-1.87 acre-ft/year of runoff in San Fernando Valley conditions. Soils there are generally various loam textures with infiltration rates of approximately 0.5-2.0 inches/hour. Loams are also common formations in the portion of the Bay Area covered by this report, those areas with Hydrologic

Soil Groups A, B, and C,⁴ thus making the conclusions of the San Fernando Valley study applicable for these purposes. This information was used to estimate how much of each case study site's annual runoff would be infiltratable, and if the pervious portion would provide sufficient area for infiltration. For instance, if sufficient area were available, the infiltration configuration would not have to be in basin form but could be shallower and larger in surface area. This study's analyses assumed the use of bioretention areas rather than traditional infiltration basins.

Volume and Pollutant Source Reduction Strategies

As mentioned above, the essence of low impact development is reducing runoff problems before they can develop, at their sources, or exploiting the infiltration and treatment abilities of soils and vegetation. If a site's existing infiltration and treatment capabilities are inadequate to preserve pre-development hydrology and prevent runoff from causing or contributing to violations of water quality standards, then LID-based source reduction strategies can be implemented, infiltration and treatment capabilities can be upgraded, or both.

Source reduction can be accomplished through various LID techniques. Soil can be upgraded to store runoff until it can infiltrate, evaporate, or transpire from plants through compost addition. Soil amendment, as this practice is known, is a standard LID technique.

Upgraded soils are used in bioretention cells that hold runoff and effect its transfer to the subsurface zone. This standard LID tool can be used where sufficient space is available. This study analyzed whether the six development case study sites would have sufficient space to effectively reduce runoff using bioretention cells, assuming the soils and vegetation could be amended and enhanced where necessary.

Conventional pavements can be converted to porous asphalt or concrete or replaced with concrete or plastic unit pavers or grid systems. For such approaches to be most effective, the soils must be capable of infiltrating the runoff passing through, and may require renovation.

Source reduction can be enhanced by the LID practice of water harvesting, in which water from impervious surfaces is captured and stored for reuse in irrigation or gray water systems. For example, runoff from roofs and parking lots can be harvested, with the former being somewhat easier because of the possibility of avoiding pumping to use the water and fewer pollutants. Harvesting is a standard technique for Leadership in Energy and Environmental Design (LEED) buildings.⁵ Many successful systems of this type are in operation, such as the Natural Resources Defense Council office (Santa Monica, CA), the King County Administration Building (Seattle, WA), and two buildings on the Portland State University campus (Portland, OR). This investigation examined how water harvesting could contribute to stormwater management for case study sites where infiltration capacity, available space, or both appeared to be limited.

⁴ <http://gis.ca.gov/catalog/BrowseCatalog.epl?id=108>,
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

⁵ New Buildings Institute, Inc., *Advanced Buildings* (2005)
(<http://www.poweryourdesign.com/LEEDGuide.pdf>).

RESULTS OF THE ANALYSIS

1. "Base Case" Analysis: Development without Stormwater Controls

Comparison of Pre- and Post-Development Runoff Volumes

Table 2 presents a comparison between the estimated runoff volumes generated by the respective case study sites in the pre- and post-development conditions, assuming implementation of no stormwater controls on the developed sites. On sites dominated by impervious land cover, most of the infiltration that would recharge groundwater in the undeveloped state is expected to be lost to surface runoff after development. This greatly increased surface flow would raise peak flow rates and volumes in receiving water courses, raise flooding risk, and transport pollutants. Only the office building, the plan for which retained substantial pervious area, would lose less than 40 percent of the site's pre-development recharge.

Table 2. Pre- and Post-Development without BMPs: Distribution of Surface Runoff Versus Recharge to Groundwater (annual volume in acre-ft)

Distribution	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
14 Inches/Year Rainfall:						
Precipitation ^b	12.8	3.54	0.90	2.47	154	0.21
Pre-development runoff ^c	0.89	0.25	0.07	0.17	10	0.02
Pre-development recharge ^d	11.9	3.29	0.83	2.30	144	0.19
Post-development impervious runoff ^c	8.07	1.51	0.42	0.57	66	0.09
Post-development pervious runoff ^c	0.51	0.24	0.06	0.23	10	0.01
Post-development total runoff ^c	8.58	1.75	0.48	0.80	76	0.10
Post-development recharge ^d	4.22	1.79	0.42	1.67	78	0.11
Post-development recharge loss (% of pre-development)	7.68 (65%)	1.50 (46%)	0.41 (49%)	0.65 (27%)	66 (45%)	0.08 (41%)
20 Inches/Year Rainfall:						
Precipitation ^b	18.2	5.06	1.29	3.54	220	0.30
Pre-development runoff ^c	1.28	0.35	0.10	0.24	15	0.03
Pre-development recharge ^d	16.9	4.71	1.19	3.30	205	0.27
Post-development impervious runoff ^c	11.5	2.16	0.60	0.82	94	0.13
Post-development pervious runoff ^c	0.73	0.34	0.08	0.33	15	0.01
Post-development total runoff ^c	12.2	2.50	0.68	1.15	109	0.14
Post-development recharge ^d	6.0	2.56	0.61	2.39	111	0.16
Post-development recharge loss (% of pre-development)	10.9 (65%)	2.15 (46%)	0.58 (49%)	0.91 (27%)	94 (45%)	0.11 (41%)

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; REST—restaurant; OFF—office building; Lg-SFR—large-scale single-family residential; SINGLE—single family home

^b Volume of precipitation on total project area

^c Quantity of water discharged from the site on the surface

^d Quantity of water infiltrating the soil; the difference between precipitation and runoff

Pollutant Concentrations and Loadings

Table 3 presents the pollutant concentrations from the literature and loadings calculated as described for the various land use and cover types represented by the case studies. Landscaped areas are expected to release the highest TSS concentration, although relatively low TSS mass loading because of the low runoff coefficient. The highest copper concentrations and loadings are expected from parking lots. Roofs, especially commercial roofs, top the list for both zinc concentrations and loadings. Landscaping would issue by far the highest phosphorus, although access roads and driveways would contribute the highest mass loadings. With expected concentrations being equal in the two rainfall zones, mass loadings in the 20 inches/year zone would be higher than those in the 14 inches/year zone in the same proportion as the ratio of rainfall quantities.

Table 3. Pollutant Concentrations and Loadings for Case Study Land Use and Cover Types

Land Use	Concentrations				Loadings			
	TSS (mg/L)	TCu (mg/L)	TZn (mg/L)	TP (mg/L)	Lbs. TSS/ acre- year	Lbs. TCu/ acre- year	Lbs. TZn/ acre- year	Lbs. TP/ acre- year
14 Inches/Year Rainfall:								
Residential roof	25	0.013	0.159	0.11	75	0.039	0.477	0.330
Commercial roof	18	0.014	0.281	0.14	54	0.042	0.844	0.420
Access road/driveway	120	0.022	0.118	0.66	360	0.066	0.354	1.981
Parking	75	0.036	0.097	0.14	225	0.108	0.291	0.420
Walkway	25	0.013	0.059	0.11	75	0.039	0.177	0.330
Landscaping	213	0.013	0.059	2.04	81	0.005	0.022	0.774
20 Inches/Year Rainfall:								
Residential roof	25	0.013	0.159	0.11	107	0.056	0.683	0.472
Commercial roof	18	0.014	0.281	0.14	77	0.060	1.207	0.601
Access road/driveway	120	0.022	0.118	0.66	515	0.094	0.507	2.834
Parking	75	0.036	0.097	0.14	322	0.155	0.417	0.601
Walkway	25	0.013	0.059	0.11	107	0.056	0.253	0.472
Landscaping	213	0.013	0.059	2.04	135	0.008	0.037	1.291

The Basin Plan freshwater acute criteria for copper and zinc are 0.013 mg/L and 0.120 mg/L, respectively (http://www.swrcb.ca.gov/rwqcb2/basinplan/web/BP_CH3.html). All developed land uses are expected to discharge copper at or above the criterion, based on the mass balance calculations using concentrations from Table 3. Any surface release from the case study sites would just meet or violate the criterion at the point of discharge, although dilution by the receiving water would lower the concentration below the criterion at some point. Even if copper mass loadings are reduced by BMPs, any surface discharge would equal or exceed the criterion initially, but it would be easier to dilute below that level. In contrast, runoff from land covers other than roofs would not violate the acute zinc criterion. Because of this difference, the evaluation considered whether or not the zinc criterion would be exceeded in each analysis, whereas there was no point in this analysis for copper. There are no equivalent water quality criteria for TSS and TP; hence, their concentrations were not further analyzed in the different scenarios.

Table 4 shows the overall loadings, as well as zinc concentrations, expected to be delivered from the case study developments should they not be fitted with any BMPs. As Table 4 shows, all cases are forecast to exceed the 0.120 mg/L acute zinc criterion. Because of its size, the large residential development dominates the mass loading emissions.

Table 4. Case Study Pollutant Concentration and Loading Estimates without BMPs

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
14 Inches/ Year Rainfall:						
TZn (mg/L)	0.127	0.123	0.128	0.133	0.123	0.121
Lbs. TSS/year	1254	328	119	230	14249	20
Lbs. TCu/year	0.44	0.070	0.030	0.043	3.04	0.004
Lbs. TZn/year	2.94	0.576	0.165	0.286	25.04	0.034
Lbs. TP/year	6.24	2.27	0.68	1.69	98.55	0.14
20 Inches/ Year Rainfall:						
TZn (mg/L)	0.127	0.123	0.128	0.133	0.123	0.121
Lbs. TSS/year	1864	501	180	360	21781	30
Lbs. TCu/year	0.63	0.102	0.043	0.063	4.44	0.006
Lbs. TZn/year	4.22	0.833	0.238	0.417	36.2	0.050
Lbs. TP/year	9.60	3.55	1.05	2.71	154	0.22

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; REST—restaurant; OFF—office building; Lg-SFR—large-scale single-family residential; SINGLE—single-family home

2. “Conventional BMP” Analysis: Effect of Basic Treatment BMPs

Effect of Basic Treatment BMPs on Post-Development Runoff Volumes

The current set of regional permits allows regulated parties to select from a range of BMPs in order to treat or infiltrate a given quantity of annual rainfall. The administrative draft of the proposed MRP is also non-specific regarding the role of LID in satisfying permit conditions. The range of BMPs includes drain inlet inserts, CDS units, and other manufactured BMPs, detention vaults, and sand filters, all of which isolate runoff from the soil; as well as basins and biofiltration BMPs built in soil and generally having vegetation. Treatment BMPs that do not permit any runoff contact with soils discharge as much stormwater runoff as equivalent sites with no BMPs, and hence yield zero savings in recharge. As mentioned above, the CalTrans (2004) study found that BMPs with a natural surface can reduce runoff by substantial margins (30-50 percent for extended-detention basins and biofiltration).

With such a wide range of BMPs in use, runoff reduction ranging from 0 to 50 percent, and a lack of clearly ascertainable requirements, it is not possible to make a single estimate of how much recharge savings are afforded by maximal implementation of the current permits or the Municipal Regional Permit (MRP), if issued as now proposed. We made the following assumptions regarding implementation of BMPs. Assuming natural-surface BMPs perform at the average of the three types tested by CalTrans (2004), i.e., 40 percent runoff reduction, the estimate can be bounded as shown in Table 5. The table demonstrates that allowing free choice of BMPs without regard to their ability to direct water into the ground forfeits substantial groundwater recharge benefits when hardened-surface BMPs are selected. Use of soil-based conventional BMPs could cut recharge losses from half or more of the full potential to about one-quarter to one-third or less, except with the highly impervious commercial development. This analysis shows the wisdom of draining impervious to pervious surfaces, even if those surfaces are not prepared in any special way. But as subsequent analyses showed, soil amendment can gain considerably greater benefits.

Table 5. Pre- and Post-Development with Conventional BMPs: Distribution of Surface Runoff Versus Recharge to Groundwater (annual volume in acre-ft)

Distribution	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
14 Inches/Year Rainfall:						
Precipitation ^b	12.8	3.54	0.90	2.47	154	0.21
Pre-development runoff ^c	0.89	0.25	0.07	0.17	10	0.02
Pre-development recharge ^d	11.9	3.29	0.83	2.30	144	0.19
Post-development impervious runoff ^e	4.84-8.07	0.90-1.51	0.25-0.42	0.34-0.57	39-66	0.05-0.09
Post-development pervious runoff ^e	0.30-0.51	0.14-0.24	0.04-0.06	0.13-0.23	6.3-10	0.006-0.01
Post-development total runoff ^e	5.15-8.58	1.05-1.75	0.29-0.48	0.48-0.80	46-76	0.06-0.10
Post-development recharge ^{d, e}	4.22-7.60	1.79-2.49	0.42-0.62	1.67-2.00	78-108	0.11-0.15
Post-development recharge loss (% of pre-development) ^e	4.29-7.68 (36-65%)	0.80-1.50 (24-46%)	0.80-0.41 (26-49%)	0.30-0.65 (13-27%)	34-66 (24-45%)	0.05-0.08 (24-41%)
20 Inches/Year Rainfall:						
Precipitation ^b	18.2	5.06	1.29	3.54	220	0.30
Pre-development runoff ^c	1.28	0.35	0.10	0.24	15	0.03
Pre-development recharge ^d	16.9	4.71	1.19	3.30	205	0.27
Post-development impervious runoff ^e	6.92-11.5	1.29-2.16	0.35-0.60	0.49-0.82	56-94	0.08-0.13
Post-development pervious runoff ^e	0.44-0.73	0.20-0.34	0.05-0.08	0.19-0.33	9.0-15	0.006-0.01
Post-development total runoff ^e	7.36-12.2	1.50-2.50	0.41-0.68	0.68-1.15	65-109	0.08-0.14
Post-development recharge ^{d, e}	6.0-10.8	2.56-3.56	0.61-0.88	2.39-2.86	111-155	0.16-0.22
Post-development recharge loss (% of pre-development) ^e	6.1-10.9 (36-65%)	1.14-2.15 (24-46%)	0.31-0.58 (26-49%)	0.44-0.91 (13-27%)	49-94 (24-45%)	0.07-0.11 (24-41%)

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; REST—restaurant; OFF—office building; Lg-SFR—large-scale single-family residential; SINGLE—single-family home. Ranges represent 40 percent runoff volume reduction, with full site coverage by BMPs having a natural surface, to no reduction, with BMPs isolating runoff from soil.

^b Volume of precipitation on total project area

^c Quantity of water discharged from the site on the surface

^d Quantity of water infiltrating the soil; the difference between precipitation and runoff ^e Ranging from the quantity with hardened bed BMPs to the quantity with soil-based BMPs

Effect of Basic Treatment BMPs on Pollutant Discharges

Table 6 presents estimates of zinc effluent concentrations and mass loadings of the various pollutants discharged from four types of conventional treatment BMPs. The loading reduction results show the CDS units always performing below 50 percent reduction for all pollutants analyzed, and most often in the vicinity of 20 percent, with zero copper reduction.

Table 6. Pollutant Concentration and Mass Loading Reduction Estimates with Conventional BMPs

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
Effluent Concentrations:						
CDS TZn (mg/L) ^a	0.095	0.095	0.098	0.102	0.095	0.094
EDB TZn (mg/L) ^a	0.085	0.086	0.084	0.084	0.086	0.084
Swale TZn (mg/L)	0.055	0.054	0.055	0.056	0.054	0.053
Filter strip TZn (mg/L)	0.039	0.039	0.039	0.041	0.039	0.038
Mass Loading Reductions—14 Inches/Year Rainfall:						
CDS TSS reduction	15.7%	19.9%	22.0%	24.0%	19.9%	20.2%
CDS TCu reduction	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CDS TZn reduction	22.7%	22.4%	22.9%	23.1%	22.4%	22.5%
CDS TP reduction	30.6%	41.5%	40.7%	45.9%	41.5%	42.0%
EDB TSS reduction	68.1%	73.7%	79.0%	81.1%	73.7%	74.3%
EDB TCu reduction	61.9%	55.7%	66.2%	63.0%	55.7%	55.8%
EDB TZn reduction	59.7%	59.6%	60.4%	61.9%	59.6%	59.8%
EDB TP reduction	61.9%	69.7%	69.1%	72.9%	69.7%	70.1%
Swale TSS reduction	68.8%	71.1%	73.1%	73.9%	71.1%	71.3%
Swale TCu reduction	72.5%	68.5%	78.2%	73.3%	68.5%	68.5%
Swale TZn reduction	78.4%	78.1%	84.3%	78.8%	78.1%	78.2%
Swale TP reduction	66.3%	70.7%	67.2%	76.2%	70.7%	71.1%
Filter strip TSS reduction	69.9%	75.4%	80.6%	82.6%	75.4%	76.0%
Filter strip TCu reduction	74.4%	69.1%	78.2%	75.4%	69.1%	69.1%
Filter strip TZn reduction	78.3%	77.9%	78.4%	78.7%	77.9%	78.1%
Filter strip TP reduction	48.4%	53.1%	63.7%	59.8%	53.1%	53.5%

Table 6 continued

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
Mass Loading Reductions—20 Inches/Year Rainfall:						
CDS TSS reduction	18.8%	25.0%	26.3%	30.5%	25.0%	25.4%
CDS TCu reduction	0.7%	1.9%	1.1%	3.0%	1.9%	2.0%
CDS TZn reduction	23.1%	23.3%	23.6%	24.7%	23.3%	23.4%
CDS TP reduction	35.4%	46.6%	44.8%	51.8%	46.6%	47.1%
EDB TSS reduction	68.8%	74.6%	79.6%	81.6%	74.6%	75.1%
EDB TCu reduction	61.8%	55.6%	66.0%	62.7%	55.6%	55.7%
EDB TZn reduction	59.6%	59.3%	60.2%	61.5%	59.3%	59.6%
EDB TP reduction	63.0%	70.4%	69.7%	73.4%	70.4%	70.7%
Swale TSS reduction	69.1%	71.4%	73.6%	74.1%	71.4%	71.6%
Swale TCu reduction	72.5%	68.4%	77.9%	73.1%	68.4%	68.5%
Swale TZn reduction	78.3%	78.0%	84.1%	78.6%	78.0%	78.1%
Swale TP reduction	67.6%	71.9%	68.2%	77.1%	71.9%	72.3%
Filter strip TSS reduction	70.6%	76.3%	81.2%	83.1%	76.3%	76.8%
Filter strip TCu reduction	74.4%	69.0%	78.0%	75.1%	69.0%	69.1%
Filter strip TZn reduction	78.2%	77.8%	78.3%	78.5%	77.8%	77.9%
Filter strip TP reduction	49.9%	54.6%	66.3%	61.0%	54.6%	55.0%

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; REST—restaurant; OFF—office building; Lg-SFR—large-scale single-family residential; SINGLE—single family home; CDS—continuous defective separation unit; EDB—extended-detention basin

When treated with extended-detention basins, swales, or filter strips, effluents from each development case study site are expected to fall below the Basin Plan acute zinc criterion. These natural-surface BMPs, if fully implemented and well maintained, are predicted to prevent the pollutant masses generated on the six case study development sites from reaching a receiving water in both rainfall zones, which do not differ appreciably. Only total phosphorus reduction falls below 50 percent for three case studies. Otherwise, mass loading reductions range from about 60 to above 80 percent for the EDB, swale, and filter strip. These data indicate that draining impervious to pervious surfaces, even if those surfaces are not prepared in any special way, pays water quality as well as hydrologic dividends.

3. LID Analysis

(a) Hydrologic Analysis

The LID analysis repeats the analysis above, focusing here on the performance of LID techniques in reducing or eliminating runoff from the six development case studies. In addition to assessing the total runoff that would be expected, the analysis also considered whether LID techniques would be sufficient to attain compliance with a performance standard being

considered by the Los Angeles Regional Water Quality Control Board for Ventura County, California. This standard limits EIA (Effective Impervious Area) to five percent (but our analysis further assumed EIA would be ultimately reduced to three percent). All runoff from NCIA (Not-Connected Impervious Area) was assumed to drain to vegetated surfaces.

One goal of this exercise was to identify methods that reduce runoff production in the first place. It was hypothesized that implementation of source reduction techniques could allow all of the case study sites to infiltrate substantial proportions, or all, of the developed site runoff, advancing the hydromodification mitigation objective of the Draft Permit. When runoff is dispersed into the soil instead of being rapidly collected and conveyed away, it recharges groundwater, supplementing a resource that maintains dry season stream flow and wetlands. An increased water balance can be tapped by humans for potable, irrigation, and process water supply. Additionally, runoff volume reduction would commensurately decrease pollutant mass loadings.

Accordingly, the analysis considered the practicability of more than one scenario. In one option, all roof runoff is harvested and stored for some beneficial use. A second option disperses runoff into the soil via roof downspout infiltration trenches. The former option is probably best suited to cases like large commercial and office buildings, while distribution in the soil would fit best with residences and relatively small commercial developments. The analysis was repeated with the assumptions of harvesting OFF roof runoff for some beneficial use and dispersing roof runoff from the remaining four cases in roof downspout infiltration systems.

Expected Infiltration Capacities of the Case Study Sites

The first inquiry on this subject sought to determine how much of the total annual runoff each property is expected to infiltrate, since infiltration is a basic (although not exclusive) LID technique. Based on the findings of Chralowicz et al. (2001), it was assumed that an infiltration zone of 0.1-0.5 acres in area and 2-3 ft deep would serve a drainage catchment area in the size range 0-5 acres and infiltrate 0.9-1.9 acre-ft/year. The conclusions of Chralowicz et al. (2001) were extrapolated to conservatively assume that 0.5 acre would be required to serve each additional five acres of catchment, and would infiltrate an incremental 1.4 acre-ft/year (the midpoint of the 0.9-1.9 acre-ft/year range). According to these assumptions, the following schedule of estimates applies:

<u>Pervious Area Available for Infiltration</u>	<u>Catchment Served acres</u>	<u>Infiltration Capacity</u>
0.5 acres	0-5 acres	1.4 acre-ft/year
1.0 acres	5-10 acres	2.8 acre-ft/year
1.5 acres	10-15 acres	4.2 acre-ft/year
(Etc.)

As a formula, infiltration capacity $\approx 2.8 \times$ available pervious area. To apply the formula conservatively, the available area was reduced to the next lower 0.5-acre increment before multiplying by 2.8.

As shown in Table 7, in both rainfall zones all six of the sites have adequate or greater capacity to infiltrate the full annual runoff volume expected from NCIA and pervious areas where EIA is limited to three percent of the total site area. Indeed, five of the six development types have sufficient pervious area to infiltrate *all* runoff, including runoff from EIA areas. These results are based on infiltrating in the native soils with no soil amendment. For any development project at which infiltration-oriented BMPs are considered, it is important that infiltration potential be carefully assessed using site-specific soils and hydrogeologic data. In the event such an investigation reveals a marginal condition (e.g., hydraulic conductivity, spacing to groundwater) for infiltration basins, soils could be enhanced to produce bioretention zones to assist infiltration. Notably, the five case studies with far greater than necessary infiltration capacity would offer substantial flexibility in designing infiltration, allowing ponding at less than 2-3 ft depth.

Table 7. Infiltration and Runoff Volume (With 3 Percent EIA and All NCIA Draining to Pervious Areas)

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
14 Inches/Year Rainfall:						
EIA runoff (acre-ft/year)	0.36	0.10	0.03	0.07	4.4	0.01
NCIA + pervious area runoff (acre-ft/year)	8.20	1.64	0.45	0.73	71.3	0.08
Total runoff (acre-ft/year)	8.56	1.74	0.48	0.80	75.7	0.09
Pervious area available for infiltration (acres)	3.66	1.67	0.39	1.61	72.7	0.10
Estimated infiltration capacity (acre-ft/year) ^b	9.8	4.2	1.4	4.2	203	0.28
Infiltration potential ^c	>100%	>100%	>100%	>100%	>100%	>100%
20 Inches/Year Rainfall:						
EIA runoff (acre-ft/year)	0.52	0.14	0.04	0.10	6.2	0.01
NCIA + pervious area runoff (acre-ft/year)	11.7	2.34	0.64	1.04	101.7	0.14
Total runoff (acre-ft/year)	12.2	2.48	0.68	1.14	108.0	0.15
Pervious area available for infiltration (acres)	3.66	1.67	0.39	1.61	72.7	0.10
Estimated infiltration capacity (acre-ft/year) ^b	9.8	4.2	1.4	4.2	203	0.28
Infiltration potential ^c	84%	>100%	>100%	>100%	>100%	>100%

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; REST—restaurant; OFF—office building; Lg-SFR—large-scale single-family residential; SINGLE—single family home;

^b Based on Chralowicz et al. (2001) according to the schedule described above

^c Compare runoff production from NCIA + pervious area (row 3) with estimated infiltration capacity (row 6)

As Table 7 shows, each of the six case study sites have the capacity to infiltrate *all* or substantially all of the runoff produced onsite annually by draining impervious surfaces to pervious areas on native soils or, in some soil regimes, soils amended with organic matter. If these sites were designed as envisioned in this analysis, no runoff discharge is expected in storms as large as, and probably larger than, the design storm event—using infiltration only. Discharge would be anticipated only with exceptionally intense, large, or prolonged rainfall that saturates the ground at a faster rate than water can infiltrate or evaporate. Even runoff from the area assumed to be EIA could be infiltrated in most cases based on the amount of pervious area available in typical development projects. Therefore, this analysis shows that the EIA performance standard being considered for Ventura County, California, or one more stringent, can be met readily in development projects occurring on A, B, and C soils in the San Francisco Bay Area.

Additional Source Reduction Capabilities of the Case Study Sites: Water Harvesting Example

As noted, infiltration is one of a wide variety of LID-based source reduction techniques. Where site conditions such as soil quality or available area limit a site's infiltration capacity, other source LID measures can enhance a site's runoff retention capability. For example, soil amendment, which improves infiltration, is a standard LID technique. Water harvesting is another. Such practices can also be used where infiltration capacity is adequate, but the developer desires greater flexibility for land use on-site. Table 8 shows the added LID implementation flexibility created by subtracting roof runoff by harvesting it or efficiently directing it into the soil through downspout dispersion systems, further demonstrating the feasibility and robust performance of LID options for reducing or eliminating runoff in most expected conditions. Specifically, all development types studied could readily infiltrate and/or retain all expected annual precipitation.

Table 8. Infiltration and Runoff Volume Reduction Analysis Including Roof Runoff Harvesting or Disposal in Infiltration Trenches (Assuming 3 Percent EIA and All NCIA Draining to Pervious Areas)

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
14 Inches/Year Rainfall:						
EIA runoff (acre-ft/year)	0.36	0.10	0.03	0.07	4.4	0.01
Roof runoff (acre-ft/year)	4.68	0.89	0.08	0.19	38.5	0.05
Other NCIA + pervious area runoff (acre- ft/year)	3.52	0.75	0.37	0.54	32.7	0.04
Total runoff (acre-ft/year)	8.56	1.74	0.48	0.80	75.6	0.10
Pervious area available for infiltration (acres)	3.66	1.67	0.39	1.61	72.7	0.10
Estimated infiltration capacity (acre- ft/year) ^b	9.8	4.2	1.4	4.2	203	0.28
Infiltration capacity ^c	>100%	>100%	>100%	>100%	>100%	>100%
20 Inches/Year Rainfall:						
EIA runoff (acre-ft/year)	0.52	0.14	0.04	0.10	6.2	0.01
Roof runoff (acre-ft/year)	6.67	1.27	0.12	0.28	55.1	0.08
Other NCIA + pervious area runoff (acre- ft/year)	5.03	1.07	0.52	0.76	46.7	0.06
Total runoff (acre-ft/year)	12.2	2.48	0.68	1.14	108.0	0.15
Pervious area available for infiltration (acres)	3.66	1.67	0.39	1.61	72.7	0.10

Table 8 continued

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
Estimated infiltration capacity (acre-ft/year) ^b	9.8	4.2	1.4	4.2	203	0.28
Infiltration capacity ^c	>100%	>100%	>100%	>100%	>100%	>100%

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; REST—restaurant; OFF—office building; Lg-SFR—large-scale single-family residential; SINGLE—single family home;

^b Based on Chralowicz et al. (2001) according to the schedule described above

^c Comparison of runoff production from NCIA + pervious area (row 3) with estimated infiltration capacity (row 6)

Effect of Full LID Approach on Recharge

Table 9 shows the recharge benefits of preventing roofs from generating runoff and infiltrating as much as possible of the runoff from the remainder of the case study sites. The data show that LID methods offer significant benefits relative to the baseline (no stormwater controls) in all cases. These benefits are particularly impressive in developments with relatively high site imperviousness, such as in the MFR case.

Table 9. Comparison of Water Captured Annually (in acre-ft) from Development Sites for Beneficial Use with a Full LID Approach Compared to Development With No BMPs

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
14 Inches/Year Rainfall:						
Pre-development recharge ^b (acre-ft)	11.9	3.29	0.83	2.30	144	0.19
No BMPs—						
Post-development recharge ^b (acre-ft)	4.22	1.79	0.42	1.67	78	0.11
Post-development recharge lost (acre-ft)	7.68	1.50	0.41	0.65	66	0.08
Post-development % recharge lost	65%	46%	49%	27%	45%	41%
Full LID approach—						
Post-development runoff capture (acre-ft) ^c	11.9	3.29	0.83	2.30	144	0.19
Post-development recharge lost (acre-ft)	0	0	0	0	0	0
Post-development % recharge lost	0%	0%	0%	0%	0%	0%

Table 9 continued

	MFR ^a	Sm-SFR ^a	REST ^a	OFF ^a	Lg-SFR ^a	SINGLE ^a
20 Inches/Year Rainfall:						
Pre-development recharge ^b (acre-ft)	16.9	4.71	1.19	3.30	205	0.27
No BMPs—						
Post-development recharge ^b (acre-ft)	6.0	2.56	0.61	2.39	111	0.16
Post-development recharge lost (acre-ft)	10.9	2.15	0.58	0.91	94	0.11
Post-development % recharge lost	65%	46%	49%	27%	45%	41%
Full LID approach—						
Post-development runoff capture (acre-ft) ^c	16.9	4.71	1.19	3.30	205	0.27
Post-development recharge lost (acre-ft)	0	0	0	0	0	0
Post-development % recharge lost	0%	0%	0%	0%	0%	0%

^a MFR—multi-family residential; Sm-SFR—small-scale single-family residential; REST—restaurant; OFF—office building; Lg-SFR—large-scale single-family residential; SINGLE—Single family home

^b Quantity of water infiltrating the soil; the difference between precipitation and runoff

^c Water either entirely infiltrated in BMPs and recharged to groundwater or partially harvested from roofs and partially infiltrated in BMPs. EIA was not distinguished from the remainder of the development, because these sites have the potential to capture all runoff.

(b) Water Quality Analysis

It was assumed that any site discharges would be subject to treatment control. For purposes of the analysis, treatment control was assumed to be provided by conventional sand filtration. This choice is appropriate for study purposes for two reasons. First, sand filters can be installed below grade, and land above can be put to other uses. Pervious area should be reserved for receiving NCIA drainage, and using sand filters would not draw land away from that service or other site uses. A second reason for the choice is that sand filter performance data equivalent to the data used in analyzing other conventional BMPs are available from the CalTrans (2004) work. Sand filters may or may not expose water to soil, depending on whether or not they have a hard bed. This analysis assumed a hard bed, meaning that no infiltration would occur and thus there would be no additional recharge in sand filters. Performance would be even better than shown in the analytical results if sand filters were built in earth.

Pollutant Discharge Reduction Through LID Techniques

The preceding analyses demonstrated that in each of the six case studies, *all* stormwater discharges could be eliminated at least under most meteorological conditions by dispersing runoff from impervious surfaces to pervious areas. Therefore, pollutant additions to receiving waters would also be eliminated.

SUMMARY AND CONCLUSIONS

This paper demonstrated that common Bay Area residential and commercial development types subject to the Municipal NPDES Permit are likely, without stormwater management, to reduce groundwater recharge from the pre-development state by approximately half in most cases to a much higher fraction with a large ratio of impervious to pervious area. With no treatment, runoff from these developments is expected to exceed Basin Plan acute copper and zinc criteria at the point of discharge and to deliver large pollutant mass loadings to receiving waters.

Conventional soil-based BMP solutions that promote and are component parts of low impact development approaches, by contrast, regain about 30-50 percent of the recharge lost in development without stormwater management in Bay Area locations having NRCS Hydrologic Soil Groups A, B, and C. It is expected the soil-based BMPs generally would release effluent that meets the acute zinc criterion at the point of discharge, although it would still exceed or just barely meet the copper limit. Excepting phosphorus, it was found that these BMPs would capture and prevent the movement to receiving waters of the majority of the pollutant loadings considered in the analysis.

It was found that by draining all site runoff to pervious areas with A, B, or C soil types, runoff can be eliminated entirely in most development categories. It follows that a three percent Effective Impervious Area standard can be met in typical developments, as well. This result was reached assuming the use of native soils or well recognized soil enhancement techniques (typically, with compost). Draining impervious surfaces onto these soils, in connection with limiting directly connected impervious area to three percent of the site total area, should eliminate storm runoff from some development types and greatly reduce it from more highly impervious types. Adding roof runoff elimination to the LID approach (by harvesting or directing it to downspout infiltration trenches) provides an additional tool, increasing flexibility and confidence that no discharge in most meteorological conditions is a feasible performance expectation. Even in the development scenarios involving the highest relative proportion of impervious surface, losses of rainfall capture for beneficial uses could be reduced from the untreated scenario when draining to pervious areas was supplemented with water harvesting. These results demonstrate the basic soundness of the concept of using LID techniques to reduce stormwater pollution in the Bay Area, and further show that limiting directly connected impervious area and draining the remainder over pervious surfaces, as contemplated by some Regional Water Boards in California, is also feasible.

REFERENCES

- California Department of Transportation. 2004. BMP Retrofit Pilot Program Final Report. California Department of Transportation, Sacramento, CA.
- Chralowicz, D., T. Goff, M. Mascali, and E. Taylor. 2001. Infiltration of Urban Stormwater Runoff to Recharge Groundwater Used for Drinking Water: A Study of the San Fernando Valley, California. Master of Environmental Science and Management Report, University of California at Santa Barbara, Santa Barbara, California.
- Herrera Environmental Consultants, Inc. Undated. Pollutant Concentrations for Urban Source Areas, unpublished data table.
- Natural Resource Conservation Service. 1986. Urban Hydrology for Small Watersheds, Technical Release-55. U.S. Department of Agriculture, Washington, D.C.
- Schueler, T.R. 1987. Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs. Metropolitan Washington Council of Governments, Washington, D.C.
- U.S. Environmental Protection Agency. 1983. Results of the Nationwide Urban Runoff Program: Volume 1 - Final Report, Report No. 832R83112. Office of Water, Washington, D.C.

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ATTACHMENT A

POLLUTANT CONCENTRATIONS FOR URBAN SOURCE AREAS (HERRERA ENVIRONMENTAL CONSULTANTS, INC. UNDATED)

Source Area	Study	Location	Sample Size (n)	TSS (mg/L)	TCu (ug/L)	TPb (ug/L)	TZn (ug/L)	TP (mg/L)	Notes
Roofs									
Residential	Steuer, et al. 1997	MI	12	36	7	25	201	0.06	2
Residential	Bannerman, et al. 1993	WI	~48	27	15	21	149	0.15	3
Residential	Waschbusch, et al. 2000	WI	25	15	n.a.	n.a.	n.a.	0.07	3
Residential	FAR 2003	NY		19	20	21	312	0.11	4
Residential	Gromaire, et al. 2001	France		29	37	493	3422	n.a.	5
Representative Residential Roof Values									
Commercial	Steuer, et al. 1997	MI	12	24	20	48	215	0.09	2
Commercial	Bannerman, et al. 1993	WI	~16	15	9	9	330	0.20	3
Commercial	Waschbusch, et al. 2000	WI	25	18	n.a.	n.a.	n.a.	0.13	3
Representative Commercial Roof Values									
Parking Areas									
Res. Driveways	Steuer, et al. 1997	MI	12	157	34	52	148	0.35	2
Res. Driveways	Bannerman, et al. 1993	WI	~32	173	17	17	107	1.16	3
Res. Driveways	Waschbusch, et al. 2000	WI	25	34	n.a.	n.a.	n.a.	0.18	3
Driveway	FAR 2003	NY		173	17	107	107	0.56	4
Representative Residential Driveway Values									
Comm./ Inst. Park. Areas	Pitt, et al. 1995	AL	16	110	116	46	110	n.a.	1
Comm. Park. Areas	Steuer, et al. 1997	MI	12	110	22	40	178	0.2	2
Com. Park. Lot	Bannerman, et al. 1993	WI	5	58	15	22	178	0.19	3
Parking Lot	Waschbusch, et al. 2000	WI	25	51	n.a.	n.a.	n.a.	0.1	3
Parking Lot	Tiefenthaler, et al. 2001	CA	5	36	28	45	293	n.a.	6
Loading Docks	Pitt, et al. 1995	AL	3	40	22	55	55	n.a.	1
Highway Rest Areas	CalTrans 2003	CA	53	63	16	8	142	0.47	7
Park and Ride Facilities	CalTrans 2003	CA	179	69	17	10	154	0.33	7
Comm./ Res. Parking	FAR 2003	NY		27	51	28	139	0.15	4
Representative Parking Area/Lot Values									

Landscaping/Lawns

Landscaped Areas	Pitt, et al. 1995	AL	6	33	81	24	230	n.a.	1
Landscaping	FAR 2003	NY		37	94	29	263	n.a.	4
Representative Landscaping Values				33	81	24	230	n.a.	
Lawns - Residential	Steuer, et al. 1997	MI	12	262	n.a.	n.a.	n.a.	2.33	2
Lawns - Residential	Bannerman, et al. 1993	WI	~30	397	13	n.a.	59	2.67	3
Lawns	Waschbusch, et al. 2000	WI	25	59	n.a.	n.a.	n.a.	0.79	3
Lawns	Waschbusch, et al. 2000	WI	25	122	n.a.	n.a.	n.a.	1.61	3
Lawns - Fertilized	USGS 2002	WI	58	n.a.	n.a.	n.a.	n.a.	2.57	3
Lawns - Non-P Fertilized	USGS 2002	WI	38	n.a.	n.a.	n.a.	n.a.	1.89	3
Lawns - Unfertilized	USGS 2002	WI	19	n.a.	n.a.	n.a.	n.a.	1.73	3
Lawns	FAR 2003	NY	3	602	17	17	50	2.1	4
Representative Lawn Values				213	13	n.a.	59	2.04	

Notes:

Representative values are weighted means of collected data. Italicized values were omitted from these calculations.

- 1 - Grab samples from residential, commercial/institutional, and industrial rooftops. Values represent mean of DETECTED concentrations
- 2 - Flow-weighted composite samples, geometric mean concentrations
- 3 - Geometric mean concentrations
- 4 - Citation appears to be erroneous - original source of data is unknown. Not used to calculate representative value
- 5 - Median concentrations. Not used to calculate representative values due to site location and variation from other values.
- 6 - Mean concentrations from simulated rainfall study
- 7 - Mean concentrations. Not used to calculate representative values due to transportation nature of land use.

SUPPLEMENTARY INVESTIGATION OF THE FEASIBILITY AND BENEFITS OF LOW-IMPACT SITE DESIGN PRACTICES (“LID”) FOR THE SAN FRANCISCO BAY AREA

Richard R. Horner[†]

ABSTRACT

The Clean Water Act NPDES permit that regulates municipal separate storm sewer systems (MS4s) in the San Francisco Bay Area, California will be reissued in 2007. The draft permit includes general provisions related to low impact development practices (LID) for certain kinds of development and redevelopment projects. Using eight representative development project case studies, based on California building records, the author investigated the practicability and relative benefits of LID options for the portion of the region having soils potentially limiting to infiltration. The principal LID option applicable in this situation is roof runoff harvesting, supplement by dispersion of the roof water in single-home sites. Other site runoff would be treated by conventional stormwater best management practices (BMPs), as specified in the permit. The results showed that effectively managing roof runoff and treating the remainder with conventional BMPs can: (1) reduce annual runoff volumes by almost half to more than 3/4, depending on land use characteristics, with much of the water saved available for a beneficial use; and (2) decrease mass loadings of pollutants to receiving waters by 63 to over 90 percent, depending on pollutant and land use.

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INTRODUCTION

Background

A report titled Initial Investigation of the Feasibility and Benefits of Low-Impact Development Practices (“LID”) for the San Francisco Bay Area used six representative development project case studies, based on California building records, to investigate the practicability and relative benefits of LID options for the majority of the region having soils potentially suitable for infiltration either in their natural state or after amendment using well recognized LID techniques. The results demonstrated that: (1) LID site design and source control techniques are more effective than conventional best management practices (BMPs) in reducing runoff rates; and (2) in each of the case studies, LID methods would reduce site runoff volume and pollutant loading to zero in typical rainfall scenarios.

For a broad regional assessment of relatively large scale use of soil-based, infiltrative LID practices, the initial report covered areas having soils in Natural Resources Conservation Service (NRCS) Hydrologic Soil Groups A, B, or C as classified by the Natural Resources Conservation Service (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>). Depending on site-specific conditions, A and B soils would generally effectively infiltrate water without modification, whereas C soils could require organic amendments according to now standard LID methods. This supplementary report covers locations with group D soils, which are generally not amenable to infiltration, again depending on the specific conditions on-site. A minority but still substantial fraction of the Bay Area has group D soils (39.3, 68.0, 18.3, and 50.1 percent of the mapped areas of Alameda, Contra Costa, San Mateo, and Santa Clara Counties, respectively). Regarding any mapped soil type, it is important to keep in mind that soils vary considerably within small distances. Characteristics at specific locations can deviate greatly from

those of the major mapped unit, making infiltration potential either more or less than may be expected from the mapping. The soil survey data are regarded as appropriate for use in broad-scale assessments such as underlie this and the initial report, but once site-specific implementation begins, it is important to verify site conditions.

General Assessment Methods

The assessment for group D soils reported herein emphasizes the use of LID practices appropriate in areas with relatively restrictive soils to the greatest possible extent, supplemented by conventional stormwater management practices implemented at fully practicable, high levels of effectiveness. The assessment was performed in a manner analogous to the analysis for the other soil groups and as described in the initial report. To recap briefly, with respect to each of several development case studies, three assessments were undertaken: a baseline scenario incorporating no stormwater management controls; a second scenario employing conventional BMPs; and a third development scenario employing LID stormwater management strategies. In each assessment, annual stormwater runoff volumes were estimated, as well as concentrations and mass loadings (the products of concentrations times flow volumes) of four pollutants: (1) total suspended solids (TSS), (2) total recoverable copper (TCu), (3) total recoverable zinc (TZn), and (4) total phosphorus (TP). The results of the second and third assessments were expressed in terms of the extent to which the management practices would reduce pollutant concentrations and loadings and runoff volumes, converting stormwater discharge a potential beneficial use (direct consumption or, in the case of group A, B, C soil areas, groundwater recharge).

Six case studies were selected to represent a range of urban development types considered to be representative of the Bay Area. These case studies involved: a multi-family residential complex (MFR), a relatively small-scale (23 homes) single-family residential development (Sm-SFR), a restaurant (REST), an office building (OFF), a relatively large (1000 homes) single-family residential development (Lg-SFR), and a single home (SINGLE). The land cover types for these various land uses were derived from building permit and other public records from the Bay Area or elsewhere in California.

Adaptation of Methods for Areas with Group D Soils

A key LID technique in a setting with soils relatively restrictive to infiltration is water harvesting, which can be applied at larger scales in commercial and light industrial developments and at smaller residential scales using cisterns or rain barrels. Harvesting has been successful in reducing runoff discharged to the storm drain system and conserving water in applications at all scales. For example, in downtown Seattle the King County Government Center collects enough roof runoff to supply over 60 percent of the toilet flushing and plant irrigation water requirements, saving approximately 1.4 million gallons of potable water per year (http://www.psat.wa.gov/Publications/LID_studies/rooftop_rainwater.htm, http://dnr.metrokc.gov/dnrp/ksc_tour/features/features.htm). A much smaller public building in Seattle, the Carkeek Environmental Learning Center, drains roof runoff into a 3500-gallon cistern to supply toilets (<http://www.harvesth2o.com/seattle.shtml>). Collecting drainage from individual dwellings for household use is a standard technique around the world, particularly in areas deficient in rainfall and without affordable alternative sources.

An additional general category of LID practices for poorly infiltrating locations, applicable especially at single homes and other relatively small-scale developments, is runoff dispersion for storage in vegetation and soil until evapotranspiration and some infiltration occurs. Section C.3.c of the California Regional Water Quality Control Board San Francisco Bay Region "Administrative Draft" NPDES Municipal Regional Stormwater Permit ("the Permit") requires all single-family home projects that create and/or replace 5,000 square feet or more of impervious surface to implement one or more stormwater lot-scale BMPs from a selection of: (1) diverting roof runoff to vegetated areas; (2) directing paved surface runoff flow to vegetated areas; and/or (3) installing driveways, patios, and walkways with pervious material such as pervious concrete or pavers. Another way of distributing and dissipating roof runoff used successfully in varied soils in the state of Washington is the downspout dispersion system, consisting of a splash block or gravel-filled trench serving to spread roof runoff over a vegetated area (Washington Department of Ecology 2005 [Volume III, Section 3.1.2]).

The basis of the group D soils assessment was harvesting roof runoff to the maximum possible degree, supplemented in smaller-scale developments by runoff dispersion methods. The report asserts that, through these LID BMPs, it is practicable to prevent the entrance of any roof runoff into the municipal storm drain system in any soils setting in the Bay Area. In group D soils, infiltration likely cannot be relied upon to reduce runoff from other portions of developments, such as walkways, driveways, parking lots, access roads, and landscaping. Some water loss would undoubtedly occur, especially through evapotranspiration and at least some infiltration of runoff generated on or directed to landscaping. The analysis presented in this report does not take account of these losses and hence is somewhat conservative in estimating benefits.

As required by the Permit, any runoff not attenuated by harvest, evapotranspiration, or infiltration would be subject to quantity and quality controls. The analysis assumes that extended-detention basins (EDBs) with water residence times up to 72 hours would provide this control. EDBs are one of several general-purpose, conventional stormwater BMPs available for this service, others being wet ponds, constructed wetlands, sand or other media filters, and biofiltration swales and filter strips. The California Department of Transportation (Caltrans, 2004) tested the performance of all of these practices in its BMP Retrofit Pilot Program, conducted in San Diego and Los Angeles Counties. The initial report investigating LID for A, B, and C soils presented estimates of benefits for EDBs, swales, and filter strips, along with continuous deflective separation (CDS) units, a practice that effectively captures only large particulate pollutants. For brevity, this follow-up report focuses on just EDBs as the supplement to LID. In performance, EDBs tend to fall between swales and filter strips for total suspended solids, slightly lower than the other two BMP types for metals, and either between the two or comparable to swales for total phosphorus.

These practices were applied to the same six case studies used in the initial analysis and described in Table 1 of the first report. Two additional case studies were defined for the assessment reported here: a sizeable commercial retail installation (COMM) and an urban redevelopment (REDEV). The hypothetical COMM scenario consists of a building with a 2-acre footprint and 500 parking spaces. Parking spaces were estimated to be 176 sq ft in area, which corresponds to 8 ft width by 22 ft length dimensions. A simple, square parking lot with roadways around the four sides and a square building with walkways also around the four sides were assumed. Roadways and walkways were taken to be 20 ft and 6 ft wide, respectively. The REDEV case was taken from an actual project in Berkeley involving a remodel of an existing structure, built originally as a corner grocery store with apartments above and a large side yard, and the addition of a new building on the same site to create a nine-unit, mixed-use, urban infill project. Table 1 summarizes the characteristics of these two case studies. The table also provides the recorded or estimated areas in each land use and cover type.

Table 1. Characteristics and Land Use and Land Cover Areas of Added Case Studies

	COMM ^a	REDEV ^a
No. buildings	1	1
Total area (ft ²)	226,529	5,451
Roof area (ft ²)	87,120	3,435
No. parking spaces	500	2 uncovered
Parking area (ft ²)	88,000	316 uncovered
Access road area (ft ²)	23,732	-
Walkway area (ft ²)	7,084	350
Driveway area (ft ²)	-	650
Landscape area (ft ²)	20,594	700

^a COMM—retail commercial; REDEV—commercial/residential infill

The assessment for group D soils employed the same methods as the earlier analysis to estimate annual stormwater runoff volumes and pollutant discharges. Please refer to the initial report for details on those

methods. The Natural Resource Conservation Service (NRCS, 1986) methodology cited in that report was applied to estimate that infiltration in group D soils would be roughly 60 percent of the amount through landscaping or the bed of a conventional BMP in C soils, which were the basis for establishing runoff coefficients in the first analysis. While that initial analysis was performed for both 14- and 20-inch average annual runoff zones, typical of different Bay Area locations, this supplementary work covered only the former condition. This simplification was made in the interest of brevity in this report, given that the first analysis showed almost no difference in conclusions between the two situations.

RESULTS OF THE ANALYSIS

Table 2 provides a comprehensive summary of the results. Rows shaded in gray compare runoff and pollutant discharges with and without treatment by CDS units, which can capture relatively large solids but have no mechanisms for dissolved substances and the finer particles. Having no soil contact and very limited residence time for evaporation, this BMP cannot reduce runoff volume at all. It can achieve some substantial reductions in TSS and TP for land uses relatively high in landscaped area but little removal of metals, especially copper.

The blue-shaded rows show the performance of conventional EDBs. In the group D soils considered in this analysis, they were estimated to reduce annual runoff volumes by 13-23 percent, the higher values for land uses with relatively small impervious footprints (OFF and REST). These BMPs can capture the majority of the long-term mass loading of most pollutants from most land uses in these soils, falling below 50 percent in reducing metals in stormwater flowing from residential developments.

Rows shaded in green present the results of applying LID BMPs appropriate for group D soils, roof runoff harvesting supplemented by dispersion in single-home land uses, plus treating the remaining runoff with EDBs. Comparing annual runoff volumes with and without LID, it can be seen that removing roof runoff from the storm drain system affords very significant benefits in reducing surface discharge and putting much of that water to productive use. Compared to directing all site runoff to EDBs, LID is expected to reduce volume by almost 10 times in the REDEV case, by about five times for the various residential land uses, 3.6 times for the large commercial development, and around twice for the OFF and REST cases. This management strategy can recover over 3/4 of the stormwater that would otherwise go down the drain in the intense redevelopment case, approximately 2/3 for the multi- and single-family residential cases, over half in the COMM development, and almost half in the office and restaurant cases with relatively small roof footprints.

Reduction of volume translates to decreases in pollutant loadings also. The combination of LID and EDB treatment is estimated to raise copper and zinc reductions to about 70 to over 90 percent in all except the developments with relatively low roof proportions (60-65 percent in these cases). TSS predictions come in at a quite consistent 75-82 percent across land uses. Total phosphorus estimates are a similarly consistent 63-71 percent, a bit higher in the highly impervious REDEV case.

Effectively managing roof runoff gives a way out of the dilemma posed by group D soils in the Bay Area. The analysis has demonstrated that harvesting this runoff stream, supplemented by ground dispersion techniques with sufficient space, shows strong promise to reduce the majority of flow inputs to municipal storm drain systems while conserving water. Moreover, this strategy can also stem the majority of solids, copper, zinc, and phosphorus transport to receiving waters.

Table 2. Runoff Volume and Pollutant Loading Reductions with Conventional and Low-Impact Development (LID) Best Management Practices (BMPs) for Eight Land Use Case Studies in Hydrologic Group D Soils

	COMM ^a	OFF ^a	REST ^a	REDEV ^a	MFR ^a	Lg-SFR ^a	Sm-SFR ^a	SINGLE
Total annual runoff with no BMPs (ac-ft)	5.29	0.80	0.47	0.12	8.57	75.66	1.74	0.10
Total annual runoff with CDS units ^b (reduction)	5.29 (0.0%)	0.80 (0.0%)	0.47 (0.0%)	0.12 (0.0%)	8.57 (0.0%)	75.66 (0.0%)	1.74 (0.0%)	0.10 (0.0%)
Total annual runoff with EDBs ^b (reduction)	4.43 (16.3%)	0.63 (21.3%)	0.36 (23.2%)	0.11 (8.1%)	7.48 (12.7%)	65.27 (13.7%)	1.50 (13.7%)	0.09 (13.3%)
Total annual runoff with LID ^b (reduction)	2.22 (58.0%)	0.44 (45.0%)	0.28 (40.4%)	0.03 (78.9%)	2.80 (67.3%)	26.72 (64.8%)	0.61 (64.8%)	0.04 (65.7%)
CDS TSS reduction ^{b, c}	19.4%	44.8%	33.9%	22.1%	27.1%	37.1%	37.1%	37.7%
CDS TCu reduction ^{b, c}	0.4%	11.0%	4.2%	0.9%	2.7%	7.3%	7.3%	7.6%
CDS TZn reduction ^{b, c}	25.3%	29.1%	25.5%	25.5%	24.1%	25.6%	25.6%	25.9%
CDS TP reduction ^{b, c}	25.9%	63.7%	54.3%	35.7%	46.7%	57.6%	57.6%	58.2%
EDB TSS reduction ^{b, c}	64.7%	78.1%	74.9%	66.5%	62.8%	70.3%	70.3%	70.9%
EDB TCu reduction ^{b, c}	57.9%	51.6%	56.4%	53.2%	51.4%	43.5%	43.5%	43.6%
EDB TZn reduction ^{b, c}	57.6%	49.6%	48.9%	58.1%	48.5%	47.7%	47.7%	48.0%
EDB TP reduction ^{b, c}	44.4%	67.6%	63.3%	52.8%	56.3%	64.4%	64.4%	64.7%
LID + EDB TSS reduction ^{b, c, d}	74.6%	80.3%	77.0%	81.5%	79.4%	81.3%	81.3%	81.8%
LID + EDB TCu reduction ^{b, c, d}	71.9%	60.3%	62.2%	82.3%	73.8%	68.9%	68.9%	69.5%
LID + EDB TZn reduction ^{b, c, d}	79.7%	65.1%	60.9%	92.3%	78.9%	76.4%	76.4%	77.0%
LID + EDB TP reduction ^{b, c, d}	63.1%	69.8%	66.0%	75.2%	69.4%	70.8%	70.8%	71.1%

^a COMM—retail commercial; OFF—office building; REST—restaurant; REDEV—commercial/residential redevelopment; MFR—multi-family residential; Lg-SFR—large-scale single-family residential; Sm-SFR—small-scale single-family residential; SINGLE—single family home

^b CDS—continuous deflective separation; EDBs—extended-detention basins; reduction—comparison with no BMPs

^c TSS—total suspended solids; TCu—total recoverable copper; TZn—total recoverable zinc; TP—total phosphorus

^d LID + EDB—roof runoff harvesting for COMM, OFF, REST, REDEV, AND MFR; harvesting supplemented by dispersion of roof runoff for Lg-SFR, Sm-SFR, and SINGLE; treatment of remaining runoff by EDBs

REFERENCES

California Department of Transportation. 2004. BMP Retrofit Pilot Program Final Report. California Department of Transportation, Sacramento, CA.

Natural Resource Conservation Service. 1986. Urban Hydrology for Small Watersheds, Technical Release-55. U.S. Department of Agriculture, Washington, D.C.

Washington Department of Ecology. 2005. Stormwater Management Manual for Western Washington. Washington Department of Ecology, Olympia, WA.
<http://www.ecy.wa.gov/programs/wq/stormwater/index.html>.



LA PERMIT GROUP

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April 13, 2012

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SUBJECT: Technical Comments on Los Angeles Regional Water Quality Control Board Staff Working Proposals for the Greater Los Angeles County MS4 Permit (Permit) – Minimum Control Measures and Non-Stormwater Discharges

Dear Ms. Purdy and Mr. Ridgeway:

The Los Angeles Permit Group would like to take this opportunity to provide comments on the working proposals for Minimum Control Measures (MCMs) and prohibitions for non-stormwater discharges. These documents were posted on the Regional Board website on March 21 and March 28, 2012 respectively. The LA Permit Group appreciates the Regional Board staff's effort to develop the next NPDES stormwater permit and their commitment to meet with various stakeholders including our group. We look forward to continuing the dialogue with the Board staff on this very important permit. Our overarching comments on the MCMs and non-stormwater discharges are highlighted in this letter. Detailed comments regarding the Staff Working Proposal for MCMs are attached. Detailed comments related to Non-stormwater Discharges will be submitted next week.

Watershed-Based Program and Maximum Extent Practical Standard

In order to achieve further water quality improvements, the Permit needs to set clear goals, while allowing flexibility with the programs and BMPs implemented. The way to accomplish this is through integrated watershed planning and monitoring. This strategy has been presented by the LA Permit Group as it will allow permittees to look at the larger picture and develop programs and BMPs based on addressing multiple pollutants. In doing so, limited local resources can be concentrated on the highest priorities. The LA Permit Group has on numerous occasions expressed our support of a watershed based approach to stormwater management. It would appear in Provision VI.C.1.a that the Board proposal also supports this approach.

The permit should allow permittees to tailor actions as part of a Watershed Plan.. The permit should clearly indicate that permittees have the option of either adopting the MCMs as they are laid out within the permit or pursue a Watershed Plan that provides permittees with the flexibility to customize the MCMs. The opportunity for a municipality to customize the MCMs to reflect the jurisdiction's water quality conditions is absolutely critical if municipalities are to

develop and implement stormwater programs that will result in achievement of water quality standards and environmental improvement. We, however, feel the MCMs are overly prescriptive and suggest that the permit ultimately establish a criterion that will be used to support any customization of MCMs. The criteria should be comprehensive but flexible. We suggest flexibility in the criteria because the management of pollutants in stormwater is a challenging task and the science and technology to help guide customizing MCMs are still developing. Furthermore, the municipal stormwater performance standard to reduce pollutants to the maximum extent practicable is not well defined and will depend on a number of factors¹. This constraint, as well as USEPA position² that the iterative/adaptive process is the basis for good stormwater management, supports the need to provide flexibility in defining the criteria for customizing actions.

We anticipate having further comments related to the MCMs once further information has been released regarding the permit structure and how the various aspects of the permit will work together. For example, it is difficult to fully comment on the MCMs until we are able to see them in the context of the compliance structure and the Watershed Plan section of the Permit.

Timeline and Fiscal Resources

The Staff Working Proposal does not provide timelines for the start-up and implementation of the MCM requirements. It is fair to say that there will be a transition period between the time the Permit becomes effective and the time that the municipalities will have to modify their current stormwater management programs to be in compliance with the new Permit provisions. At the same time, consideration should be given to the time required to develop watershed based “customized” programs. The LA Permit Group requests that the Regional Board provide a draft timeline for implementation and phasing-in of the MCM requirements.

Regarding fiscal resources, the LA Permit Group would like to recognize the parameters in which municipalities operate. The Staff Working Proposal requires municipalities to exercise its authority to secure fiscal resources necessary to meet all of the requirements of the Permit (page 5). However, we have a limited amount of funds that are under local control. Any additional funds needed for stormwater programs would need to come from increased/new stormwater fees and grants. New fees for stormwater are regulated under the State’s Prop 218 regulations, and require a public vote so this is an item that is not under direct control of the municipalities – the Regional Board must take this into consideration and this provision should be removed from the permit. Furthermore in addition to clean water, local resources are also directed to a number of health, safety and quality of life factors. Thus, all these factors need to be developed in balance with each other. This requires a strategic process and that will take time to get right. We urge you to develop the permit conditions based on a reasonable timeframe in balance with the existing economy and other health, safety, regulatory and quality of life factors that local agencies are responsible for.

Shifting of State Responsibility to the MS4 Permittees

The Staff Working Proposal shifts much of the State responsibilities to the Municipalities regarding the State’s General Permits for Construction Activities (CGP), Industrial Activities (IGP) and NPDES permits issued for non-stormwater discharges. Such examples are noted in our attached detailed comments.

In addition, there are requirements outlined in the Staff Working Proposal that exceed those required in the CGP and IGP. For example, the CGP compared to Provision 9.f which requires a ESCP for construction sites of all sizes. A few examples of where the Staff Working Proposal either shifts the responsibility or actually exceeds the requirements of the CGP are listed below:

¹ See E. Jennings 2/11/93 memorandum to Archie Mathews, State Water Resources Control Board.

² See Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits, 61 FR 43761 (Aug. 26, 1996).

- Maintaining a database that overlaps with the State's own SMARTS database. Asking Permittees to collect the same data adds unnecessary time and expense with no benefit to water quality.
- Maintaining a database for all types of permits is excessive and includes building permits that have little or no relevance to water quality protection.
- Requiring the development of a Rain Event Action Plan for small sites under 1 acre or for sites that would be categorized as Risk Level 1 under the CGP.

Those elements that shift State responsibility should be eliminated and the MCMs should be coordinated with other state and federal requirements, with particular attention to CGP and IGP requirements.

MCMs Should Reflect Effective Current Efforts

The LA Permit Group understands that the new Permit must reflect current efforts of stormwater management and water quality issues. Where the current stormwater management effort is assessed to be inadequate, then additional efforts are warranted. However, when permittees' current efforts are assessed to be adequate for protecting water quality, then the MCMs should reflect permittees' current efforts. One significant area where the LA Permit Group believes that the current effort is protective of water quality is in the new development program. Both the City and County of Los Angeles have developed and adopted Low Impact Development Ordinances and significant work, technical analysis, and public input have gone into the development of these ordinances. Rather than developing more stringent standards, the Permit should use these pre-established Ordinances as a reference for the type of program and flexibility needed to accommodate the unique and vastly varying characteristics throughout the County. Instead of providing detailed information in the text of the Permit, the LID provisions should outline general requirements of the program, and the details contained in a technical guidance manual. This point was reiterated by several speakers at the April 5, 2012 workshop, including BIA and supported by several Regional Board Members.

"MCMs for New Development"

Notwithstanding our comments above, the LA Permit Group has a number of concerns with the New Development provision of the MCMs. While the LA Permit Group has concerns and requests clarification with the other MCMs, we find the New Development MCMs the most challenging and unsupportable. These provisions are difficult to follow and the BMP selection hierarchy is confusing and at times in conflict. The LA Permit Group believes this provision should be redrafted. We have significant concerns with the following parts of the New Development MCMs:

- Selection hierarchy
- Infeasibility criteria
- Treatment Control Performance benchmarks (water quality based versus technology based)
- BMP tracking
- Inspection program
- BMP specificity

"MCMs for Public Agency Activities"

The Staff Working Proposal identifies, in a number of provisions, requirements to address trash regardless of whether the area is subject to a trash TMDL. We take exception to this approach, as on the one hand the MCMs requires prioritization, cleaning and inspection of catch basins as well as street sweeping and some other management control measures to address trash at public events. And then, even if the municipality is controlling trash through these control measures, the municipality must still install trash excluders (see page 63 regarding "additional trash management practices"). This makes little sense and the LA Permit Group would submit that if the initial control measures are successful, then the "additional trash management practices" are unnecessary (as evident by the lack of a TMDL).

“MCMs for ID/IC”

The Staff Working Proposal identifies a significant non-stormwater outfall based monitoring program. The LA Permit Group submits that TMDLs monitoring programs have already identified, to a large extent, a comprehensive non-stormwater monitoring program. As such we suggest that the TMDL monitoring program be the basis for the “non-stormwater outfall based monitoring program” and both should be identified in an Integrated Watershed Monitoring Program.

The other critical issue in the ID/IC program is clarifying the responsibilities of the municipalities and the Regional Board. This is particularly important when dealing with ongoing illicit discharges (see page 71). When this type of discharge occurs, the ultimate responsibility in correcting the illicit discharge lies with the discharger. The municipalities and the Regional Board may need to work in tandem to address a recalcitrant discharger, but the fiscal responsibility should lie with the discharger and not the municipality or Regional Board.

Non-Stormwater Prohibitions

The two overriding concerns associated with the proposed non-stormwater prohibition requirements is 1) the assumption that certain non-stormwater discharges should be conditioned to be allowed and 2) the need for further discussion and collaboration regarding potable water and fire operations and training activities discharges to MS4s. In the first case the LA Permit Group would submit that the monitoring data to support these conditions is lacking and should be the focus of the next Permit term. The LA Permit Group supports the need to place certain conditions on non-stormwater discharges when it has been shown that the discharge is an issue in the receiving water. Anything less than such a demonstration calls into question the water quality benefit for the additional cost to implement the conditions. Regarding our second observation, the LA Permit Group has worked closely with a group of community water systems and Fire Chiefs to discuss how potable water discharges should be addressed. While we have reached consensus on certain aspects, additional discussion and time is needed to work towards consensus.

In particular, the permit should differentiate between natural flows such as stream diversions, natural springs, uncontaminated groundwater and flows from riparian habitats and wetlands and urban discharges. Natural flows should not be held to a standard equal to urban discharges. The requirements to conduct appropriate monitoring and explore alternatives for the discharge are not commensurate with water quality concerns. Natural sources should not be conditioned in order to be allowed. The LA Permit Group recommends that the Regional Board continue the current permit format of categorizing natural sources separately from urban activity discharges.

Thank you for the opportunity to comment on the working proposals and we look forward to meeting with you to discuss our comments and to explore alternative approaches. Please feel free to contact me at (626) 932-5577 if you have any questions regarding our comments.

Sincerely,



Heather Maloney
Chair, LA Permit Group

Attachment A: Specific Comments on the Regional Board Staff Working Proposal for the Greater Los Angeles County MS4 Permit

cc: Sam Unger, LARWQCB
Deb Smith, LARWQCB

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MINIMUM CONTROL MEASURES – 3/28/2012 STAFF WORKING PROPOSAL
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No.	Page	Citation	Comment
General			
1	2	C.1.c	<p>The Definition of: "Development", "New Development" and "Re-development" should be added. The definitions in the existing permit should be used:</p> <p><i>“Development” means 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.</i></p> <p><i>“New Development” means land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision.</i></p> <p><i>“Redevelopment” means 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.</i></p> <p>The last of the three "routine maintenance" activities listed above should exclude projects related to existing streets since typically you are not changing the "purpose" of the street to carry vehicles and should not be altered.</p>
Legal Authority			
2	4	2.a.i	<p>Staff proposal states: "Control the contribution of pollutants to its MS4 from stormwater discharges associated with industrial and construction activity and control the quality of stormwater discharged from industrial and construction sites."</p> <p>It appears the intent of this language is to transfer the State's inspection and enforcement responsibilities to municipalities through the MS4 permit. When a separate general NPDES permit is issued by the Regional or State Board it should be the responsibility of that agency collecting such permit fees to control the contribution of pollutants, not MS4 permittees.</p>

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3	4	2.a.vii	<p>Staff proposal states: "Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Co-permittees."</p> <p>The intention of this statement is unclear and should be explained, and a definition of "shared MS4" should be provided. How would an inter-agency agreement work with an upstream and downstream agency? This is not practical - this agreement should have been done before the interconnection of MS4 systems occurred. An example of this agreement should be provided within the Permit. The permittee will not agree to the responsibility of an exceedance without first having evidence of the source and its known origin (in other words, an IC/ID is a private "culprit" and not the cause of the City).</p>
4	4	2.a.xi	<p>Staff proposal states: "Require that structural BMPs are properly operated and maintained."</p> <p>MS4 agencies can control discharges through an illicit discharge program, and conditioning new/redevelopment to ensure mitigation of pollutants. Unless the existing development private property owners/tenants are willing or in the process of retrofitting its property, the installation and O&M of BMPs is not practical and cannot be legally enforceable against an entity that does not own or control the property, such as a municipal entity.</p>
5	5	2.a.xii	<p>Staff proposal states: "Require documentation on the operation and maintenance of structural BMPs and their effectiveness in reducing the discharge of pollutants to the MS4."</p> <p>It is difficult, if not impossible; to accurately quantify the exact effectiveness of a particular set of BMP's in reducing the discharge of pollutants. Some discharges may be reduced over time given reductions in industrial activity, population in a particular portion of the community feeding into the MS4, or for other reasons not directly related to implementation of structural BMPs. Given that the County of LA is generally urbanized and thus impervious, a lethargic economic climate (meaning development and redevelopment is not occurring in an expeditious manner), and that several pollutants do not have known BMPs effective at removing/reducing the content (i.e., metals, toxics, pesticides), the effectiveness of BMPs should not be required and instead should only be used for research, development, and progress of BMP testing.</p>
Fiscal Resources			
6	5	3	<p>The staff proposal includes a section on Fiscal Resources. Most MS4's do not have a storm water quality funding source, and even those that do have a funding source are not structured to meet the requirements of the proposed MS4 requirements (for instance, development funds may be collected to construct an extended detention basin, but not for street sweeping, catch basin cleaning, public right-of-way structural BMPs, etc).</p>

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7	5	3.a	<p>Staff proposal states: "Each permittee shall exercise its full authority to secure fiscal resources necessary to meet all requirements of this Order"</p> <p>This sentence has no legally enforceable standard. What exactly does the exercise of "full authority" mean, when the exercise of a city's right to tax comes with consequences and no guarantee of success. Municipal entities must adjust for a variety of urgent needs, some federally mandated in a manner that cannot be ignored. So, if we seek the fiscal resources to fund the programs required in the permit and the citizens say "No", then a municipality will have a limited ability to comply with "all requirements of this Order".. Can the language be changed to state: "Each permittee shall make its best efforts given existing financial and budget constraints to secure fiscal resources necessary to meet all requirements of this Order"?</p>
Public Information and Participation Program			
8	6	6.a.iii	<p>Staff proposal states: "To measurably change the waste disposal and stormwater pollution generation behavior of target audiences..."</p> <p>Define the method to be used to measure behavior change. As written, this requirement is vague and open to interpretation.</p>
9	7	6.d.i.2.b	<p>Staff proposal states: "... including personal care products and pharmaceuticals)"</p> <p>The stormwater permit should pertain only to stormwater issues. Pharmaceuticals getting into waters of the US are typically a result of waste treatment processes. All references to pharmaceuticals should be removed from this MS4 permit.</p>
10	8	6.d.i.3	<p>The Regional Board assumes that all of the listed businesses will willingly allow the City to install displays containing the various BMP educational materials in their businesses. If the businesses do allow the installations then the City must monitor the availability of the handouts because the business will not monitor or keep the display full or notify the City when the materials are running out. If the business will not allow the City to display the educational material must we document that denial? Will that denial indicate that the City is not in compliance?</p>
Industrial/Commercial Facilities Program			
11	10	7.b.i.4	<p>Staff proposal states: "All other facilities tributary to waterbody segment addressed by a TMDL..."</p> <p>As written, this category is so vague that it could mean every single industrial or commercial facility. Please clearly define or revise this requirement. In this context, "commercial" refers to a currently unspecified category of facilities beyond those listed in VI.C.7.b.i.1 (page 9). Provide a precise definition for a commercial facility, or specify the extended category (or NAICSs/SICs) of facilities to be considered. Also, clarify how the Permittees will initially determine the pollutants generated for these facilities. A method that will promote consistency among Permittees is preferred, such as a table of potential pollutants based on business type or activities.</p>

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12	10	7.b.ii.6	<p>Staff proposal states: "A narrative description that describes the economic activities performed and principal products used at each facility"</p> <p>Since "economic activities" is an invasive question to ask of a facility, we suggest the following: "A narrative description of activities performed and/or principal products of each facility."</p>
13	11	7.d-f	<p>These sections pertain to inspecting critical source facilities where it appears the intent is to transfer the State's Industrial General Permit inspection and enforcement responsibilities to municipalities through the MS4 permit. We request eliminating these sections OR revise to exclude all MS4 permittee responsibility for NPDES permitted industrial facilities.</p>
14	17	7.e.i	<p>Staff proposal states: "...in the event a Permittee determines that a BMP is infeasible, Permittee shall require implementation of similar BMPs..." Judging a BMP to be "infeasible or ineffective" is subjective. Please delete this requirement.</p>
15	17	7.e.i	<p>Staff report states: "Facilities must implement the source control BMPs identified in the California Stormwater BMP Handbook, Industrial and Commercial, unless the pollutant generating activity does not occur. In the event that a Permittee determines that a BMP is infeasible at any site, the Permittee shall require implementation of similar BMPs that will achieve the equivalent reduction of pollutants in the stormwater discharges. Likewise, for those BMPs that are not adequately protective of water quality standards, a Permittee may require additional site-specific controls." It is not clear when source control BMPs would need to be implemented. Further, if the City implements low-flow diversions and an enhanced street sweeping program, it would not make sense to still require BMP retrofits to those catchment areas.</p>
Development Planning			
16	21	8.b.1	<p>This permit update would be a good opportunity to examine the type of developments that are subject to the permit. There should be a link between the selected categories and the water quality objectives. Perhaps a reworking of this section could provide that clear nexus.</p>
17	21	8.b.i.1.g	<p>Roadway construction projects that are part of a large development (i.e. track-home development) can be subjected to the associated residential or commercial/industrial development, making this requirement difficult to implement.</p>
18	21	8.b.i.1.g	<p>The proposed limit is too low for street construction projects by using the typical 10,000 square foot number that is used in several development projects. A street project that proposes to build 10,000 sq. ft. is an extremely small street project, as the requirement calls out overall area. It might consist of a one block extension of a street 60 feet wide by 166 feet long. When cities propose street extensions it is usually in terms of half mile or mile-long segments which involve more than 150,000 square feet (sq. ft.). For public works projects, the area of 50,000 sq. ft. is a more correct and appropriate threshold. Please delete this requirement.</p>
19	21	8.b.i.1.g	<p>Public Works roadway maintenance projects including the ones that expand the roadway capacity should not be subject to these provisions because of the limited opportunities for BMP incorporation. Existing roads incorporate a large number of utilities within them that limits the opportunities for BMP incorporation.</p>

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20	21	8.b.i.1.g	We support the use of opportunity-based BMP guidance for roadway projects such as the referenced USEPA's "Green Infrastructure: Green Streets", however calling for this implementation to the maximum control possible is contradictory.
21	24	8.c.i.1	It appears based on the language that the project performance criteria of c. is intended to apply to all categories of new development and redevelopment projects as listed in b.i and b.ii. Please clarify whether this is meant to apply to single family hillside homes with no size limit? A new definition of single family hillside home has not been provided in this working draft, so it is unclear whether this is the case. If the intention was to only require the narrative measures for single-family hillside homes as listed in 8.b.i.(1)k)-v, and not require to retain the design volume onsite, then that should be clarified by excluding them from the 8.c.i(1) statement.
22	24	8.c.i.2	The SWQDv definition should be modified to better reflect the purpose of the regulation as stated in 8.a.i(3) "... designing projects to minimize the impervious area footprint, and employing Low Impact Development (LID) design principles to mimic predevelopment water balance...". Modify as follows: "... the Stormwater Quality Design Volume (SWQDv) defined as the runoff from all impervious surfaces that are generated by a:..."
23	24	8.c.i.2.c	The "whichever is greater" requirement is unnecessary since both criteria are deemed to be equivalent. This requirement will only increase design time by having engineering staff perform multiple analyses.
24	24	8.c.i.5	Please define the term "wet-weather season".
25	24	8.c.i.5	The only reasonable and still beneficial rainwater harvesting approach would require the storage of the seasonal (winter-time) runoff for use when needed (spring and summer). This would increase the size of the rainwater harvesting BMPs. RWQCB should acknowledge that rainwater harvesting is both economically and technically infeasible for the vast majority of development projects in arid Los Angeles region climates.
26	24	8.c.i.6	The 72 hour drawdown requirement is counterproductive. Most irrigation practices do not irrigate landscaping within 72 hours after heavy/medium rainfall events because the ground could be saturated and the plants do not require water. Irrigating saturated ground could result in increase dry weather runoff because the water will not percolate into the saturated soil quick enough.
27	25-26	Table	The table provided lacks clarity and the use of M_v parameter is not clear and is not defined. However it appears to require projects that cannot retain runoff on-site to seek alternative locations to retrofit. We anticipate that this requirement will be unfeasible for a number of legal, logistical and technical reasons and as a result the "Least Preferred Option" will be exercised in most cases. The "Least Preferred Option" requires the over-sizing of the biofiltration systems by a factor of 1.5. We recommend that any design be consistent with established design standards (i.e. California Stormwater Quality Association) for consistency and ease in its implementation.
28	25-26	Table	The requirements that are provided in this table seem to be overly prescriptive. The requirements are not water-quality driven but rather groundwater-recharge driven. A more balanced approach will allow the use of multiple BMP options and not excluding effective treatment technologies.
29	28	8.c.iii.3.b	The proposed language uses terms that may be understood by hydrologists, but most city engineers and development engineers would not know what a HUC-10 or an HUC-12 Hydrologic Area is. Please define these terms if they are going to be used in this regulatory permit.

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30	29	8.c.iii.3.c	The federal stormwater regulation place importance on water quality. Groundwater recharge is outside the purview of this permit. The requirement to prove equal benefit should be removed.
31	29	8.c.iii.3.g	This section introduces an arbitrary delay if a project opponent petitions the Executive Officer to review a projects off-site mitigation. The project proponent deserves to receive a response in a reasonable time when an appeal is filed with the Executive Officer. We respectfully request that lines of communications be opened between the Executive Officer and the project proponent within 15-days when a third party files an appeal of the local jurisdictions decision on a project.
32	30	8.c.iii.4	Requiring biofiltration systems to treat 1.5 times the SWQDv will not improve water quality during a 85th percentile storm event. The concentration leaving the system will not improve if the system is 50% larger. Biofilters are typically size by increasing the surface area as the flow increases. If the flow is lower than the design flow a small area of the system is utilized. The removal efficiency is the same for all flow rates below the design flow and therefore the concentration is the same for the design flow or below.
33	30	8.c.iii.5.b	Biofilters are not designed with detention volume. They are designed on a flow rate basis. The last portion of the paragraph regarding pore spaces and re-filter should be removed.
34	30	8.c.iv.1	New development/redevelopment project that are upstream of an offsite water quality mitigation project should be exempt from the requirements of this subsection. Requiring a project to mitigate their pollutant load twice is unnecessary. This subsection should only apply if the project would discharge to the receiving water without first draining to an offsite project.
35	31	8.c.iv - Table	The presence of benchmark tables, even for the projects that implement offsite mitigation is inappropriate. These standards for the great part are not attainable by existing technologies. Development projects instead should only be subject to design standards not performance standards. The idea of upgrading the treatment system to achieve compliance introduces unnecessary uncertainties to future development activities in our region.
36	33	8.c.v.1	Alternatives to the Ventura County Permit Hydromodification criteria should be considered such as those identified in the Los Angeles County Low Impact Development Standards Manual or maintain the “peak flow control” requirements as appear in the existing permit. Los Angeles County watersheds are significantly different than those of Ventura County. Los Angeles County has limited areas draining into natural drainage systems.
37	33	8.c.v.1.a	The use of Erosion Potential (E_p) as a sole method for determining hydromodification impacts is inappropriate because of its limited use and difficulty to use. The existing Los Angeles County requirement to conduct hydrology and hydraulic analysis for SUSMP, 2-, 5-, 10-, 25-, and 50-year storm events and fully mitigate drainage impacts from these flow regimes is better understood.
38	37	8.c.vi	The Regional Board proposes an Annual Report item for each project that is approved with off-site mitigation. The calculations for the off-site mitigation should be easy to document, but the project performance without alternative compliance is not so clear. Please provide the information necessary to complete the annual report.
39	38	8.d.i	The proposed language as written would not accept existing LID Ordinances to be compliant with the applicable provisions of this Order. Please provide language that allows flexibility for existing LID ordinances and also provide criteria determining equivalency.
40	39	8.d.iv	It should be clarified that previously approved projects will not be subject to these requirements.

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41	40	8.d.iv.b	This requirement should be limited to the sites already visited as part of the “critical sources” program. Allow a self-inspection program where the property owners will be required to maintain their BMPs based on their type and maintenance needs. These requirements can be incorporated in the Covenant and Agreement (C & A). Property owners will be required to keep records of maintenance performed on these BMPs. Municipalities lack the resources to conduct the inspection. Municipalities can perform instead a review of the inspection records on a random and as-needed limited basis.
Development Construction			
42	41	9.d	Requiring this on all projects regardless of size is excessive. Small project will have minimal if any impact on water quality. A lower limit needs to be set for applicability such as 100 cubic yards of disturbed soil. It may be appropriate for projects to install a minimum set of BMPs without the need for a plan.
43	41	9.e.1.i	Maintaining the required database for all types of permits issued by the municipalities is excessive since not all permits require this type of information. In the City of Los Angeles for example about 35,000 building permits are issued annually.
44	42-43	9.f.ii	The number of elements for the ESCP should not be the same as those of the State SWPPP as required by the General Construction Permit. Existing Erosion Control Plans require the identification and placement of the BMPs in the engineering drawings and this has been identified as adequate.
45	43	9.f.ii.3.i	An example of how excessive it is to require these elements for the smaller sites is the requirement to prepare a Rain Event Action Plan (REAP). Under the Construction General Permit, a REAP is not required until the project reaches a Risk Level 2 status. It is not justifiable to say that a grading project, that does not disturb more than an acre and is not subject to a CGP, should be required to prepare a REAP.
46	43	9.f.ii.4	The requirement to discuss the rationale for the selection and design of the proposed BMPs (including soil loss calculations for the non-selected BMPs) is excessive and it dramatically increases the engineering costs of small construction projects. Please delete this requirement.
47	43	9.f.ii.5	The proposed language shifts much of the State responsibilities for sites greater than one acre to the Municipal Permittees without shifting the corresponding funding. Please consider setting-up a mechanism for the municipalities to operate the registration, fee collection, and inspection for sites that are under GCP coverage or revise the language so that Municipal Permittees are not made responsible parties for this activity.
48	43	9.f.ii.8	The proposed language asks cities to verify the approvals of the Army Corps of Engineers, Department of Fish and Game and the Regional Water Boards prior to the issuance of a grading or building permit. This requirement should not be implemented unless the Regional Board can provide a simple, easy to use system to accomplish the check. Furthermore, many projects reviewed every day do not require a 401, 404 or a 1600 certification to be allowed to grade on their site. The few cases where these certifications are required, they are taken care of in the EIR process rather than the Building or Grading permit process. This restriction should cite the Planning process rather than the building or grading process.
49	43-44	9.g.i	The Regional Board should not write this MS4 permit to overlap the CGP. A project that is required to have coverage under the CGP will deal with the Risk levels and apply the appropriate provisions of the CGP. Smaller sites that do not require coverage under the CGP should have lesser requirements than Risk Level 1 provisions.

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50	44	9.g.iv	The Regional Board is referring to an outdated set of BMP tables by referring to the 2003 version of the CASQA Manuals. CASQA has updated the manuals in 2010 and these are the manuals that should be referenced.
51	44-47	Tables	It appears that the Regional Board is taking the BMP tables from the CGP, without the language contained in the CGP that states that to avoid duplication each subsequent table needs to include or be added to the BMPs shown in the earlier list. Please include this language so that unfamiliar engineering, plan-checking, or inspection staff does not overlook the intent of the CGP.
52	48	Table	The proposed language would require municipalities to inspect GCP sites at least monthly. This constitutes a large increase in the inspection responsibilities for the municipalities for State responsibilities. Please delete or revise this requirement.
53	48	9.h.ii.2	The requirement to perform five inspections during the construction phase of a project, no matter how small, is excessive and serves no benefit. The only reasonable inspection would be during the grading phase and upon project completion as part of existing inspections.
54	50	9.h.ii.5.b	The language is all inclusive for the inspection portion of the permit. By asking the field inspector to "determine whether all BMPs have been selected, installed, implemented and maintained according to the approved plans." the Board is placing responsibility on the inspector which rightly should be the responsibility of the plan reviewer. If an inspector is having a dispute with the Contractor or builder of a project, the inspector can improperly raise the issue of BMP selection and cause great expense to the project. The Plan Reviewer should determine what BMPs are appropriate for the site and verify that they are properly designed. The inspector should verify that BMPs are install properly, and are being implemented and maintained as required by the field conditions; however, to allow the inspector to evaluate selection is overstepping his training and authority.
55	51	9.j	A more effective approach would be through a State mandate for a Statewide training program perhaps through the use of the contractor's license board. Because of their nomadic nature of construction activity, contractors move from City to City at will. For a City to be responsible for training the contractors that work within their city is not possible. This should either be a State responsibility, much like the QSD/QSP programs currently run by the State.
56	54	10.d	If there is a specific pollutant to address, retrofitting or any other BMP would best be accomplished through a TMDL, which is for the Permittees to determine rather than a prescribed blanket approach. As written, this is too broad of a requirement with unknown costs that is attempting to solve a problem before there is a problem. Please delete this VI.C.10.d.

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57	54	10.d	<p>Staff proposal states: "Each Permittee shall develop an inventory of retrofitting opportunities that meets the requirements of this Part. The goals of the existing development retrofitting inventory are to address the impacts of existing development through retrofit projects that reduce the discharges of stormwater pollutants into the MS4 and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards."</p> <p>This process would require land acquisition, a feasibility analysis, no impacts to existing infrastructure, proper soils, and support of various interested stakeholders. Additionally, if a property or area is being developed/redeveloped, retrofitting the site for water quality purposes makes sense, but not for an area where no development/redevelopment is planned. Finally, the LID provisions have already included provisions for off-site mitigation, in which we recommend that regional water quality projects be considered in lieu of local-scale water quality projects that will prove difficult to upkeep, maintain, and replace, let alone have existing sites evaluated as feasible. For these reasons, this requirement should be removed.</p>
58	56	10.d.v	<p>Any retrofit activities should be the result of either an illicit discharge investigation or TMDL monitoring follow-up and will need to be addressed on a site-by-site basis. A blanket effort as proposed in a highly urbanized area is simply not feasible at this time.</p>
59	56	10.e.ii	<p>Staff proposal states: "Each Permittee shall implement the following measures for flood management projects"</p> <p>Flood management projects need to be clearly defined.</p>
60	60	10.g.ii.7	<p>Staff proposal states: "Policies, procedures, and ordinances shall include commitments and a schedule to reduce the use of pesticides that cause impairment of surface waters..."</p> <p>The method which a pesticide that causes "impairment" to waterbodies needs to be defined.</p>
61	62	10.h.iv.1.c	<p>Staff proposal states: "Provide clean out of catch basins... 24 hours after event"</p> <p>Many public events happen on the weekends (i.e. Saturday). To avoid excessive overtime costs, please change the requirement to "next business day after the event" or "next business day."</p>
62	63	10.h.vii.1	<p>This requirement appears to be an "end-run" around the lack of catch basin structural BMPs in areas not covered by Trash TMDLs. The requirement has the potential to be extraordinarily economically burdensome. If an area is NOT subjected to a Trash TMDL, then the need for any mitigation devices is baseless. The MS4 permit requirements should not circumvent nor minimize the CWA 303(d) process.</p>
63	64	10.h.ix	<p>Staff proposal requires: "Infiltration from Sanitary Sewer to MS4 / Preventive Maintenance...."</p> <p>The State Water Board has implemented a separate permit for sewer maintenance activities. Additional sewer maintenance requirements are redundant and unnecessary. Please delete this requirement.</p>

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Illicit Connection and Illicit Discharge Elimination Program			
64	-	11	In general the LA Permit Group would like the flexibility to determine where (i.e. outfall vs. receiving water) monitoring is conducted and how the program is developed. This flexibility is necessary due to the variability in the physical makeup from one watershed to the next, and perspectives/philosophy of one permittee to the next. The Group proposes to do “non-stormwater outfall-based monitoring program” as part of an Integrated Watershed Monitoring Program. There is ample dry weather monitoring in the TMDLs to address a “non-stormwater outfall-based monitoring program”. Please revise each mention of “ <i>Each Permittee</i> ” to “Permittee/Permittees” to allow the flexibility of doing a Watershed or by individual city program, and sufficient program flexibility for receiving waterbody monitoring in-lieu of outfall monitoring.
65	-	11	A definition of “outfall” is required for clarity. An “outfall” for purposes of “non-stormwater outfall-based monitoring program” should be defined as “major outfall” pursuant to Clean Water Act 40CFR 122.26. Please revise each mention of “ <i>outfall</i> ” to read “major outfall” when discussing “non-stormwater outfall-based monitoring program”.
66	68	11.a	Some small cities do not have digital maps. In the “General” category of Section 11, please provide a 1 year time schedule for cities to create digital maps OR provide the municipality the ability to develop comprehensive maps of the storm sewer system in any format.
67	68	11.b.i.1	Omit the comment, “ <i>Each mapped MS4 outfall shall be located using geographical positioning system (GPS) and photographs of the outfall shall be taken to provide baseline information to track operation and maintenance needs over time.</i> ” This requirement is cost prohibitive and of little value because many City outfalls are underground and could not be accurately located or photographed. Photographs of outfalls in channels have little value since data required is already included on “As-Built” drawings. Geographic coordinates can easily be obtained using Google Earth or existing GIS coordinate systems. “The contributing drainage area for each outfall should be clearly discernable...” The scope of this requirement would involve thousands of records of drainage studies. The Regional Board should be aware that this requirement would be very labor intensive, time consuming, and very costly.
68	69	11.b.i.3	Storm drain maps should show watershed boundaries which by definition provide the location and name of the receiving water body. Please revise (3) to read “The name of all receiving water bodies from those MS4 major outfalls identified in (1).”
69	69	11.c.i	The LA Permit Group proposes “non-stormwater outfall-based monitoring program” to be flow based monitoring. Please revise item (4) of 11., c. i. to read “(4) monitoring flow of unidentified or authorized non-stormwater discharges, and...”
70	69	11.c.i.4	“Monitoring of unknown or authorized discharges” “Authorized” discharges are exempted or conditionally exempted for various reasons. Monitoring authorized discharges is monitoring for the sake of monitoring and offers no clear goal or water quality benefit. Please delete this requirement. If the source of a discharge is unknown, then monitoring may be used as an optional tool to identify the culprit.
71	70	11.d.i	Please revise the proposed language to “Permittee/Permittees shall develop written procedures for conducting investigations to identify the source of suspected illicit discharges, including procedures to eliminate the discharge once source is located.” It is not know if a discharge is illicit until the investigation is completed.

LOS ANGELES PERMIT GROUP COMMENTS
STAFF WORKING PROPOSAL - MINIMUM CONTROL MEASURES
LOS ANGELES COUNTY MUNICIPAL STORMWATER PERMIT

72	70	11.d.ii	Please revise the proposed language to “At a minimum, each Permittee/Permittees shall initiate an investigation(s) to identify and locate the source within 48 hours of becoming aware of the suspected illicit discharge.” Due to the intermittent nature of illicit discharges, it is may not be possible to conduct the investigation within 48 hours.
73	70	11.d.iii.1	“Illicit discharges suspected of sanitary sewage... shall be investigated first.” ICID inspectors should be allowed to make the determination of which event should be investigated first. For example, a toxic waste spill or a truck full of gasoline spill should take precedence over a sewage spill. This requirement should be amended to the “most toxic or severe threat to the watershed” shall be investigated first.
74	70	11.d.iii.4	Please revise the proposed language to “If the source of the discharge is found to be authorized under a NPDES permit...” If the discharge is permitted, then it is not “illicit”.
75	70	11.d.iv.1	Please revise the first sentence of the proposed language to “If the source of the illicit discharge has been determined to originate within a Permittee’s jurisdiction, the Permittee shall immediately notify the responsible party of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the illicit discharge within 48 hours of notification.” “Non-stormwater” discharges do not equate to “illicit” discharges.
76	70	11.d.iv.2	Please revise the first sentence of the proposed language to “If the source of the suspected illicit discharge has been determined to originate within an upstream jurisdiction, the Permittee shall...” Unknown discharges are suspected of being illicit discharges, but may in fact prove to be authorized discharges.
77	71	11.d.v	<p>Please revise the proposed language <i>“the Permittee shall work with the Regional Water Board to provide 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.”</i> To “the Permittee shall work with and provide support to the Regional Water Board to continue Progressive Enforcement Policy of the Regional Board.”</p> <p>In the case that an Illicit Discharge is ongoing, then the discharger can be identified and the responsibility to clean up and eliminate the discharge lies with the discharger. Any illicit discharge for which the Permittee has exhausted their Progressive Enforcement Policy should be deferred to the Regional Water Quality Control Board for additional Progressive Enforcement or permitting.</p>
78	71	11.e.i	Please revise the first sentence to “Permittee/Permittees, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation within 21 days...” The process to determine the source of an illicit connection or responsible party may take a considerable time should the suspected source be an unoccupied site.
79	71	11.e.ii	Please revise the “days of completion” from 90 to 180 days. Illicit connections need to be disconnected from the storm drain system in the street Right of Way, which will require plans and permitting. Permitting with in State Right of Way can take on average 60 to 120 days.

**LOS ANGELES PERMIT GROUP COMMENTS
STAFF WORKING PROPOSAL - MINIMUM CONTROL MEASURES
LOS ANGELES COUNTY MUNICIPAL STORMWATER PERMIT**

80	71	11.f.i	Revise the proposed first sentence to "Permittee/Permittees shall promote, publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into the MS4s through a central contact point..." It is not possible to distinguish authorized discharges from illicit discharges at the outfalls.
81	71 & 72	11.f.ii.1&2	Revise "PIPP" to "Hotline". The subject of this item is "reporting hotline requirements".
82	72	11.f.iii	Omit this section. "No Dumping" signs have already been posted at open channels.
83	72	11.f.iv	Omit the second sentence, "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 Permittee." This is an unnecessary and burdensome requirement. Procedures should be updated and documented as needed.
84	73	11.h.i	Please revise this section to "Permittee/Permittees must continue to implement a training program regarding or require contractors to implement training for 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 storm drain system. Training program documents must be available for review by the permitting authority." Cities can require contractors to train their staff, but should not be directing contractor staff. The requirement to put notification procedures in fleet vehicles is unnecessary and is covered by the required training.
85	74	"Attachment	On page 74, reference is made to Bioretention/Biofiltration Design Criteria and the Ventura County Technical Guidance Manual. This criterion is likely not fit for LA County given that soils, impervious surface amounts, engineered channels, and agricultural practices are completely different in one county versus the other.

April 13, 2012

Renee A. Purdy; Chief
Regional Programs Section
Los Angeles Regional Water Quality Control Board

Subject: Comments on Staff Working Proposal – Los Angeles Region MS4 Permit

Dear Ms. Purdy,

Thank you for the opportunity to comment on the staff working proposal of the minimum control measure section of the Greater Los Angeles County MS4 Permit. As written, the proposal does incorporate key components of a low impact development based approach to stormwater management, but could be improved significantly in ways that more directly speak to the local needs of Los Angeles County. This letter contains specific recommendations for improving the draft permit in four areas:

- Treat rainwater as a resource by making BMPs that retain rainwater for future use within the watershed and within a reasonable time frame the most preferred post construction stormwater management approach
- Provide incentives for retrofit of the built environment to accelerate TMDL compliance
- Lower feasibility thresholds for Green Infrastructure BMPs to encourage their use
- Remove prescriptive post construction BMP design guidance from the permit and replace with clear performance standards

Treat Stormwater as a Resource

Los Angeles County is a net importer of water from as far away as the Sacramento Bay Delta and the Colorado River. This reliance on external sources of potable water is unsustainable and expensive compared to tapping local supplies. Conservation is a crucial component of our local water security plan, but thriving landscapes of native plants are also important for habitat, temperature buffering, recreation and aesthetics. Landscapes do require water as do buildings, cooling systems, fire suppression systems. The Los Angeles County permit should drive project proponents toward designs that capture rainwater and use it within the watershed as the top priority. Such an approach is consistent with the EPA definition of LID which states that “LID employs principles... that treat stormwater as a resource rather than a waste product.”¹

Recommendation:

The current hierarchy of management approaches should be revised as follows:

- 1. Most Preferred: Rainwater capture for beneficial use (i.e. rainwater harvest for indoor non-potable use, irrigation and other uses that offset potable water demand) or infiltration to groundwater where that water will be recovered in a reasonable amount of time (<5 years) either on site or in regional facilities within the same watershed**
- 2. Second Tier – Retention of water on site or off site through infiltration where that water will not be available for extraction within a reasonable time frame (>5 years)**
- 3. Third tier – Biofiltration through amended soils designed to produce at least a 90% reduction in TSS, 50% Phosphorus reduction, 50% reduction in soluble Zinc and 40% reduction in soluble copper. Where feasible these systems should allow incidental infiltration and should incorporate an anoxic subsurface storage zone for nitrogen removal.**

¹ From: <http://www.epa.gov/owow/NPS/lid/>

The current proposal does include the first tier option of discharging treated water from a site to a regional collection facility which is commendable. Operation and maintenance can be much more reliable and economical at regional facilities compared to on-site LID facilities which have been documented to have very high (~50%) failure rates within the first few years of operation due to improper construction and/or maintenance. In Los Angeles where nearly all developable land is already developed, regional facilities can typically retain runoff at a much lower cost. Recovery and distribution of captured water, through groundwater extraction or direct treatment and use of stormwater runoff can also be more cost effective per gallon recovered compared to small scale decentralized facilities.

Onsite infiltration of water also makes sense where it does not cause structural or pollutant transport issues. However, infiltrating water onsite where that infiltrated water has no connection to larger groundwater tables squanders our rainfall resources. It would be better to capture and store that water for later use to offset potable water demand.

Retrofit of built environment

With approximately 1% of the Los Angeles County area being developed annually, even the most stringent regulation of new development and redevelopment during the permit term will probably not make significant progress toward restoring beneficial uses of our rivers, streams and bays. The numerous TMDLs set to be incorporated into the permit are evidence that the region has significant unresolved problems that are the result of existing development. Understandably, retrofit of the built environment is a difficult proposition financially and politically. Retroactive requirements for existing land owners would be extremely unpopular especially in the current climate of depreciating real estate values. However, the owners and operators of MS4s in the County will be responsible for ultimately meeting load allocations set in those TMDLs. This permit should provide clear requirements for identification, prioritization and initiation of municipal redevelopment projects that compliment current efforts like Los Angeles River revitalization planning and Integrated Regional Water Management Planning. It should also incentivize redevelopment of private property. The alternative mitigation program is one opportunity to do this.

Recommendation:

Within each watershed, retrofit projects should be initiated that preferably harvest and use rainwater either through cistern type systems or through recharge of recoverable groundwater systems. At a minimum these projects should retain water on site. These projects should be initiated as soon as possible, with ongoing monitoring of the actual water harvest and runoff reduction amounts. Where projects in the same watershed enroll in the alternative compliance program due to infeasibility of on-site retention, an alternative compliance fee paid by the developer would be applied toward constructed project costs as a rebate to the funders of those projects. Projects enrolling in the alternative mitigation program must still provide adequate treatment for the portion of the design storm that leaves the project site. The permit should specify a minimum number of new redevelopment projects or a minimum retention volume per watershed to be completed within the permit term.

Eliminate prescriptive BMP design requirements and strengthen performance standards

Government and private industry work together best when clear, progressive performance standards are set by government and private industry is challenged to innovate to create the most cost effective and desirable means of achieving those standards. This permit clearly establishes retention of the 85th percentile design storm as the top tier performance standard. Where that is infeasible, biofiltration is allowed. However, there are no performance objectives given for biofiltration in terms of a pollutant load reduction required or a volume of annual runoff to be reduced. Presumably these are exactly the benefits that prescriptive design requirements regarding storage volume, incidental infiltration, media depth are intended to produce. The lack of a clear performance standard in combination with design requirements virtually eliminates the opportunity for innovation. These design details should be given in a technical

manual to accompany the permit, but as suggested, not required methods of satisfying permit requirements. Engineers must also be given the option to select a different design that has been demonstrated to provide equivalent performance. There are several nationally recognized stormwater BMP verification programs that can serve as independent auditors of system performance.

Recommendation:

Prescriptive BMP design requirements should be stripped from the permit and should be collected in a technical guidance manual to be completed after permit adoption. For each tier of preference, the permit must articulate specific, measurable performance standards relating to pollutant load reduction and runoff reduction.

Lower feasibility thresholds for Green Infrastructure BMPs to encourage their use

Green infrastructure BMPs are a subset of BMPs that infiltrate, evapotranspire or harvest stormwater on-site. In Los Angeles, there are many sites where retention of the entire water quality volume will not be feasible. The current draft appears to set a feasibility threshold of 100% capture of the SWQDv for each technology which is far too high. Setting the feasibility threshold at 40% annual capture for infiltration and rainwater harvest would encourage more widespread implementation of these BMPs. The rainwater harvest feasibility threshold should be modeled after the Orange County Technical Guidance Document² guidance which requires consideration of the 30 day demand on site and allows water to be applied to the landscape at the native soil infiltration rate instead of the agronomic demand of the landscape vegetation. Feasibility criteria for the various BMPs do not need to be included in the Permit, but should be detailed in an accompanying technical manual.

Recommendation:

Set the feasibility threshold for green infrastructure BMPs at 40% annual runoff capture. Require consideration of the 30 day non-potable water demand on site for rainwater harvesting system feasibility assessment. Allow captured rainwater to be delivered to the landscape at up to the native soil infiltration rate.

With these changes, the proposal will be more protective and more tailored to the unique conditions of Los Angeles County. I would welcome the opportunity to review them in more detail at your convenience. In addition, attached is a summary of specific language change recommendations that address other important issues. I look forward to reviewing the draft permit in its entirety.

Sincerely,

A handwritten signature in black ink, appearing to read "Vaikko", written over a light blue rectangular background.

Vaikko Allen, CPSWQ, LEED-AP
Regulatory Manager- Stormwater
CONTECH Construction Products Inc.
allenv@contech-cpi.com

² Available at: <http://www.ocwatersheds.com/WQMP.aspx>

Suggested Changes
Staff Working Proposal
Los Angeles County Areawide Urban Stormwater Runoff Permit

Submitted by Vaikko Allen, CPSWQ, Regulatory Manager - Southwest
 CONTECH Stormwater Solutions, Inc.
 Phone:310-850-1736, e-mail: vallenv@conteches.com
 Address:2550 Bonmark Drive, Ojai, CA 93023

Section	Proposed Change or Comment	Justification
C.1.c.ii	Change biofiltration definition to allow incidental infiltration where feasible instead of requiring that all biofiltration systems include a means for infiltration. Planter boxes should also be added to the definition of biofiltration.	Biofiltration should only be applicable where the lower infiltration rate threshold is not met. That threshold is currently 0.15"/hr. Therefore incidental infiltration during the storm event will be minimal. As written, aside from rainwater harvest and evapotranspiration, there are no allowable options for sites where there are technical reasons that infiltration is not suitable, for example close proximity to groundwater, wells or contaminated soils. This permit should make it clear that biofiltration without an underdrain is a suitable treatment technology in such circumstances without requiring enrollment in the alternative compliance track
C.1.c.iii	No change needed	The elimination of an underdrain in bioretention facilities is a good idea since it will result in prolonged pooling of water where the infiltration rate of native soils is compromised. This is a good indicator that corrective action is needed.
C.1.c.iv	Remove Bioswale from this section	Bioswales and filter strips are not acceptable as stand alone treatment systems. According to the International BMP Database, they are comparatively ineffective in removing important pollutants like bacteria, nutrients, sediment and metals.
C.8.a.i.(7)	Amend the order of preference to the following: (a) BMPs that retain water for subsequent use or evapotranspiration; (b) BMPs that retain water on site or in regional facilities where it is not recoverable within 5 years; (c) On site biofiltration (including planter boxes)	Given the persistent drought conditions in Southern California and our reliance on water from Northern California and the Colorado river, stormwater is a valuable resource that should be harvested and used to offset potable water demand. This can be done either on site or off site within the watershed with the same water supply and water quality benefit.
C.8.c.i.(2)	Add subsection (c): the volume of runoff required to be stored to reduce runoff by at least 80% on an annual basis given the BMP drawdown time	Rainwater harvest systems and infiltration systems over low permeability soils may take greater than 48 hours to drain down completely. When drawdown times are longer, it may be necessary to increase the storage volume of the BMP to achieve performance on par with systems retaining the 85th percentile storm with a drawdown time of 48 hours or less.

Section	Proposed Change or Comment	Justification
C.8.c.i.(3)	Change lower infiltration rate threshold to 0.5" per hour.	The lower infiltration rate threshold of 0.15 inches per hour is extremely low. A 0.5 inch per hour lower rate would be more consistent with other permits in Southern California. Typically, factors of safety between 2 and 8 are applied to the measured infiltration rate to produce a design infiltration that is used to size the infiltration BMP. This factor of safety combined with a target infiltration rate of 48 hours could result in very large systems with allowable effective depths of as little as one inch.
C.8.c.i.(5)	Remove "worse case scenario" language with requirement that estimate of effectiveness be based on the average annual runoff reduction as demonstrated through daily continuous simulation modeling.	Section XII.B.4 contains water quality design storm requirements. It does not specify any level of treatment that is required by BMPs treating this design storm. This addition is needed to ensure that BMPs are effective in controlling the pollutants that are expected on site.

Allan Automatic Sprinkler Corporation of So. Cal.

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April 16, 2012

Los Angeles Regional Water Quality Board
Metropolitan Water District Headquarters
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Attn: Renee A. Purdy
rpurdy@waterboards.ca.gov

Ivar Ridgeway
iridgeway@waterboards.ca.gov

My name is Jack Thacker, I'm a Fire Protection Engineer and I have been in the fire protection industry for over 50 years. I recently served on the State Fire Marshal's Task Force that developed the "Water Based Fire Protection Systems Discharge Best Management Practices Manual" dated April 19, 2011.

This document was presented at your April 5th Work Shop held at MWD by Mr. James Parsegian of the California State Fire Marshal's office. The document was developed over 18 months by a Task Force consisting of Fire Departments, Water Purveyors, and C-16 Contractors, the entities that are performing the testing and maintenance of fire protection systems.

The reasoning behind the development of the document was to provide guidance to those fire protection contractors who are performing inspection, testing and maintenance (ITM) on fire protection systems as mandated by the adoption of NFPA 25 where water discharge would be considered a problem to certain Regional Water Quality Boards.

Please see Attachment "A" which lists the Task Force Members and of particular notice should be made that Bill Hereth of the State Water Control Board, played a significant part in the developed of the BMP's.

Obviously, the April 5th Work Shop was not the proper venue to review the State Fire Marshal's BMP's but I feel that needs to take place. Of particular concern in your document is footnote 10 on page 4 which precludes any fire protection discharge, regardless of volume or quality of water, from being discharged to the MS4. This is exactly where the State Fire Marshal's Task Force began but after each stakeholder became familiar with the issues, and the concerns of each other were addressed, it was obvious that all discharges need not be precluded.

I believe the proper thing to do would be to have our Task Force meet with Los Angeles Regional Quality Board to reach the common goal of the issues related to non-storm water discharge.

Sincerely,

ALLAN AUTOMATIC SPRINKLER CORPORATION OF SO. CAL.

Jack Thacker

cc: Ben Ho – Cal Fire
James Parsegian – State Fire Marshal's Office
Bruce Lecair – NFSA

Tonya Hoover – Cal Fire
Don Becka – Qualco Fire
Peter Hulin – Superior Fire

Acknowledgements

ATTACHMENT "A"

This Best Management Practices Manual was developed through the accumulation of research, analysis, and collaborative efforts of the many disciplines involved with the State Fire Marshal Water Discharge for Fire Protection Task Force.

Included in those efforts are (in alphabetical order) the: Allan Automatic Sprinkler Corporation of Southern California, California State Water Resources Control Board, City of Beverly Hills Waste Water Treatment Program, City of El Segundo Fire Department, City of Healdsburg Fire Department, City of Torrance Fire Department, East Bay Municipal Utilities District, National Automatic Sprinkler Industry Promotion, National Fire Sprinkler Association, Northern California Fire Prevention Officers Association, Paraclete Fire Safety Incorporated, Riverside County Fire Department, Sonoma County Permit and Resource Management Department, and Southern California Fire Prevention Officers Association.

Water Discharge for Fire Protection Task Force Members

James Parsegian, Co-Chair, Office of the California State Fire Marshal
James Carver, Co-Chair, City of El Segundo Fire Department
Bruce Lecair, Interim Co-Chair, National Fire Sprinkler Association
Allen Quirk, Paraclete Fire Safety Incorporated
Bill Hereth, California State Water Resources Control Board
Bob Gebel, City of Torrance Fire Department
David Eugene Kimbrough, Castaic Lake Water Agency
Jack Thacker, Allan Automatic Sprinkler Corporation of Southern California
Jennifer Lorenzo, Office of the California State Fire Marshal
John C. Dettle, City of Torrance Department of Public Works
Josette Descalzo, City of Beverly Hills Waste Water Treatment Program
Linda Collister, City of Healdsburg Fire Department
Randy Collins, City of Healdsburg Fire Department
Reg Cullen, Sonoma County Permit and Resource Management Department
Robert Livermore, TNT Fire Protection
Ron Stevenson, Allan Automatic Sprinkler Corp. of Southern California
Steve Hart, National Automatic Sprinkler Industry Promotion
Walter Brandes, Riverside County Fire Department
William R. Kirkpatrick, East Bay Municipal Utilities District

From: Cathy Hollomon <chollomon@scwater.org>
To: <rpurdy@waterboards.ca.gov>, <sunger@waterboards.c.gov>
Date: 4/17/2012 3:24 PM
Subject: LA County MS4 Permit - Non-Storm Water Discharge

I am writing in regards to the proposed Los Angeles County Municipal Separate Storm Sewer System National Pollution Discharge Elimination System permit (MS4 Permit) - Non-Storm Water Discharge Prohibitions. The MS4 Permit is important for the protection of our critical water resources and we support the continued advancement of this effort. However, as a water retailer, we are quite concerned about the implications of some of the changes being proposed and that, in general, the text is often not clear and difficult to interpret.

Specifically our concerns are:

1) Paragraph 3 (pages 1 - 4) describe which Non-Storm Water (NSW) discharges do not have to be banned by MS4 permittees (i.e. an Authorized Non-Storm Water) when the MS4 permittee does not discharge into an Area of Special Biological Significance (ASBS). The paragraph is divided into two sections; those authorized NSW discharges which are covered by an existing NPDES Permit and those that are not so covered. The comments are these:

- a. In sub-section ix unplanned discharges from CWSs such as broken mains and sheared hydrants should be included.
- b. In sub-section xvi non-emergency fire flows such as training should be included to match the language found in Table X.
- c. In footnote 10, the ban on "building fire suppression system maintenance" should be removed.

2) Paragraph 5 (pages 5 - 6) requires MS4 permittees "develop and implement procedures to ensure" that all of the Authorized NSWs in Paragraphs 3 & 4 comply with the requirements in Table X. In subsection a. it states that MS4 permittees ensure that "all necessary permits and water quality certifications are obtained by a discharger prior to discharge to the MS4..."

a. It is not clear what this means. The phrase "necessary permits and water quality certifications" appears several times in the text, including Table X, but is undefined. Paragraph 5 appears to apply to all authorized NSW discharges but in Table X it only appears in two discharge categories, "flows from riparian habitats and wetlands" and "diverted stream flows". If it is only for these two NSW flows, the text should say so clearly and if not, that should be clear as well. The phrase should also be defined.

3) Paragraph 7 (on pages 6 - 7) requires permittees to evaluate outfall monitoring data required in Table X. If the permittee determines that a "category" of authorized NSWs is causing an exceedance, then the entire category has to be either prohibited, have additional discharge conditions applied, or require the discharger to obtain an NPDES permit.

- a. The language uses the term "category" and "discharger" interchangeably but there may be several dischargers in a given category. It seems unreasonable to require all dischargers in any one category to have to take remedial actions if only one discharger is causing the exceedance.
- b. Not all discharges from a single discharger are necessarily the same. In the case of CWSs, different wells have different water qualities. If only one particular discharge location is causing a problem, it does not seem reasonable that all discharge locations and dischargers in given category should be forced to take remedial actions
- 4) Paragraph 8 (pages 7 - 8) is the key section for CWSs. In it, it says that if there is an exceedance which is caused by a discharge from a CWS, then the MS4 permittee is not in violation of the permit (which means that the RWQCB cannot issue an NOV and they cannot be sued by third parties) and so they would have no reason to limit or ban our discharges. However, MS4 permittees would then have to take at least one of the following actions: A) Evaluate the long-term impact of the discharger; B) Identify alternative discharge routes; C) Impose additional conditions to those found in Table X; D) Require the CWS to obtain an NPDES Permit.
- a. This paragraph is limited to dischargers who are "not otherwise regulated by a separate NPDES permit", i.e. discharges covered under an NPDES permit are not given regulatory relief. There does not appear to be any particular reason for this limitation. This would not eliminate the conflict between CWSs and MS4 permittees when there is an NPDES permit involved and provide further disincentives for CWSs to obtain NPDES permits.
- b. This is confusing. Consider a CWS with two wells, one with an NPDES permit and one without. Discharges from the one well and the distribution system would enjoy "regulatory relief" but the other well would not?
- c. Is this a "single-pass" process? It can be read that the MS4 permittee only receives regulatory relief the first time that an exceedance is found to have been caused by discharge from a CWS, not afterwards.
- d. Can an MS4 permittee legally require a CWS to obtain an NPDES Permit? What would be the enforcement mechanism? It implies that each MS4 permittee would have to require CWSs obtain a local discharge permit to operate within that particular jurisdiction.
- e. Each time an MS4 permittee required a CWS to obtain an NPDES permit, the MS4 permittee would lose more regulatory relief.
- f. Which NPDES Permit would be required? This would create a complex patchwork situation with each MS4 permittee requiring different permits and with other requiring none.
- g. This would create a crazy patchwork approach with each MS4 permittee taking completely different approaches. CWSs operating in several jurisdictions would face multiple and conflicting requirements.
- h. Liability for MS4 permittees in a watershed is "joint and several" which means all MS4 permittees share the liabilities equally, they face the same fines no matter how much water they discharge. They thus have a vested interest in approaching this issue in a uniform fashion. This permit does not allow for this approach.
- i. The provisions for advanced notification and record keeping and sharing only work on a watershed basis. Having 200 plus CWSs notifying 80 plus CWSs about planned discharges and sharing records

would be chaotic and overwhelming except on a watershed basis.

j. Being required to obtain an NPDES permit is exactly what the vast majority of CWSs do not want to do.

5) Non-emergency fire flows need to be mentioned in Paragraph 9.

Thank you very for the opportunity to submit these comments.

Cathy Z. Hollomon

Cathy Z. Hollomon

Associate Water Resources Planner/

Water Quality Specialist

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April 18, 2012

VIA E-MAIL & FIRST CLASS MAIL

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

**Re: Los Angeles County MS4 Permit - Comments on Staff Working
Proposal on Non-Storm Water Discharge Provisions**

Dear Ms. Purdy and Mr. Ridgeway:

We represent the Public Water Agencies Group (the "Group"), an association of seventeen public water suppliers located throughout Los Angeles County (fifteen of which are located in the Los Angeles Region).¹ We also represent California Domestic Water Company, Lincoln Avenue Water Company, Rubio Cañon Land and Water Association, Tract 349 Mutual Water Company and Valencia Heights Water Company, mutual water companies that provide water service in various communities within the Los Angeles Region (collectively, the "Companies").

Pursuant to your March 28, 2012 transmittal letter concerning the above-referenced Staff Working Proposal, this letter sets forth the Group's and Companies' comments to that proposal.

- A. Section 3(b)(ix) (page 3): unplanned discharges, including, but not limited to, broken water mains and sheared fire hydrants, should be added to subdivision (ix).
- B. Section 3(b)(xvi) (page 4): based on the statements made at the April 5, 2012 Board workshop on these non-storm water discharge issues, non-

¹ The fifteen Public Water Agencies Group members located within the Los Angeles Region are: Crescenta Valley Water District, Kinneloa Irrigation District, La Habra Heights County Water District, La Puente Valley County Water District, Newhall County Water District, Orchard Dale Water District, Pico Water District, Rowland Water District, San Gabriel County Water District, San Gabriel Valley Municipal Water District, Sativa-Los Angeles County Water District, South Montebello Irrigation District, Three Valleys Municipal Water District, Valley County Water District and Walnut Valley Water District.

Ms. Renee Purdy
Mr. Ivar Ridgeway
Los Angeles Regional Water Quality Control Board
April 18, 2012
Page 2

emergency fire flows, such as discharges for fire department training purposes, should be added to subdivision (xvi). In addition, footnote 10 on page 4 should be deleted and discharges from building fire suppression maintenance (i.e., sprinkler line flushing) should also be added to subdivision (xvi).

- C. Section 5(a) (page 5): in the first two lines of that subdivision, the phrase “all necessary permits and water quality certifications” is undefined and thus is vague. Thus, that phrase needs to be defined and/or further expanded, and, at a minimum, “if required” must be added after “all necessary permits.” That phrase also appears in Table X as a condition/BMP applicable to only two discharge categories: “flows from riparian habitats and wetlands” and “diverted stream flows.” The inclusion of that phrase as to only those two categories creates uncertainty and potential confusion with respect to application of Section 5(a) – i.e., does it only apply to those two discharge categories, or does it apply to all discharge categories? That needs to be clarified in the text of Section 5(a).
- D. Section 6 (page 6): advance notification is not possible for unplanned discharges. Thus, a carve-out from that advance notification requirement needs to be added to Section 6 for such unplanned discharges. That could be accomplished by adding “where feasible” in the second line between “in this Order,” and “the Permittee.”
- E. Section 7 – second paragraph (pages 6 and 7): as drafted, Section 7 states it applies to the “category” of the discharge. Thus, that section’s requirements would apply to an entire category of discharges, even if the “category” of discharge is generally innocuous and the exceedance identified is a one-time abnormal occurrence resulting from one discharger’s discharge. Such a structure may unfairly penalize other dischargers who had no role in the subject exceedance, by subsequently prohibiting those dischargers’ discharges or requiring those other dischargers to comply with potentially more onerous conditions. We therefore believe it is not appropriate or reasonable to have an entire “category of discharge” be the trigger for a Permittee’s subsequent remedial actions.
- F. Section 8 – first paragraph (page 7): this section distinguishes between a potable water supply and distribution system that is not otherwise regulated under a separate NPDES permit and one that is. However, that

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Mr. Ivar Ridgeway
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distinction ignores the fact that in a given system, some facilities may be operating under an NPDES permit, while other facilities are not. Thus, we do not believe that distinction is justified, and it, in fact, penalizes community water systems that are regulated under a separate NPDES permit by making them ineligible for the regulatory relief provided to other non-NPDES permitted community water systems. Whether or not a community water system has a separate NPDES permit in place should not impact its eligibility for the regulatory relief otherwise provided under Section 8. In addition, the scope of the regulatory relief should also be expanded to include unplanned (i.e., accidental) discharges from community water system facilities, which are beyond the control of the community water system.

Another concern we have is that Section 8, as initially drafted, also would likely create a patchwork of regulation, where a community water system operating in more than one city/MS4 Permittee may be subjected to different requirements from another city/MS4 permittee. Section 8 needs to be revised to address these issues, and those revisions should include applying that regulatory relief to NPDES permit holders.

Lastly, it appears that the regulatory relief provided under Section 8 is a one-time only relief and that in the event of any short-term exceedance from a legally required discharge (see above regarding the need to include unplanned/accidental discharges among those to receive the regulatory relief) will result in the Permittee being required (i.e., use of the term "shall") to take one of the alternative actions regardless of the circumstances underlying the exceedance. The Permittee should have discretion in reviewing the facts and circumstances of a given exceedance to ascertain the appropriate steps to then take.

- G. Section 8(a)(iv) (page 8): subdivision (a)(iv) should be deleted. While we believe it is appropriate for Permittees to be empowered to take some remedial actions under the MS4 permit provisions (i.e., those listed in subdivisions (i), (ii) and (iii) of Section 8), authorizing a Permittee to require a community water system to obtain coverage under a separate NPDES permit raises a host of issues, including, but not limited to, how that Permittee would determine the appropriate type of permit and what conditions should be included in that permit. That authority would also create situations where a community water system could be required to

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Mr. Ivar Ridgeway
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obtain different permits by different Permittees within whose jurisdiction its system discharges. A more certain and uniform system is needed.

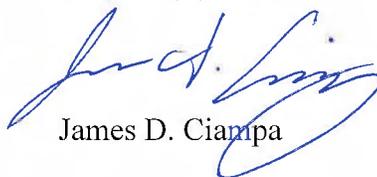
- H. Section 9 (page 8): non-emergency fire flows, such as discharges for training purposes, should be added to Section 9, as should discharges from building fire suppression maintenance (i.e., sprinkler line flushing).
- I. Table X: As a general comment, we believe it is more efficient to incorporate by reference industry-standard BMPs into the permit, rather than listing various conditions and BMPs in the permit itself. Thus, if changes are made in the future (e.g., new BMPs are established or existing BMPs are revised), the permit will not need to be amended. We also offer the following specific comments to items in Table X:
1. “All Discharge Categories” (page 9): It is not in the best interests of community water systems to waste the water they deliver. Unfortunately, however, in most cases, capturing their non-storm water discharges for recharge or reuse simply is not economically or technically feasible. Also, disposal to the sanitary sewer is itself a complicated and costly process and the sanitary sewer system operators typically disfavor accepting non-waste water. Similarly, it is not feasible to conclusively “segregate” community water systems’ non-storm water discharges from potential sources of pollutants, which can be interpreted very broadly. That condition/BMP should be revised to require a discharger to use its best efforts, or act “to the maximum extent practical.”
 2. “Potable Drinking Water Supply and Distribution Releases” (pages 13 and 14):
 - (a) With respect to advance notification on page 13, 72 hours may not be a practical period for such notification in some planned discharge circumstances. We suggest revising the required notification to “at least 24 hours’ notice” for a planned discharge.
 - (b) Concerning mobilization of pollutants on page 13, the provision should identify the appropriate party (we believe it should be the Permittee) to ensure those monitoring procedures.

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Mr. Ivar Ridgeway
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- (c) Concerning the “to be determined” volume to trigger record-keeping on pages 13 and 14, we recommend that Regional Board staff meet with community water system representatives to discuss an appropriate level to trigger those record-keeping requirements. In addition, the practicality of some of the other listed conditions can also be discussed to ensure those conditions are economically and technically feasible.
- (d) With respect to the cleaning out of MS4 inlets and outlets on page 14, further discussion with the L.A. Permit Group and community water systems’ work group should occur to ensure that consensus is reached on this issue.

Thank you for the opportunity to provide the foregoing comments on the Group’s and Companies’ behalf. Please let me know if you have any questions on them. We look forward to continuing to work with you to develop appropriate permit language that ensures that Los Angeles County’s MS4 operators, community water systems and fire departments are able to continue to meet their statutory and regulatory requirements in a cost-effective environmentally prudent manner, while also addressing the Regional Board’s concerns.

Very truly yours,



James D. Ciampa

JDC/cc

cc: Public Water Agencies Group Members (via e-mail only)
Mr. Jim Byerrum, California Domestic Water Company (via e-mail only)
Mr. Bob Hayward and Ms. Jennifer Betancourt, Lincoln Avenue Water Company
(via e-mail only)
Ms. Jan Fahey, Rubio Cañon Land and Water Association (via e-mail only)
Mr. Martin Susnir, Tract 349 Mutual Water Company (via e-mail only)
Mr. Dave Michalko, Valencia Heights Water Company (via e-mail only)
David Kimbrough, Ph.D, Pasadena Water and Power (via e-mail only)

*Lagerlof
Senecal
Gosney & Kruse*
LLP



City of Downey

April 19, 2012

Rene Purdy,
Ivar Ridgeway
California Regional Water Quality Control Board
Los Angeles Region
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Los Angeles CA 90013

rpurdy@waterboards.ca.gov
iridgeway@waterboards.ca.gov

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CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION
FUTURE UNLIMITED

Subject: Comments on the Staff Working Proposals 3/28/12 for Non-Stormwater Discharges

Dear Ms. Purdy and Mr. Ridgeway:

The City of Downey would like to again thank you for the opportunity to provide comments on the staff working drafts of the next MS4 permit. Similar to the comments on the Minimum Control Measures, the City's comments below are limited to the Non-Stormwater Discharge Staff Working Proposal.

1. As you know, the City of Downey has submitted its own Report of Waste Discharge. As such, the City intends to develop its own outfall or storm drain monitoring plan. The City of Downey is effectively situated between three watersheds and has very little flow-through runoff from other jurisdictions. The City does not wish to be included in the same "generic" outfall monitoring requirements as other MS4 cities. Provisions for any approved monitoring plan prepared and submitted by the City of Downey and subsequently approved by the Regional Board's Executive officer must be able to supersede "generic" MS4 permit provisions.
2. Part III.A.5 Page 5 indicates that Permittees shall develop procedures to ensure that all conditionally authorized non-storm water discharges comply with applicable conditions. How does the Regional Board intend to ensure that School Districts, General Construction and General Industrial sites, and other facilities that may be outside the jurisdictional control of the Permittees (i.e., City of Downey) abide by the same requirements?
3. Similar to comment 3 above, the City understands that there are considerable discussions taking place regarding the requirements of the State Department of Public Health for water purveyors to flush their lines and perform other operational discharges on a regular basis. It is critical that the Regional Board resolve this issue in a way that allows water purveyors to meet Health Department regulations while at the same time does not place Permittees in jeopardy if these discharges do not meet TMDL or other MS4 monitoring provisions. This provision must also extend to accidents (i.e. sheared fire hydrants, other) and water pipeline leaks which occur from time to time.

April 19, 2012

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4. Part III.A.8 – Under the current proposal the City is both a Permittee as well as a water purveyor which operates its own water system consisting of approximately 300 miles of water mains and 20 active groundwater wells. Flushing as part of water distribution system construction, maintenance, and testing as well as for groundwater well purging and rehabilitation is absolutely paramount for the City to ensure the delivery of safe drinking water to its more than 110,000 customers. As both a Permittee and water purveyor, the City appreciates the recent efforts by the Regional Board in working with cities and water purveyors to allow for TMDL exceedances by the Permittee where such exceedances are the result of necessary water purveyor activities. However, Parts III.A.8.a. and III.A.8.b. currently require the Permittee to impose conditions to eliminate such exceedances once one has occurred. Being that flushing by water purveyors is primarily routine and necessary to properly maintain a water system and TMDLs for some constituents are set even lower than what water purveyors are required to serve to the human population, it is both impractical and cost prohibitive to the tax paying citizens to require such conditions. Such requirements also defeat the purpose of exempting Permittees and water purveyors from these exceedances, since once one occurs, the water purveyor will no longer be able to operate its water system in the same fashion regardless of what BMPs are being implemented. The City requests that Parts III.A.8.a. and III.A.8.b. be removed in their entirety leaving only Section III.A.8. which could use some modification to streamline documentation requirements.
5. There is mention of recycled water irrigation runoff in the working draft but no mention of recycled water distribution system flushing resulting from construction, maintenance, and operation. Recycled water received by and used in the City is of high quality; both tertiary treated and disinfected. There has been increasing focus by stakeholders including regulatory agencies to maximize the use of this alternative water source in order to meet State mandated water conservation goals by streamlining the approval process. Given the amount of costly treatment already provided to this water source and the importance in maximizing its use, it is important that the Regional Board treat recycled distribution discharges in the same fashion as potable discharges by exempting Permittees from any resulting exceedances. Doing so will also minimize impacts to rate payers which would otherwise shoulder the burden of the City having to implement cost prohibitive recycled water discharge control measures.

As these comments are provided in reference to the "Staff Working Proposal", the city may have additional comments in the future as the permit process progresses. Thank you again for the opportunity to comment. Please contact me if you have any questions.

Sincerely,



John Oskoui, P.E.
Assistant City Manager/Director of Public Works

April 18, 2012

Renee Purdy
Ivar Ridgeway
Regional Programs Section
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Via Electronic Mail

RE: Los Angeles County Municipal Separate Storm Sewer System (“MS4”) Permit – Staff Working Proposal on Non-Storm Water Discharge Prohibitions (March 28, 2012)

Dear Ms. Purdy and Mr. Ridgeway,

Santa Monica Baykeeper (“Baykeeper”) has reviewed the Los Angeles Regional Water Quality Control Board (“Regional Board”) staff’s working proposal on the new Los Angeles County (“LA County”) MS4 Permit’s non-storm water discharge provisions, dated March 28, 2012.

While we support the proposed definitions of non-storm water and storm water and staff’s attempt to list all individual and general NPDES permits regulating non-storm water discharges, we oppose the proposed list of “conditionally authorized” non-storm water discharges and the continued inclusion of landscape irrigation flows in that list. Moreover, we urge staff to abandon the proposed “safe harbor” for violations of Receiving Water Limitations (“RLWs”) and/or Water Quality Based Effluent Limitations (“WQBELs”) caused by a so-called “short-term exceedance” resulting from a non-storm water discharges from a potable water supply or distribution system because it is unlawful. Baykeeper appreciates the opportunity to provide staff with our comments on the working proposal.

I. The New LA County MS4 Permit Must Contain Clear Requirements to Effectively Prohibit Non-Storm Water Discharges

More than two decades after the first LA County MS4 Permit was issued and despite the Clean Water Act’s clear requirement to “effectively prohibit non-storm water discharges,” 33 U.S.C. § 1342 (p)(3)(B), non-storm water discharges to and from the MS4 continue to be a daily occurrence in LA County. While numerous TMDLs specifically directed at reducing and eliminating the dry weather violations of water quality standards in LA County waterbodies have been adopted by the Regional Board and the EPA in the last ten years, monitoring data demonstrates that TMDLs and water quality standards are persistently exceeded in days with no precipitation. *See e.g.* April 5, 2012 LA County MS4 Permit Workshop, Regional Board Staff Presentation, Slide 8. As Regional Board staff itself

observed, LA County MS4 Permittees' efforts to eliminate non-stormwater discharges have failed and there is "little done to identify the sources and characteristics" of non-stormwater discharges that persistently impair our waters, harm aquatic life and endanger public health. *Id.*; December 15, 2011 LA County MS4 Permit Workshop, Regional Board Staff Presentation, Slide 5.

In light of this persistent problem, the new LA County MS4 Permit's non-storm water discharge provisions must ensure that non-storm water discharges are eliminated as required by the Clean Water Act's mandate to effectively prohibit non-storm water discharges. Rather than eliminating non-storm water discharges, however, staff proposes a significant increase from the current LA MS4 Permit in the number of exempted non-storm water discharges from 12 to roughly 25.

Further, staff's working proposal fails to provide legal support for its claim that the Clean Water Act's prohibition of non-stormwater discharges does not apply to "discharges [that] are either specifically authorized by a separate individual or general NPDES permit or conditionally authorized in accordance with sections A.3 through A.6." Staff's Working Proposal on LA County MS4 Permit Non-Storm Water Discharge Prohibitions ("Staff's Working Proposal") at 1. Neither section 402(p) of the Clean Water Act, nor its implementing regulations under 40 C.F.R. § 122.26(d)(2)(iv)(B)(1) allow or create exemptions from the prohibition against non-stormwater discharges. In fact, even the legal authority cited in staff's working proposal as support for "conditionally authorizing" more than two dozen types of non-storm water discharges, clearly states that "[u]ltimately, 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. Consequently, the new LA County MS4 Permit may not contain any conditional exemptions to the Clean Water Act's directive to effectively prohibit non-storm water discharges.

II. Landscape Irrigation Should Be Removed From the List of Conditionally Authorized Discharges

Though we believe the Regional Board does not have authority to exempt specific non-storm water discharges for section 402(p)'s prohibition on non-storm water discharges, we are specifically concerned with the proposed wholesale exemption of such non-storm water flows as dewatering of decorative fountains and pool /spa discharges and, especially, landscape irrigation. Lawn irrigation has been identified as a "hot spot" for nutrient contamination in urban watersheds—lawns "contribute greater concentrations of Total N, Total P and dissolved phosphorus than other urban source areas ... source research suggests that nutrient concentrations in lawn runoff can be as much as four times greater than other urban sources such as streets, rooftops or driveways."¹ The fact that landscape

¹ Center for Watershed Protection (March 2003) *Impacts of Impervious Cover on Aquatic Systems* at 69; see also H.S. Garn (2002) *Effects of lawn fertilizer on nutrient concentration in runoff from lakeshore lawns, Lauderdale Lakes, Wisconsin*. U.S. Geological Survey Water-Resources Investigations Report 02-4130 (In an investigation of runoff from lawns in Wisconsin, runoff from fertilized lawns contained elevated concentrations of phosphorous and dissolved phosphorous); Orange County Watershed and Coastal Resources Division (August 18, 2006) Model Aliso Creek

irrigation was recently removed from the list of exempted discharges in the Orange County MS4 Permit, Order No. R9-2009-0002, NPDES Permit No. CAS0108740, a permit regulating MS4 discharges in a region which is very similar to LA County, is a clear indication that landscape irrigation is a source of pollutants and should no longer be exempted in the new LA County MS4 Permit.

III. There Is No Legal Authority for the Proposed Exemption From Liability for “Short Term Exceedance” of Applicable RWLs and/or WQBELs Resulting From A Non-Storm Water Discharge from A Potable Water Supply or Distribution System

In addition to significantly expanding the list of “conditionally authorized” non-stormwater discharges, staff also proposes an exemption from liability for “short-term exceedance” of RWLs and/or WQBELs caused by non-storm water discharge from a potable water supply or distribution system “not otherwise regulated by a separate NPDES permit, but required by state or federal statute and/or regulation.” Staff’s Working Proposal at 7. Apart from the obvious difficulties associated with defining “short-term exceedance,” and the additional layer of complicated requirements associated with this “exemption” added to an already complicated and confusing permit, staff’s proposal directly contradicts the Clean Water Act’s requirements and EPA regulations.

Non-storm water discharges must be effectively prohibited. 33 U.S.C. § 1342 (p)(3)(B). Such discharges must either be removed from the MS4 system or “become subject to an NPDES Permit.”⁵⁵ Fed. Reg. at 47995. Non-storm water discharges through the MS4 not covered by an NPDES permit are by definition “illicit discharges.” *Id.* There is no authority for exempting violations of water quality standards or TMDL or the Clean Water Act’s prohibition on non-storm water discharges caused by such “illicit discharges.” The Regional Board has only two options for regulating such discharges – to prohibit them or to issue an NPDES permit prescribing specific requirements for these discharges.

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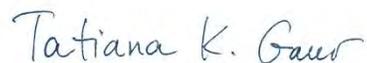
Watershed Action Plan, at 2-13 (“Based on other studies performed in Orange County, it is suspected that organophosphate pesticides may be a significant component of aquatic toxicity in the Aliso Creek storm samples.”)

IV. Conclusion

Staff's working proposal on the LA County MS4 Permit non-storm water discharge prohibitions does not fully comport to the letter and spirit of the Clean Water Act. The proposal should be significantly revised to ensure the new LA County MS4 Permit is lawful and finally implements the Clean Water Act's mandate to eliminate non-storm water discharges to and from the MS4. Only then can the Regional Board ensure that water quality standards and TMDLs in the Los Angeles Region are met and our precious water resources are protected.

We are looking forward to working together with the Regional Board in this endeavor.

Sincerely,



Tatiana Gaur
Staff Attorney
Santa Monica Baykeeper



CITY OF SIGNAL HILL

2175 Cherry Avenue ♦ Signal Hill, CA 90755-3799

18 April 2012

VIA EMAIL

Renee Purdy
State Water Resources Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90023

rpurdy@waterboards.ca.gov

Subject: Comments on Proposed Non-Stormwater Discharge Language for Reissued Los Angeles County MS4 Permit

Dear Ms. Purdy:

I am writing on behalf of the City of Signal Hill to provide comments on the non-stormwater discharge prohibition language currently being considered by Regional Water Board staff for inclusion in the reissued Los Angeles County MS4 Permit. Thank you for the opportunity to provide these comments. Signal Hill has applied for a separate MS4 permit similar to the City of Long Beach. We are providing comments based on the precedent setting nature of your proposal.

The City is both an MS4 permittee and a water purveyor. The City of Signal Hill's Water Operations program is a utility program responsible for the production, distribution, administration, and customer service of the water system. The program is responsible for the operation and maintenance of approximately 50 miles of pipeline, three reservoir facilities, and two wells. We are impacted both by MS4 permit requirements and requirements placed on municipal water service providers.

Since we do have our own water operations, we are particularly concerned with the conflicts between the proposed requirements for discharges of potable water and the legal operation of a water system in Los Angeles County. We also have concerns regarding conditional discharges, particularly related to fire protection services and landscape irrigation. However, first we have a general observation about the excessive discharge prohibition language in the March 28, 2012 Staff Working Proposal.

Proposed Permittee Requirements Exceed the Clean Water Act Mandate

Staff's intent of reducing non-stormwater discharges is good. However, the language proposed for the reissued MS4 permit goes beyond the mandate in the Clean Water Act (CWA) and the Code of Federal Regulations to effectively eliminate non-stormwater discharges into the storm drain system in two ways. First, it inappropriately extends the effective prohibition of non-stormwater discharges to discharges from the MS4. Both the CWA and the regulations restrict the effective prohibition of non-stormwater discharges to discharges into the storm drain system (MS4). Congress very clearly specified that discharges from the MS4 are to be controlled to the maximum extent practicable (MEP). All references to effectively prohibiting non-stormwater discharges from the MS4 should be removed from the draft permit language.

Secondly, the proposed language places severe restrictions on requirements for water services and firefighting services mandated by other existing laws, which puts cities in jeopardy. We believe that Board staff does not intend to construct permit requirements in a manner that will place cities in violation of other health and safety laws, but that is currently the case.

Potable Water

The City of Signal Hill agrees with the LA Permit Group's assertion in its April 13, 2012 comment letter that there should be further discussion and collaboration regarding how potable water is treated in the proposed non-stormwater discharge prohibition part of the permit. As was apparent at the April 5, 2012 workshop, water purveyors are concerned that the proposed regulations are overly prescriptive and could have a detrimental impact on legitimate and necessary operations of potable water service providers. It is absolutely necessary for water supply agencies to be able to flush water lines and test fire hydrants without undue restrictions or conditions to be able to operate in accordance with State Health Department requirements.

Other Detailed Comments

- Section III.A.1.c – The definition of illicit discharges should also exempt authorized non-stormwater discharges as defined in Section III.A.1.d.
- Section III.A.3 – Fire hydrant testing should be specifically exempted from effective prohibition because it is both a necessary water system operational practice and a safety practice required for effective fire fighting preparedness.
- Section III.A.5 – The first sentence of this section should be revised to read, "Each permittee shall develop and implement procedures designed to ensure..." The second sentence should be rewritten to remove "and from the MS4 into the receiving waters."

City of Signal Hill Comments on Staff Working Proposal
Regarding Non-Stormwater Discharge Language for
Greater Los Angeles County MS4 Permit
18 April 2012
Page 3 of 3

- Section III.A.5.b – This provision should be rewritten to make clear that the requirement to explore and consider alternatives to the discharges to the MS4 does not apply to natural flows.
- Section III.5.c – Should be rewritten to recognize that municipalities have no direct control over schools and cannot legally implement procedures to minimize their discharge of landscape irrigation water into the MS4.
- Table X – The proposed requirement to “Segregate authorized non-stormwater discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving waters” (page 9) specified for all discharge categories and natural springs is overly broad and may be impossible in some cases. We would appreciate the opportunity to discuss this with staff in order to understand the intent and develop workable substitute language.
- Table X – The conditions specified for landscape irrigation using potable water (page 12) should be reconsidered. The General Condition requiring implementation of an ordinance specifying water efficient landscape standards as well as outreach and education are reasonable. However, the Board needs to recognize that it will be virtually impossible to eliminate all discharges of landscape irrigation water and that even to minimize such discharges will take a long time. Many irrigation systems are old and will need to be rebuilt to minimize discharges. In addition, the proposed condition to utilize delivery rates that do not exceed the infiltration rate of the soil should be deleted. This might work for new installations, but it is impractical for existing irrigation systems where the infiltration rates of the soil are unknown.

Thank you again for the opportunity to provide these comments.

Sincerely,

CITY OF SIGNAL HILL



Steve Myrter, P.E.
Director of Public Works



PASADENA WATER AND POWER

April 18, 2012

Ms. Renee Purdy, Section Chief
California Regional Water Quality
Control Board – Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

Subject: Los Angeles County MS4 Permit

Dear Ms. Purdy:

Please find below comments from Pasadena Water and Power in regards to the proposed language for the Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit. The comments are broken up into four parts, a statement of the problem that Community Water Systems (CWSs) face because of the MS4 Permit, a proposed solution, general comments on the overall structure of the regulatory scheme to resolve those problems, and then specific comments on particular elements.

1) Statement of Problem

- a. The existing and proposed language in the MS4 Permit puts a large incentive on MS4 Permittees to achieve an objective of "Zero Discharge of Non-Stormwaters" (NSW). MS4 Permittees operate under threat of Notice of Violations (NOVs) from the Regional Water Quality Control Board (RWQCB) and third party lawsuits (TPLs), which have the potential for large penalties if they fail to comply with the MS4 NPDES Permit. The only secure "Safe Harbor" that an MS4 Permittee has when confronted with an exceedance in a receiving water is to demonstrate that no discharges had occurred. This can only be achieved if in fact there have been no NSW discharges.
- b. Discharges from CWSs and Fire Departments (FDs) are legally required to occur by Federal and State statute, regulation, and permit. As such, the discharges from CWSs and FDs prevent MS4 Permittees from complying with MS4 Permit and place them in jeopardy of NOVs and TPLs. As a result, MS4 Permittees have taken actions against CWSs to curtail or eliminate discharges. Examples of this include CWSs being fined by

MS4 Permittees, having their discharges banned by MS4 Permittees and being required to obtain NPDES permits and Waste Discharge Requirements. This puts CWSs and FDs in double jeopardy, failing to discharge would place them in violation of the Safe Drinking Water Act, but discharging would place them in violation of the local requirements for achieving compliance with the Clean Water Act.

2) Proposed Solution

- a. The key to resolving this conflict is for the MS4 Permit to give regulatory relief to MS4 Permittees for those situations where an exceedance in a receiving water was caused by or contributed to by a discharge from a CWS or FD. In exchange for this relief, MS4 Permittees would take on additional responsibilities – specifically ensuring that CWSs and FDs complied with enhanced Best Management Practices (BMPs).
- b. CWSs and FDs would get regulatory relief from the MS4 Permittees for their discharges.
- c. In exchange for this relief CWSs would put into practice enhanced BMPs. MS4 Permittees and CWSs would sign a Memorandum of Understanding (MOU) binding them to the practice of these enhanced BMPs. The MOU would be the tool MS4 Permittees would use to enforce its new responsibilities.
- d. These BMPs include Advanced Notification to MS4 Permittees by CWSs of Planned Discharges, Dechlorination of Discharges, Sediment Control Procedures, Record Keeping and Record Sharing. This will provide a mechanism for helping MS4 Permittees track flows and hopefully prevent difficulties complying with the MS4 Permit.
- e. For this proposal to work, it must be organized on a watershed basis.
 - i. Liability for compliance with Total Maximum Daily Loads (TMDLs) and Water Quality Based Effluent Limitations (WQBELs) is “joint and several”, which means that all MS4 Permittees in a given watershed are equally liable for any exceedance of a Receiving Water Limitation (RWL). The information collected under and provided for under the MOU and BMPs would be needed by all MS4 Permittees in a given watershed.
 - ii. There are scores of MS4 Permittees, FDs, and CWSs in Los Angeles County. It is simply impractical for all CWSs and FDs to provide advanced notification and share records with all MS4 Permittees and undesirable for MS4 Permittees to receive advance notification and records from all FDs and CWSs.
 - iii. The requirements that might be needed in a BMP Manual in one watershed might not be needed in another watershed.

3) General Comments

- a. All references to paragraphs and page numbers are to the document entitled "LA County MS4 Permit – Non-Storm Water Discharge (NSW) Prohibitions".
- b. The basic elements of the above proposed solution are present in the proposed permit language, but they are not presented in a clear and accessible fashion and are scattered about in the permit. The solution is more implicit and vague. What is needed is an explicit and organized arrangement of these elements.
- c. The proposed language, on Paragraph 3 (pages 1 – 4) describes NSW discharges that do not have to be banned by MS4 Permittees (i.e. an Authorized NSWs) when the MS4 Permittee does not discharge into an Area of Special Biological Significance (ASBS). The paragraph is divided into two sections; those authorized NSW discharges, which are covered by an existing NPDES permit and those that are not so covered. This division does not serve any useful purpose.
 - i. MS4 Permittees can be placed in a position of receiving NOVs and TPLs by discharges from CWSs and FDs whether there is an NPDES permit present or not. Los Angeles County Flood Control District ("the District") was recently sued by the Natural Resources Defense Council (NRDC) and Heal the Bay for failing to comply with the MS4 Permit. The District had argued that while RWL had indeed been exceeded, they were not liable for those exceedances because the District was not the source of pollutants. The pollutants had been added to the receiving waters by other "upsewer" dischargers, which had NPDES permits.
 - ii. The Ninth Circuit Court of Appeals ruled against the District on this issue and wrote: "...the District argues that merely channeling pollutants created by other municipalities or industrial NPDES Permittees should not create liability because the District is not an instrument of 'addition' or 'generation', the Clean Water Act (CWA) does not distinguish between those who add and those who convey what is added by others — the CWA is indifferent to the originator of water pollution." While the District is appealing the ruling, it is not appealing this part of the ruling. No matter how the Supreme Court rules, the legal principle that just because a discharge with enough pollutant to cause a RWL exceedance was released by an entity with an NPDES permit flows into MS4, the MS4 Permittee is still liable and subject to NOVs and TPLs, is now established. As such, any separation of permitted from non-permitted discharges into MS4s is meaningless in the context of compliance with the MS4 Permit.

<http://www.scotusblog.com/case-files/cases/los-angeles-county-flood-control-district-v-national-resources-defense-council/>

- iii. It might be more effective to create a category of “Legally Mandated Discharges” which could include:
 1. Discharges from potable water sources, including but not limited to water line flushing (supply and distribution system releases), tank dewatering, well to waste operations, sheared fire hydrants, broken mains, etc. including planned, unplanned, and emergency discharges.
 2. Discharges resulting from firefighting training activities, which simulate emergency responses, valve exercises, and other related activities.
 3. Flows from emergency firefighting activities (i.e., flows necessary for the protection of life or property).
 4. Discharges from building fire suppression system maintenance (e.g. sprinkler line flushing).
- d. Paragraph 8 (pages 7 – 8) is the key section for CWSs. In it, it says that if there is an exceedance, which is caused by a discharge from a CWS, then the MS4 Permittee is not in violation of the MS4 Permit (which means that the RWQCB cannot issue an NOV and they cannot be sued by third parties) and so they would have no reason to limit or ban CWS discharges. However, MS4 Permittees would then have to take at least one of the following actions: A) Evaluate the long-term impact of the discharger; B) Identify alternative discharge routes; C) Impose additional conditions to those found in Table X; D) Require the CWS to obtain an NPDES permit.
 - i. This paragraph is limited to dischargers who are “not otherwise regulated by a separate NPDES permit”, i.e. discharges covered under an NPDES permit are not given regulatory relief. There does not appear to be any particular reason for this limitation. This would not eliminate the conflict between CWSs and MS4 Permittees when there is an NPDES permit involved and provide further disincentives for CWSs to obtain NPDES permits.
 - ii. This is confusing. Consider a CWS with two wells, one with an NPDES permit and one without. Discharges from the one well and the distribution system would enjoy “regulatory relief”, but the other well would not.
 - iii. It is not clear who decides which combination of these four options is to be implemented, the MS4 Permittee or the RWQCB.
 - iv. This paragraph creates the impression that this is a “single-pass” process. It can be read that the MS4 Permittee only receives regulatory relief the first time that an exceedance is found to have

been caused by discharge from a CWS, not afterwards. It would appear, that once, at least one of the four listed options is implemented, there is no additional regulatory relief.

- v. The fourth option, requiring a discharger to obtain an NPDES permit is particularly troublesome.
 - 1. Can an MS4 Permittee legally require a CWS to obtain an NPDES Permit? What would be the enforcement mechanism? It implies that each MS4 Permittee would have to require CWSs to obtain a local discharge permit to operate within that particular jurisdiction.
 - 2. As currently written, each time an MS4 Permittee requires a CWS or FD to obtain an NPDES permit, the MS4 Permittee would lose more regulatory relief.
 - 3. Which NPDES Permit would be required? This would create a complex patchwork situation with each MS4 Permittee requiring different permits and with other requiring none.
- vi. Requiring MS4 Permittees to require CWSs to obtain NPDES permits would create a patchwork approach with each MS4 Permittee taking completely different approaches. CWSs operating in several jurisdictions would face multiple and conflicting requirements. This would be contradictory to the need to address these issues on a watershed-wide basis.
- vii. Being required to obtain an NPDES permit creates a variable of problems for CWSs:
 - 1. These permits are costly and complex to obtain and maintain for routine operational discharges.
 - 2. They open CWSs to TPLs.
 - 3. They would establish that the water delivered by CWS is a waste under California law, which creates a wide range of legal difficulties.
- viii. Alternative language could read as follows:
 - 8. If a Permittee demonstrates that a specific non-storm water Legally Mandated Discharge caused a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, the Permittee shall not be found in violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations for that specific sampling event. Such demonstration must be based on relevant information regarding the location, date, time and duration of the discharge, the discharge pathway and receiving water(s) of

the flows, and an estimate of the volume of the Legally Mandated non-storm water discharge. Permittees in a given watershed must establish a uniform, watershed-wide BMPs Manual that all dischargers shall comply with.

- a. The BMP Manual shall be consistent with the requirements identified in Table X.
 - b. The Permittees in each watershed shall have necessary legal authority to require the use of these BMPs by the Legally Mandated Dischargers in their respective watershed, e.g. a MOU.
 - c. The instrument of legal authority and written BMP Manual are subject to approval by the Regional Water Board Executive Officer.
- e. Paragraph 9 address emergency fire flow discharges. It might be more useful to combine all legally mandated discharges into Paragraph 8, both emergency and non-emergency. How these would differ in terms of BMPs might be better addressed in the MOU and BMP Manual rather than the permit language itself.

4) Specific Comments

- a. Paragraph 5 (pages 5 – 6) requires MS4 Permittees “develop and implement procedures to ensure” that all of the Authorized NSWs in Paragraphs 3 & 4 comply with the requirements in Table X. In subsection a. it states that MS4 Permittees ensure that “all necessary permits and water quality certifications are obtained by a discharger prior to discharge to the MS4...”.
 - i. It is not clear what this means. The phrase “necessary permits and water quality certifications” appears several times in the text, including Table X, but is undefined.
 - ii. Paragraph 5 appears to apply to all authorized NSW discharges, but in Table X it only appears in two discharge categories, “flows from riparian habitats and wetlands” and “diverted stream flows”. This would suggest that the phrase “necessary permits and water quality certifications” has to do with the Corps of Engineers and the California Department of Fish and Game.
 - iii. If it is only for these two NSW flows, the text should clearly say so otherwise it could be misconstrued to applied to all NSW flows. The phrase “necessary permits and water quality certifications” should also be defined.

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- b. Paragraph 7 (on pages 6 – 7) requires permittees to evaluate outfall monitoring data required in Table X. If the Permittee determines that a “category” of authorized NSWs is causing an exceedance, then the entire category has to be either prohibited, have additional discharge conditions applied, or require the discharger to obtain an NPDES permit.
 - i. The language uses the term “category” and “discharger” interchangeably, but there may be several dischargers in a given category. It seems unreasonable to require all dischargers in any one category to have to take remedial actions if only one discharger is causing the exceedance.
 - ii. Not all discharges from a single discharger are necessarily the same. In the case of CWSs, different wells have different water qualities. If only one particular discharge location is causing a problem, it does not seem reasonable that all discharge locations and dischargers in a given category should be forced to take remedial actions
- c. Some of the BMPs in the Table X are overly detailed. These requirements will often be watershed specific and would best be spelled out in the context of a regional MOU and BMP Manual rather than in the Permit itself. Examples include.
 - i. 72 hour notification is probably a good objective unrealistic in many cases.
 - ii. pH adjustment is probably not really necessary, it is highly unlikely that a routine discharge would have pH outside of the specified range and bringing tanks of sulfuric acid or caustic soda to field for adjustment is probably not very practical. The exception to this might be in cases where an NPDES permit would be required, such as hydrostatic testing or well development. However, those permits already have pH adjustment requirements.

In summary, PWP believes that the basic ideas put forth in the proposed language by Board staff for dealing with NSW discharges capture the needed elements to resolve conflicts between CWSs, FDs, and MS4 Permittees. However, the process for this to occur must be on a watershed wide basis, must be clear and explicit, and requirements for MS4 Permittees to require CWSs and FDs to obtain NPDES permits are counter-productive.

Sincerely,



David E. Kimbrough
Water Quality Manager

DK/hs

Department of Water and Power



the City of Los Angeles

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April 18, 2012

Mr. Sam Unger
Executive Officer
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90012

Attention: Ms. Renee Purdee

Subject: Comments on Non-Storm Water Discharges for
LA County MS4 Permit

Dear Mr. Unger:

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to comment on the Los Angeles Regional Water Quality Control Board (LARWQCB) staff working document on non-storm water discharges for the renewal of the Municipal Storm Water Separate Sewer System (MS4) permit. The authority to discharge potable water, a non-storm water discharge, will have a significant impact to LADWP. LADWP is the largest municipal water utility in the nation that serves over 4.1 million customers. Its mission is to deliver a dependable supply of safe, quality water in an efficient, cost effective, and environmentally responsible manner.

Currently LADWP's water system has approximately 716,000 service connections in an area of nearly 470 square miles. Raw water for drinking water is received through various sources including the Mono and Owens River basins, the San Fernando Valley and Central groundwater basins through local wells, and the State Water Project and the Colorado River. The percentage of each source over a 10-year average is approximately 42% from the Owens Valley, 45% from the State Water Project, and 13% from local ground water wells.

In addition, LADWP's service area distribution system has 126 pressure zones, 88 pumping stations, over 100 storage facilities including tanks and reservoirs, 260 regulator stations and over 7,200 miles of pipeline. The distribution mains are 12 inches and less in diameter and transmission mains are 16" – 12 feet in diameter. In an effort to assess water quality and ensure the safety of our customers, approximately 250,000 field and laboratory tests are conducted on 25,000 water quality samples each year.

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LADWP's water system is large and dynamic, through operating permit requirements, and federal and state regulations, the system requires periodic flushing and draining for maintenance and monitoring to ensure the delivery of reliable and safe water of high quality to its customers.

When possible, discharges are typically done before the spring and summer seasons. The volumes of water associated with the discharge of the distribution mains are approximately 9,000 gallons per flush. Those discharges from the transmission lines are typically larger and last over a period of two days to one week; and the reservoir discharges are also larger and can last up to three to four weeks.

Historically these potable water discharges have been covered under the MS4 permit as a categorical exception. Per the current MS4 permit, for larger potable water discharges such as a typical reservoir draining, LADWP notifies and obtains approval from the Regional Board. LADWP also notifies either or both the County and City of Los Angeles of its intent to discharge. LADWP implements both the monitoring program required by the Regional Board and Best Management Practices (BMPs) as stipulated in LADWP's Water System Discharge Handbook, which is based on the AWWA guidelines, to further mitigate any impacts and/or pollutants. The BMPs are similar as those outlined in AWWA guidelines and BMP handbook, such as dechlorination, sweeping the path of discharge if practical, and flow rate control to prevent erosion and sediment re-suspension.

In recent years LADWP has pulled back on its flushing activities in an effort to conserve water. This reduced flushing program has saved millions of gallons of water but still maintains the safety and efficiency of the water distribution system. Since LADWP curtailed the flushing program for water conservation purposes, most potable water discharges are for large storage and facilities and mains on an infrequent basis. LADWP is proposing that a threshold be established for determining notification and other actions that may be necessary for these types of large scale discharges.

For decades, potable water has been discharged to local municipal storm drain systems when periodic flushing and draining activities have been necessary. Studies such as the American Water Works Association Research Foundation report on the environmental impacts of untreated potable water discharges to receiving waters completed in 2007 have concluded that there are no impacts from potable water discharges to the environment. Based on this long standing history of potable water discharges not posing a threat to receiving waters, LADWP believes that potable water discharges to the MS4 system are appropriate and protective of water quality standards.

In reviewing the staff working proposal for non-storm water discharges, LADWP has worked with the Metropolitan Water District to revise the language to produce an amended version that provides water quality protections, and also provides a framework in which our ongoing operations can function. We are proposing the addition of a newly

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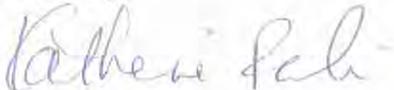
defined conditionally exempted non-storm water discharge which would be defined to include both routine potable water discharges and firefighting activities. This discharge would be called Conditionally Exempt Essential Non-Storm Water discharge. Since these discharges are both related to public safety and life safety, we believe these flows should be conditionally exempted and allowed to be discharged into the MS4 system, especially since there is no other viable option for the release of these types of discharges. The conditions which would be placed on these flows are that the discharges would need to comply with the use of BMPs based on either the AWWA standards or the State Fire Marshal standards as developed and as appropriate.

The non-storm water discharge language has also been modified to conform to the existing language of the Ventura County MS4 permit and allows for the potable water discharges to remain in the MS4 permit until such time as a specific general permit or other options may be developed for these discharges. A copy of the revised non-storm water discharge language is enclosed for your review and consideration (Enclosure 1).

LADWP and MWD recently met with the Regional Board staff to understand how the evolving standards and LADWP's needs can best be addressed and still provide the best environmental protection. We appreciated the Regional Board's openness and willingness to work with the various stakeholders and commend them for doing so. We look forward to future meetings as we move forward in developing a solution which, as mentioned above, could include interim coverage under the MS 4 as modeled in the Ventura County MS 4 permit and a possible future general permit or other avenues of compliance.

LADWP thanks the Regional Board for the opportunity to comment and looks forward to a workable solution for everyone. If you have any questions, please feel free to contact Mr. Michael Hanson of my staff at 213-367-0634.

Sincerely,



Katherine Rubin
Manager of Wastewater Quality and Compliance Group

MH:lr

Enclosures

c: Deborah Smith, Assistant Executive Officer, Los Angeles Regional
Water Quality Control Board (LARWQCB)
Mr. Ivar Ridgeway, LARWQCB
Mr. Michael Hanson

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Clean Copy of MWD & LADWP Edits to Staff Working Proposal – NSD Provisions
03/28/12

TFWRI GR OA

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

FINDINGS

F. Implementation

This Order references industry standard BMP guidance documents to ensure that Conditionally Exempt Essential Non-Storm Water Discharges are not a source of pollutants to the MS4. The BMPs referenced in the guidance documents are for the purpose of dechlorination and/or for prevention of erosion and sediment loss, or to reduce other harmful pollutants during the discharge of conditionally exempt essential non-storm water discharges to the MS4. The referenced BMP guidance documents for potable water discharges include the *American Water Works Association A WWA Guidelines For The Development Of Your Best Management Practices (BMP) Manual For Drinking Water System Releases Developed by the CA -NV A WWA Environmental Compliance Committee (2005)* which serves as an industry standard for California, from the results of studies directed by the Los Angeles Water Board, - *Evaluation of Non-Storm Water Discharges to California Storm Drains and Potential Policies for Effective Prohibition Methods, Final Report*, University of California, Los Angeles, Contract No. 5-104-140-0 (1997), and *Water Quality Concerns and Regulatory Controls for Non Storm Water Discharges to Storm Drains*, Duke L.D. and M. Kihara, Journal of the American Water Resources Association, Vol. 34: 661-676, (1998), and from the Water Boards' experience of controlling authorized non-storm discharges to the MS4 since 1990. The referenced BMP guidance documents for flows from fire fighting activities include (*insert reference to State Fire Fighting BMP Guidance Manual*). The BMP guidance documents include technically feasible, practicable, and cost-effective BMPs. The implementation of measures set forth in this Order are reasonably expected to reduce the discharge of minimal pollutants to the maximum extent practicable from conditionally exempt essential non-storm water discharges. At this time it is impractical and economically infeasible for Conditionally Exempt Essential Non-Storm Water Discharges including fire fighting and potable water discharges from conveyance and distribution systems to provide treatment methods beyond appropriate industry standard BMPs and control measures.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Part III. DISCHARGE PROHIBITIONS

A. Non-Storm Water Discharges

1. General Definitions

- a. **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.
- b. **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 (16 November 1990)).
- c. **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 regulated by an individual or general NPDES permit; conditionally authorized non-storm water discharges specifically identified in Part III.A.3 of this Order; and essential non-storm water discharges specifically identified in Part III.A.4 (pursuant to 40 CFR § 122.26(b)(2)).
- d. **Authorized Non-Storm Water Discharge:** Authorized non-storm water discharges include all discharges that are regulated by an individual or general NPDES permit and are allowed by the LARWQCB to discharge to the MS4 when in compliance with all NPDES permit conditions.
- e. **Conditionally Authorized Non-Storm Water Discharge:** Conditionally authorized non-storm water discharges are certain categories of discharges 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 (16 November 1990)).
- f. **Conditionally Exempt Essential Non-Storm Water Discharge:** Conditionally exempt essential non-storm water discharges include the following categories of discharges 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 and/or are directly or indirectly required by other State or Federal statute and/or regulation. Conditionally exempt essential non-storm water discharges may contain only 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 (16 November

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

1990)).

- Discharges from Fire Fighting Activities¹ provided appropriate BMPs are implementation based on the (*insert reference to State Fire Fighting BMP Guidance Manual*); and
 - Discharges from Potable Water Sources², where not otherwise regulated by an individual or general NPDES permit, provided appropriate BMPs are implemented based on the AWWA Guidelines for the Development of Your Best Management Practices Manual for Drinking Water System Releases
- a. **Receiving Water:** A “water of the United States” into which waste and/or pollutants are or may be discharged.

2. Prohibition of Non-Storm Water Discharges. Each Permittee shall, within its respective jurisdiction, effectively prohibit non-storm water discharges into the MS4 and from the MS4 to receiving waters except where such discharges are either specifically: 1) authorized non-storm water discharges that are regulated by an individual or general NPDES permit as identified in section A.3.a; 2) conditionally authorized non-storm water discharges in accordance with section A.3.b; or 3) conditionally exempt essential non-storm water discharges in accordance with section A.3.c.

3. Exemptions from Effective Prohibition of Non-Storm Water Discharges. The following categories of non-storm water discharges are allowed by the Regional Water Board provided they meet all required conditions specified below, or as otherwise approved by the Regional Water Board Executive Officer. Additionally, these dischargers must explore and consider alternative methods of disposal, such as water conservation, reuse of water and groundwater recharge, and determine prior to discharge that no feasible or economical alternative method of disposal exists. Pursuant to Section 2 of Article X of the California Constitution, water resources of the State shall be put to beneficial use to the fullest extent of which they are capable.

- a. **Authorized Non-Storm Water Discharges:** Those that are regulated by an individual or general NPDES permit for non-storm water discharges, including, but not limited to:

¹ This includes emergency fire fighting and fire fighting training activities, which simulate emergency responses.

² The required larger volume periodic releases from the wholesale and/or larger water purveyors are included until such time as a General Permit or other compliance measures are established that specifically addresses these types of releases.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

- i. Discharges of non-process waste water regulated by NPDES Permit No. CAG994003, including, but not limited to:
 - (a) Air conditioning condensate;
 - (b) Swimming pool filter backwash water;
 - (c) Swimming pool drainage, where the discharge is not authorized below or is otherwise prohibited by a Permittee; and
 - (d) Groundwater seepage.
- ii. Discharges of low threat hydrostatic test water³ regulated by NPDES Permit No. CAG674001;
- iii. Discharges of ground water from construction and project dewatering⁴ regulated by NPDES Permit No. CAG994004;
- iv. Discharges of ground water from potable water supply wells⁵ regulated by NPDES Permit No. CAG994005;
- v. Discharges of treated ground water from investigation and/or cleanup of volatile organic compound (VOC) contaminated sites regulated by NPDES Permit No. CAG914001;
- vi. Discharges of treated ground water and other waste waters from investigation and/or cleanup of petroleum fuel contaminated sites regulated by NPDES Permit No. CAG834001;
- vii. Short-term, intermittent discharges from utility vaults and underground structures regulated by NPDES Permit No. CAG990002.

³ 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.

⁴ Discharges of ground water from construction and project dewatering include treated or untreated waste water 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 waste water discharges that meet the eligibility criteria and could not be covered under another specific general NPDES permit.

⁵ 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.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

- b. Conditionally Authorized Non-Storm Water Discharges:** Those that fall within one of the categories below and meet all required conditions specified in Table X, or as otherwise specified or approved by the Regional Water Board Executive Officer:
- i. Natural springs;
 - ii. Flows from riparian habitats and wetlands;
 - iii. Diverted stream flows, authorized by the State or Regional Water Board;
 - iv. Dewatering of lakes;
 - v. Rising ground waters, where ground water seepage is not otherwise regulated by a separate NPDES permit⁶;
 - vi. Uncontaminated ground water infiltration⁷;
 - vii. Uncontaminated pumped ground water, where not otherwise regulated by a separate NPDES permit⁸;
 - viii. Landscape irrigation;
 - ix. Gravity flow from foundation drains, footing drains, and crawl space pumps, where ground water seepage is not otherwise regulated by a separate NPDES permit;
 - x. Air conditioning condensate, where not otherwise regulated by a separate NPDES permit;
 - xi. Dechlorinated/debrominated swimming pool/spa discharges,⁹ where not otherwise regulated by a separate NPDES permit;
 - xii. Dewatering of decorative fountains;

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

⁷ 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).)

⁸ Ibid.

⁹ Authorized dechlorinated/debrominated swimming pool/spa discharges do not include swimming pool/spa filter backwash or swimming pool/spa water containing bacteria, detergents, wastes, algacides, or cyanuric acid in excess of 50 parts per million, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

xiii. Non-commercial car washing by residents or by non-profit organizations;

xiv. Street/sidewalk wash water¹⁰.

xv.

c. **Conditionally Exempt Essential Non-Storm Water Discharges:** Those that fall within one of the categories below, meet all required BMPs as specified, are essential public services discharge activities, and/or are otherwise required by other state or federal statute and/or regulation, including:

- i. Discharges from Fire Fighting Activities provided appropriate BMPs are implemented based on the *(insert reference to State Fire Fighting BMP Guidance Manual)* and;
- ii. Discharges from Potable Water Sources, where not otherwise regulated by an individual or general NPDES permit, provided appropriate BMPs are implemented based on the AWWA Guidelines for the Development of Your Best Management Practices Manual for Drinking Water System Releases.

4. **Exemptions from Effective Prohibition within an ASBS.** The following non-storm water discharges to the MS4 and from the MS4 directly to an ASBS are conditionally authorized pursuant to the California Ocean Plan as specified below, provided that:

- a. The discharges are for essential public service, or for emergency response purposes, structural stability, slope stability or occur naturally, including the following discharges:
 - a. Foundation and footing drains;
 - b. Water from crawl space or basement pumps;
 - c. Hillside dewatering;

¹⁰ Authorized 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. Authorized 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.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

- d. Naturally occurring groundwater seepage via a storm drain; and
 - e. Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.
- b. The discharges fall within one of the specified categories in sub-part A.3.
- c. Authorized non-storm water discharges shall not cause or contribute to an exceedance of the water quality objectives in Chapter II of the Ocean Plan or alter natural ocean water quality in an ASBS.
- 5. Permittee Requirements.** Each Permittee shall:
- a. Promote measures that minimize runoff and pollutant loading from excess irrigation by promoting and/or working with potable water purveyors to promote conservation programs to minimize the discharge of landscape irrigation water into the MS4.
 - i. In addition, the Permittee may 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.
 - b. Develop and implement a work plan that results in a coordinated outreach and education program to minimize the discharge of irrigation water and pollutants associated with irrigation water consistent with Part VI.C. of this Order (Public Information and Participation Program).
 - c. If the discharger¹¹ of the conditionally exempt essential non-storm water discharge is not a named Permittee in this Order, the Regional Water Board shall require the discharger to provide advanced notification to the Permittee of the discharge. The Regional Water Board shall evaluate the monitoring data collected pursuant to Attachment X (Monitoring and

¹¹ Dischargers not named a Permittee in this Order may include, but are not limited to, potable water supply and distribution agencies, wastewater treatment agencies/sanitation districts, and other Federal, State, and local governmental entities.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Reporting Program - Non-Storm Water Outfall Based Monitoring), and any other relevant information, and determine whether any of the conditionally authorized non-storm water discharges identified in sections A.3.b are a source of pollutants that maybe causing an exceedance of an applicable water quality objective for the receiving water.

- d. If the Regional Water Board determines that any one of the categories of conditionally authorized non-storm water discharges identified in sections A.3.b are a source of pollutants that maybe causing an exceedance of an applicable water quality objective for the receiving water, the Regional Water Board may:
 - i. Impose conditions in addition to those in Table X on the conditionally authorized non-storm water discharge category for the receiving water; or
 - ii. Require the conditionally authorized non-storm water discharger to obtain coverage under a separate individual or general NPDES permit prior to discharge to the MS4.

6. Notwithstanding the above, the Regional Water Board Executive Officer, based on a comprehensive analysis and evaluation of monitoring data and other relevant information for specific categories of discharges, may modify a category or remove categories of conditionally authorized non-storm water discharges from sections A.3.b, or require that a discharger obtain coverage under a separate individual or general State or Regional Water Board permit for non-storm water discharges.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Table X. Required Conditions for Authorized and Conditionally Authorized Non-Storm Water Discharges

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹²	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
All Discharge Categories	See discharge specific conditions below.		<p>Explore and evaluate alternative means of disposal (e.g., sanitary sewer, land disposal) or opportunities for water conservation, capture, reclamation, groundwater recharge, and reuse to determine if any feasible or economical alternative methods of disposal exist. Pursuant to Section 2 of Article X of the California Constitution, water resources of the State shall be put to beneficial use to the fullest extent of which they are capable.</p> <p>Segregate authorized non-storm water discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.</p> <p>Whenever there is a discharge of 500,000 gallons or more into the MS4, the discharger shall 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 of the discharge.</p>
Natural Springs	N/A	N/A	Segregate authorized non-stormwater discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.

¹² The general orders/NPDES permits identified are those currently available to dischargers under which authorization to discharge could be provided. Alternatively, a discharger could seek authorization for the non-storm water discharge under an individual NPDES permit.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Flows from riparian habitats and wetlands	Discharge allowed only if all necessary permits/water quality certifications for water diversions are obtained prior to discharge.	N/A	All necessary permits and water quality certifications must be obtained prior to diverting flows to the MS4. Discharges shall comply with all conditions specified in permits and water quality certifications.
Diverted stream flows	Discharge allowed only if authorized by the State or Regional Water Board.	N/A	Discharges shall comply with all conditions specified by the State or Regional Water Board.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹²	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Dewatering of lakes (this does not include discharges from potable or raw water reservoirs and tanks)	Discharge allowed only if all necessary permit/water quality certifications for dredge and fill activities, including water diversions, are obtained prior to discharge.	N/A	<p>All necessary permits and water quality certifications must be obtained prior to dewatering.</p> <p>Provide advanced notification by the lake owner / operator to the Permittee(s).</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 MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p> <p>Discharges shall be volumetrically and velocity controlled to prevent resuspension of sediments.</p> <p>Measures shall be taken to stabilize lake bottom sediments.</p> <p>As applicable, monitor for pollutants of concern¹³ in the lake.</p> <p>Record-keeping of lake dewatering shall be maintained by the lake owner / operator.¹⁴</p>

¹³ 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. for the lake and/or receiving water.

¹⁴ Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date 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 monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Rising ground waters	Discharge from ground water seepage allowed only if authorized under a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	Discharges shall comply with all NPDES permit conditions for the discharge.
Uncontaminated ground water infiltration	N/A	N/A	None
Uncontaminated pumped ground water	Discharge is allowed only if authorized under a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG990002 – Discharges from Utility Vaults and Underground Structures to Surface Waters	Discharges shall comply with all NPDES permit conditions for the discharge.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Landscape irrigation using potable water	Discharge allowed if potable landscape irrigation due to runoff is minimized through the implementation of water efficient landscaping standards, as well as an outreach and education program focusing on water conservation and landscape water use efficiency.	N/A	<p>Implement BMPs, including Integrated Pest Management (IPM), to minimize runoff and prevent introduction of pollutants to the MS4 and receiving water.</p> <p>Implement water conservation methods to minimize discharge by using less water.</p> <p>Utilize water delivery rates that do not exceed the infiltration rate of the soil.</p> <p>Promote erosion repair (i.e., cover or repair areas of exposed soils in yards/landscaping).</p>
Landscape irrigation using reclaimed or recycled water	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.	N/A	Discharges must comply with applicable O&M Plans, and all relevant portions thereof, including the Irrigation Management Plan.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹²	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Hydrostatic test water	<p>Discharge of hydrostatic test water is allowed only if: 1) the discharger documents in its record-keeping that potential uses of the hydrostatic test water and potable water were considered to ensure use to the fullest extent possible and in compliance with Article 10, Section 2 of the California Constitution, and 2) authorized by a separate NPDES permit.</p>	<p>NPDES No. CAG674001 - Discharges From Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</p>
Discharges from wellhead activities, such as well construction, well development (e.g., aquifer pumping tests, well purging), or major well maintenance	<p>Discharges from activities that occur at wellheads are allowed only if authorized by a separate NPDES permit.</p>	<p>NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994005 – Discharges of Ground Water from Potable Water Supply Wells to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</p>

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹²	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Gravity flow from foundation drains, footing drains, and crawl space pumps	Discharge is allowed only if authorized by a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG990002 – Discharges from Urinity Vaults and Underground Structures to Surface Waters	Discharges shall comply with all NPDES permit conditions for the discharge.
Air conditioning condensate	Discharge is allowed only if authorized by a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	Discharges shall comply with all NPDES permit conditions for the discharge.
Dechlorinated/debrominated swimming pool/spa discharges	Discharges allowed after implementation of specified BMPs. Pool or spa water containing copper-based algaecides is not allowed to be discharged to the MS4.	N/A	Implement BMPs and segregate discharge from potential sources of pollutants to prevent introduction of pollutants prior to discharge to the MS4 and receiving water. 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.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
	Discharges of cleaning waste water and filter backwash allowed only if	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in	<p>Swimming pool water shall not contain any detergents, wastes, algaecides, or cyanuric acid in excess of 50 parts per million, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.¹⁵</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 and prevent resuspension of sediments.</p> <p>Whenever there is a discharge of 500,000 gallons or more into the MS4, the discharger shall 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 of the discharge.</p> <p>Immediately prior to discharge, the MS4 inlet to which the discharge is directed shall be inspected and cleaned out.</p>
			Discharges shall comply with all NPDES permit conditions for the discharge.

¹⁵ 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.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
	<p>authorized by a separate NPDES permit.</p>	<p>Coastal Watersheds of Los Angeles and Ventura Counties</p>	
Dewatering of decorative fountains	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Fountain water containing copper-based algaecides is not allowed to be discharged to the MS4.</p> <p>Fountain water containing dyes is not allowed to be discharged to the MS4.</p>	<p>N/A</p>	<p>Implement BMPs and segregate discharge from potential sources of pollutants to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Fountain water must be dechlorinated or dechlorinated 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 prevent resuspension of sediments.</p> <p>Whenever there is a discharge of 500,000 gallons or more into the MS4, the discharger shall 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 of the discharge.</p> <p>Immediately prior to discharge, the MS4 inlet to which the discharge is directed shall be inspected and cleaned out.</p>
Non-commercial car washing by residents or by	<p>Discharges allowed after implementation of specified BMPs.</p>	<p>N/A</p>	<p>Implement BMPs to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Minimize the amount of water used by turning off</p>

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
non-profit organizations			<p>nozzles or kinking the hose when not spraying a car, and by using a low volume pressure washer.</p> <p>Use biodegradable, phosphate free detergents and non-toxic cleaning products.</p> <p>Where possible, wash cars on a permeable surface where wash water can percolate into the ground (e.g. gravel or grassy areas).</p> <p>Create temporary berms or block off the storm drains. Use pumps or vacuums to direct water to pervious areas.</p> <p>Empty buckets of soapy or rinse water into the sanitary sewer system (e.g., sinks or toilets).</p>
Street/sidewalk wash water	Discharges allowed after implementation of specified BMPs.	N/A	<p>Implement BMPs to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Sweeping should be used as an alternate BMP whenever possible and sweepings should be disposed of in the trash.</p> <p>BMPs shall be in accordance with Regional Water Board Resolution No. 98-08 that requires: 1) removal of trash, debris, and free standing oil/grease spills/leaks (use absorbent material if necessary) from the area before washing, 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, and 3) in areas of unsanitary conditions, collection and diversion of street and alley wash water to the sanitary sewer. Each Permittee is required to implement (3) in areas where the</p>

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			congregation of transient populations can reasonably be expected to result in a significant threat to water quality.

N/A – Not Applicable



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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 Telephone: (562) 699-7411, FAX: (562) 699-5422
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GRACE ROBINSON CHAN
 Chief Engineer and General Manager

April 18, 2012
 File No. 31-370-40.4A

Ms. Renee A. Purdy
 California Regional Water Quality Control Board
 Los Angeles Region
 320 W. 4th Street, Suite 200
 Los Angeles, CA 90013

Dear Ms. Purdy:

Comments on the LA County MS4 Permit Non-Storm Water Discharge Provisions

The County Sanitation Districts of Los Angeles County (Sanitation Districts) appreciate the opportunity to submit comments to the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) on the Staff Working Proposal of the LA County MS4 Permit for Non-storm Water Discharge Provisions (Proposed Discharge Provisions). The Sanitation Districts have reviewed the Proposed Discharge Provisions pertaining to recycled water and support the Regional Board's inclusion of landscape irrigation using reclaimed or recycled water and flows from fire fighting activities in the table of Authorized Non-Storm Water Discharges. However, we would like to take this opportunity to provide some additional input regarding the specific wording used to describe fire fighting activities, as detailed below.

The Sanitation Districts agree that landscape irrigation using reclaimed or recycled water should be included in the LA County MS4 Permit as an authorized non-storm water discharge. Incidental runoff, such as over-spray from sprinklers, may escape the recycled water usage area and should not constitute an unacceptable non-storm water discharge. Recycled water is an important resource and the Sanitation Districts believe that the LA County MS4 Permit should not contain requirements that impede its use. The Regional Board itself acknowledged the importance of recycled water use by identifying the encouragement of water recycling as a 2011-2013 Basin Plan Triennial Review priority project. Therefore, the LA County MS4 Permit should continue to accommodate recycled water usage to be consistent with this objective and encourage water recycling in general.

Another aspect of the Proposed Discharge Provisions that affects the usage of recycled water is the exclusion for fire fighting activities. At times, the fire department utilizes recycled water for emergency and training purposes, and it is important for them to be able to continue to do so, since potable water may not be readily available in certain areas. Again, the Sanitation Districts agree with the Regional Board's proposal to include flows from fire fighting activities as a prohibition exception; however, several portions of the proposed text refer only to "emergency fire fighting activities". The Sanitation Districts request that the word "emergency" be removed from all references to fire fighting

activities, since these citations must also include training activities. Furthermore, this modification is consistent with the language in CFR §122.26(b)(2), which states “Illicit discharges mean any discharge to a municipal separate storm sewer that is not composed entirely of storm water except...discharges resulting from fire fighting activities.” Since the Code of Federal Regulations does not differentiate between emergency and non-emergency discharges resulting from fire fighting activities, and the Sanitation Districts consider both emergency and training fire fighting activities to be a beneficial use of recycled water, we recommend that the LA County MS4 Permit be revised to oblige such usage.

In summary, the Sanitation Districts support the inclusion of landscape irrigation using recycled water as an authorized non-storm water discharge in the LA County MS4 Permit and request the removal of “emergency” from all fire fighting activity references. If you have any questions, please contact Shannon Bishop of my staff at (562) 908-4288, extension 2843.

Very truly yours,

Grace Robinson Chan



Mike Sullivan
Section Head
Monitoring Section

MS:SAB:nm



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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ALHAMBRA, CALIFORNIA 91802-1460

April 18, 2012

IN REPLY PLEASE

REFER TO FILE: **WW-1**

Ms. Renee A. Purdy, Chief
California Regional Water Quality
Control Board – Los Angeles Region
Regional Programs Section
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Dear Ms. Purdy:

**LOS ANGELES COUNTY WATERWORKS DISTRICT
NOS. 21 (KAGEL CANYON), 36 (VAL VERDE), 37 (ACTON),
AND 29 (MALIBU) AND MARINA DEL REY WATER SYSTEM
COMMENTS ON STAFF WORKING PROPOSAL ON THE MUNICIPAL SEPARATE
STORM SEWER SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM PERMIT – NON-STORM WATER DISCHARGE PROVISIONS**

Enclosed is a copy of the comments provided by the Los Angeles County Waterworks Districts on the Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit Provisions related to Non-Storm Water Discharge Prohibitions in your staff working proposal.

Thank you for the opportunity to comment on the working proposal. We look forward to working closely with your staff on the development of detailed permit languages.

If you have any questions, please contact Mr. T.J. Kim at (626) 300-3327 or via e-mail at tjkim@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works

FOI
ADAM ARIKI
Assistant Deputy Director
Waterworks Division



TJK:kk
LTS541_March 2012 Proposal.docx

Enc.

**Comments on the Municipal Separate Storm Sewer System
National Pollutant Discharge Elimination System Permit Provisions
Related to Non-Storm Water Discharge Prohibitions
in the March 28, 2012, Staff Working Proposal**

The Los Angeles County Waterworks District Nos. 21 (Kagel Canyon), 36 (Val Verde), 37 (Acton), 29 (Malibu) and Marina del Rey Water System (Districts) have the following comments on the working proposal of the permit provisions related to the non-storm water discharge prohibitions.

- Part III.A.3.b of the working proposal listed the exempted categories of non-storm water discharges to the Municipal Separate Storm Sewer System (MS4) from the discharge prohibitions, including potable water discharges, provided that they are not a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations and/or Water Quality Effluent Limitations. The Districts request that such water quality conditions for potable water discharges be removed because they already meet very high drinking water quality standards.
- Discharges from potable water sources must be included in the exempted categories of non-storm water discharges from the discharge prohibitions within an Area of Special Biological Significance (ASBS). No water quality conditions for discharges essential for emergency response purposes and protection of public health, and for natural flows should be imposed. Therefore, the Districts request that Part III.A.4 be modified as follows:

4. Exemptions from Effective Prohibition within an ASBS. The following non-storm water discharges to the MS4 and from the MS4 directly to an ASBS are conditionally authorized pursuant to the California Ocean Plan as specified below:

- a. The discharges are essential for structural stability or slope stability, including the following discharges:
 - i. Foundation and footing drains;
 - ii. Water from crawl space or basement pumps; and
 - iii. Hillside dewatering;

The above non-storm water discharges shall not cause or contribute to a violation 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.

- b.** The discharges are essential for emergency response purposes, protection of public health, or occur naturally, and include the following discharges:
 - i.** Discharges associated with emergency fire fighting activities (i.e., flows necessary for the protection of life or property);
 - ii.** Discharges from potable water sources;
 - iii.** Naturally occurring groundwater seepage via a storm drain; and
 - iv.** Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.



GAIL FARBER, Director

COUNTY OF LOS ANGELES

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April 18, 2012

IN REPLY PLEASE

REFER TO FILE: **WM-9**

Ms. Renee Purdy, Chief
California Regional Water Quality
Control Board – Los Angeles Region
Regional Programs Section
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Dear Ms. Purdy:

**COUNTY OF LOS ANGELES AND LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT COMMENTS
STAFF WORKING PROPOSAL ON NONSTORMWATER DISCHARGE
PROHIBITIONS**

On behalf of the County of Los Angeles and the Los Angeles County Flood Control District, thank you for the opportunity to comment on the draft working proposal for Nonstormwater Discharge Prohibitions released on March 28, 2012. Enclosed are our comments for your review and consideration.

If you have any questions, please contact me at (626) 458-4300 or ghildeb@dpw.lacounty.gov or your staff may contact Ms. Angela George at (626) 458-4325 or ageorge@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works

GARY HILDEBRAND
Assistant Deputy Director
Watershed Management Division

ACL:jtz

P:\wmpubl\Secretarial\2012 Documents\Letter\Comment NSW.docx\C12098

Enc.

cc: Chief Executive Office (Dorothea Park)
County Counsel (Judith Fries)

Discharge Prohibitions			
Comment #	Permit Element/ Issue/ Concern	Location in Draft Permit	Comment/Recommendation
1	General approach	NA	<p>The working proposal would add tremendous burden on MS4 permittees to address what are authorized nonstormwater discharges. These discharges are generally perceived to be low risk. If the Regional Board has evidence that any authorized discharge poses significant risk to receiving water quality, then Regional Board should issue separate individual or general NPDES permits to address those discharges.</p> <p><u>Recommendation</u> Staff should consider a less prescriptive approach. For example, significantly simplifying Table X to address authorized non-stormwater discharges would be advisable. We would be happy to meet with staff to further discuss these issues, including a BMP-based approach for addressing non-stormwater discharges.</p>
2	Effective Prohibition of Non-Storm Water Discharges into MS4 and from MS4 into Receiving Water	III.A.1.a, c.; III.A.2. [Page 1]	<p>The proposed language refers to the "effective prohibition of non-storm water discharges..." throughout the document, and defines such discharges as "discharges into the MS4 and from the MS4 into receiving waters."</p> <p>This definition is clearly not authorized by the Clean Water Act (CWA).</p> <p>33 U.S.C. § 1342 (p)(3)(B)(ii) requires that municipal permittees "effectively prohibit" the discharge of non-stormwater into the MS4. It does not require the effective prohibition of non-storm water discharges from the storm sewers (MS4) to the receiving water.</p> <p>33 U.S.C. § 1342(p)(3)(iii) requires municipalities to "reduce the discharge of pollutants to the maximum extent practicable (MEP). 33 U.S.C. § 1362(12) defines "discharge of pollutants" not to include discharges into the MS4, but rather "any addition of any pollutant to navigable waters from any point source..."</p>

Discharge Prohibitions			
Comment #	Permit Element/ Issue/ Concern	Location in Draft Permit	Comment/Recommendation
2 cont.	Effective Prohibition of Non-Storm Water Discharges into MS4 and from MS4 into Receiving Water		<p>It also raises significant proof and enforcement issues. A municipality can identify individual dischargers to its MS4 and control that discharge through its ordinances, permitting authority or other enforcement mechanisms. However, given the mixing of discharges in the MS4 system from multiple sources (e.g., flows from individual and General NPDES permittees, POTWs, other municipal runoff, and other discharges authorized or exempted by the State or Regional Board, etc.), as well as the fact that the inlet to the MS4 may be operated by a different entity than the outlet of the MS4 to the receiving waters, it is very difficult for a permittee to take effective action to address non-stormwater discharges from the MS4.</p> <p>The Regional Board should acknowledge that certain activities that generate pollutants present in urban runoff may be beyond the ability of the permittees to eliminate. Examples of these include operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear and leaching of naturally occurring minerals from local geography.</p> <p><u>Recommendation</u> Remove "and from the MS4 into receiving waters" throughout the document.</p>
3	Definition of "Storm Water"	III.A.1.b. [Page 1]	<p>The definition of "storm water" does not follow the regulatory definition, which does not include the words "related to precipitation events."</p> <p><u>Recommendation</u> Delete "related to precipitation events."</p>

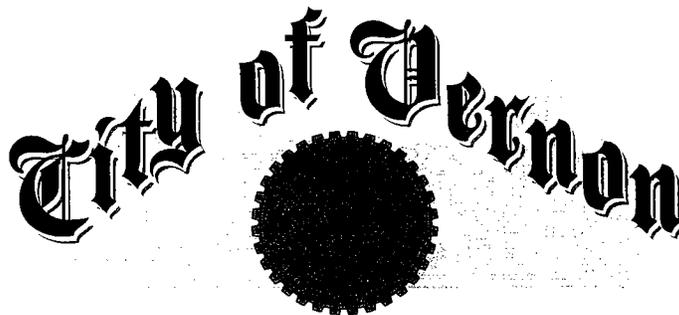
Discharge Prohibitions			
Comment #	Permit Element/ Issue/ Concern	Location in Draft Permit	Comment/Recommendation
4	Definition of "Illicit Discharge"	III.A.1.c. [Page 1]	<p>The definition of "illicit discharge" does not follow the federal regulations 40 CFR § 122.26(b)(2): "Illicit discharge means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer and discharges resulting from any fire fighting activities." The proposed definition improperly refers to discharges "from the MS4 into a receiving water." Also, there is no limitation of firefighting activities to "emergency" firefighting activities.</p> <p><u>Recommendation</u> Delete "from the MS4 into a receiving water" and "emergency".</p>
5	Responsibility to regulate individual and general NPDES permits.	III.A.3.a.; III.A.5., a. & b.; Table X [Page 2; 5]	<p>The proposed language suggests that MS4 Permittees are responsible for ensuring non-stormwater discharges regulated by a separate individual or general NPDES permit comply with those permits. If true, this places the burden to regulate such discharges on the MS4 Permittees when such responsibilities lie with the Regional Board.</p> <p>The individual and general permits issued by the Regional Board should include the requirement for dischargers to explore and consider alternatives to discharge to the MS4 . Dischargers should have already considered other options prior to requesting approval from MS4 Permittees to discharge to the MS4.</p> <p><u>Recommendation</u> "5. Each Permittee shall develop and implement procedures to <u>require that dischargers obtain all necessary permits and water quality certifications prior to discharge to the MS4.</u> ensure all conditionally authorized non-storm water discharges into the MS4 and from the MS4 into receiving waters identified in sections A.3 and A.4 above comply with the applicable conditions. These procedures shall include, at a minimum, the following:"</p> <p>Delete 'III.A.5.a. & b.'</p>

Discharge Prohibitions			
Comment #	Permit Element/ Issue/ Concern	Location in Draft Permit	Comment/Recommendation
6	Natural flows	III.A.3.b, Table X [Page 3]	As currently proposed, natural flows are not allowed to cause or contribute to exceedances of applicable standards. MS4 permittees should not be responsible for natural flows. <u>Recommendation</u> Create a separate authorized discharges category for natural discharges, ie. natural springs, flows from riparian habitats and wetlands, diverted stream flows authorized by the State or Regional Water Board, uncontaminated groundwater infiltration, and uncontaminated pumped groundwater not regulated by a separate NPDES permit. Remove the above discharges from Table X.
7	Regulatory consistency	III.A.8., III.A.9. [Pages 7, 8]	As proposed, potable water discharges required by state or federal law and discharges from emergency fire fighting activities would be allowed to <i>contribute</i> to short-term exceedances of applicable standards. This is a lower standard compared to that for MS4 Permittees, who are required to meet the "cause or contribute" standard. Discharges entering the MS4 should be held to the same standard as discharges from the MS4. <u>Recommendation</u> Consistently use "cause or contribute" throughout the Permit.
8	Landscape irrigation	III.A.3.b.viii., III.A.5.c., Table X [Pages 3, 6, and 12]	The County of Los Angeles has an existing ordinance addressing landscape irrigation. The permit should allow permittees to continue to implement their existing ordinances if they are deemed equivalent. The proposed language, especially in Table X, is too prescriptive. <u>Recommendation</u> Allow permittees to continue implement their existing ordinances that prohibit excessive landscape irrigation runoff.

Discharge Prohibitions			
Comment #	Permit Element/ Issue/ Concern	Location in Draft Permit	Comment/Recommendation
9	ASBS	III.A.4 [Page 5]	<p>As currently proposed, all authorized discharges into the ASBS are required to meet RWLs and WQBELs.</p> <p>These requirements go beyond the ASBS Special Protections, which provide that authorized non-stormwater discharges only “shall not cause or contribute to a violation of the water quality objectives in Chapter II of the Ocean Plan nor alter natural ocean water quality in an ASBS.” Since these requirements apply specifically to discharges to the ASBS, the reference to RWLs and WQBELs should be deleted.</p> <p>Finally, the proposed language is confusing and appears to require separate and specific authorization for each and every discharge in sub-part A.3.</p> <p><u>Recommendation</u> Revise Section III.A.4.b. as follows: "The discharges fall within one of the categories in sub-part A.3 and are specifically authorized by the Los Angeles Water Board." Also, delete the reference to RWLs and WQBELs in Section III.A.4.c.</p>
10	Dischargers not MS4 Permittee	III.A.6 [Page 6]	<p>As proposed, Permittees must require dischargers not named in the MS4 permit to provide advanced notification to the Permittee of its non-stormwater discharge, obtain local permits, conduct appropriate monitoring, and implement additional BMPs or control measures as a condition of discharges into the Permittee’s MS4.</p> <p>As written, the language can be interpreted more broadly than Regional Board staff may have intended. While a footnote to this provision names such parties as POTW operators, potable water supply and distribution agencies and other governmental entities, it presumably could apply to any private company or individual as well. While this provision appears to shift to the discharger responsibility for controlling its discharge, the Permittee will incur administrative costs. Also, is this requirement applicable to discharges such as irrigation runoff, car washing, and other occasional, but repetitive activities conducted by non-institutional dischargers?</p> <p><u>Recommendation</u> Clarify that this provision only applies to significant institutional discharges.</p>

Discharge Prohibitions			
Comment #	Permit Element/ Issue/ Concern	Location in Draft Permit	Comment/Recommendation
11	Monitoring data evaluation	III.A.7 [Pages 6-7]	<p>The proposed language requires that Permittees evaluate monitoring data from the Non-Storm Water Outfall-Based Monitoring Program to determine whether any categories of non-storm water discharges are a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations (RWLs) or Water Quality Based Effluent Limitations (WQBELs). If the Permittee determines that a category of non-storm water discharges is a source of pollutants that causes or contributes to an exceedance of applicable RWL or WQBELs, the Permittee shall report its findings to the Regional Water Board in the annual report, and either prohibit the discharge from either entering the MS4 or the receiving waters, impose conditions in addition to those set forth in Table X or require the discharger to require coverage under a separate “state or Regional Water Board permit prior to discharge to the MS4.”</p> <p>It is difficult to provide comments on any activities related to the monitoring program, RWLs, or WQBELs when the definitions and specifics of these programs have not been provided. At minimum, the Permittees should not be responsible for evaluating the monitoring data for discharges covered under another NPDES Permit, as explained earlier in Comment 5. Permittees can assist the Regional Board in making such evaluations by providing available information. If a discharge is found to be a source of pollutants, the Regional Board should prohibit the discharge, impose additional conditions, or require coverage under another Permit.</p> <p><u>Recommendation</u> Remove Section III.A.7, with the understanding that the integrated monitoring program and an adaptive management approach will result in prioritized investigations of exceedances.</p>

Discharge Prohibitions			
Comment #	Permit Element/ Issue/ Concern	Location in Draft Permit	Comment/Recommendation
12	Regulatory relief	III.A.8. [Page 7]	<p>The proposed language provides that if a Permittee demonstrates that a specific non-storm water discharge from a potable water supply or distribution system not otherwise regulated by a separate NPDES permit, but required by state or federal statute and regulation, caused [to be defined] a short-term exceedance of applicable RWLs and/or WQBELs during a specific sampling event, the Permittee shall not be found in violation for that specific sampling event. Demonstration must be based on monitoring data from the specific discharge, other relevant information (refer to Table X), and documentation of the statutes/regulations requiring such discharges, and the conditions under which the discharge was required.</p> <p>It is difficult to provide comments when the definition of "caused" and the specifics of "RWLs", "WQBELs", and the burden of proof are not provided. It is also possible that multiple discharges could occur concurrently that could cumulatively cause or contribute to an exceedance. Permittees are also concerned about the extensive and widespread monitoring that may be required to provide that burden of proof.</p> <p><u>Recommendation</u> Revise the regulatory relief language so the burden of proof is not put on MS4 permittees.</p>
13	Table X	Table X	<p>The working proposal would add tremendous burden on MS4 permittees to address authorized nonstormwater discharges which are generally perceived to be low risk. Specifically, Section III.A.5 combined with Table X, would require permittees to develop and implement procedures to ensure discharges meet very prescriptive and often highly resource intensive BMPs. For example, to address dewatering of lakes, swimming pools, and decorative fountains, permittees must ensure that MS4 inlets and outlets are inspected and cleaned immediately prior to discharge. This and many other similar requirements in Table X are not feasible in practice and not necessary.</p> <p><u>Recommendation</u> See Comments 1 and 5. We welcome the opportunity to meet with staff to discuss how to revise Table X so that it is more implementable.</p>



COMMUNITY SERVICES & WATER DEPARTMENT
 Samuel Kevin Wilson, Director of Community Services & Water
 4305 Santa Fe Avenue, Vernon, California 90058
 Telephone (323) 583-8811 Fax (323) 826-1435

April 18, 2012

N-1
 Via Electronic Mail

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

Attn: Renee A. Purdy, Regional Programs Section Chief
 Ivar Ridgeway, Stormwater Permitting Section Chief

RE: COMMENTS ON STAFF WORKING PROPOSAL ON LOS ANGELES COUNTY MS4 PERMIT – NON-STORM WATER DISCHARGE PROVISIONS

Dear Ms. Purdy and Mr. Ridgeway:

The City of Vernon appreciates the opportunity to provide comments on the subject matter referenced above. The City of Vernon is committed to protecting the environment and appreciates the cooperative efforts of the Regional Water Quality Control Board (RWQCB) and its staff in developing the updated Los Angeles County Municipal Stormwater Permit (MS4).

Quantifiable data evidencing that non-storm water discharges are a cause or contribution to the degradation of water quality is lacking. As such, the RWQCB should be tasked with performing a comprehensive study to determine which, if any of the non-storm water flows are contributing to the degradation of the water quality before any costly prohibitions or restrictions are placed on these flows.

Notwithstanding the above, the City of Vernon has concerns with the proposed non-storm water discharge provisions as described in the Staff Working Proposal dated March 28, 2012, and respectfully provides the following comments for your consideration:

1. Part III.A.2 specifies the following:

Each Permittee shall, within its respective jurisdiction, effectively prohibit non-storm water discharges into the MS4 and from the MS4 to receiving waters except where such discharges are either specifically authorized by a separate individual or general National Pollutant Discharge Elimination System (NPDES) permit or conditionally authorized in accordance with sections A.3 through A.6 below.

Exclusively Industrial

Concern- This prohibition conflicts with the Sections VI.C.2.i, VI.C.2.a.(i, iv., vii., and viii.) of the proposed Minimum Control Measures which indicates each permittee must **control the contribution of pollutants** and the discharge of spills to its MS4.

Proposed solution- Ensure that all sections of the proposed municipal stormwater permit are clear and consistent.

2. Part III A.3.b.xvi. Exemptions from Effective Prohibition

Flows from emergency firefighting activities (i.e., flows necessary for the protection of life or property). Footnote 10 states that discharges from vehicle washing, building fire suppression system maintenance (e.g., sprinkler line flushing), and other routine maintenance activities are not authorized to be discharged to the MS4.

Concern: The State Fire Marshall mandates that sprinkler line systems be serviced every five years. As such, this prohibition is impractical.

Proposed Solution: Authorize discharges with conditions on the discharger to implement BMPs as prescribed in the State Fire Marshall's BMP Manual of sprinkler line flushing.

3. Part III.A.5. indicates the following:

Each Permittee shall develop and implement procedures to ensure all conditionally authorized non-storm water discharges into the MS4 and from the MS4 into receiving waters.....

Concern- "Conditions" for authorized non-stormwater discharges are imposed by the Regional Water Quality Control Board on to the discharger. Therefore, the burden to "ensure all conditionally authorized non-stormwater discharges" should rationally remain with the RWQCB. All risks (compliance or otherwise) posed by the RWQCB's decision to authorize a discharge should not be at the sole expense of the municipal permittees.

Proposed Solution- We suggest omitting this requirement.

4. Part III A.3.b.xvi. Exemptions from Effective Prohibition

Flows from emergency firefighting activities (i.e., flows necessary for the protection of life or property). Footnote 10 states that discharges from vehicle washing, building fire suppression system maintenance (e.g., sprinkler line flushing), and other routine maintenance activities are not authorized to be discharged to the MS4.

Concern: The State Fire Marshall mandates that sprinkler line systems be serviced every five years. As such, this prohibition is impractical.

Proposed Solution: Authorize discharges with conditions on the discharger to implement BMPs as prescribed in the State Fire Marshall's BMP Manual of sprinkler line flushing.

5. Part III.A.5.b advises permittees to develop procedures for:

ensuring a discharger has explored and considered alternatives to discharge to the MS4, including for example, water conservation, reuse of water and ground water recharge, and has determined no feasible or economical alternative to discharge to the MS4 exists.

Concern- This permit requirement language suggests that the Municipal Stormwater Permit not only imposes onto permittees the responsibility of improving water quality, but also the added

responsibility of water conservation. Although this requirement can be arguably supported by “good intentions”, it imposes supplementary objectives unnecessary for the improvement of water quality standards.

Proposed solution- Defer water conservation responsibilities to the appropriate water purveyor(s).

6. Part III.A.5.c imposes the following onto Permittees:

c. Procedures to minimize the discharge of landscape irrigation water into the MS4. For landscape irrigation water to be discharged, each Permittee shall, within its respective jurisdiction:

i. Enact a municipal ordinance that specifies landscape irrigation standards to minimize irrigation runoff and eliminate irrigation overspray. The Permittee shall have legal authority to enforce the ordinance and levy fines. In addition, the Permittee may coordinate with the local water purveyor(s), where applicable, to enforce landscape water use efficiency requirements for existing landscaping.

ii. Coordinate with the water purveyor(s) within its jurisdiction to develop and implement a work plan that results in a coordinated outreach and education program to minimize the discharge of irrigation water and pollutants associated with irrigation water consistent with Part VI.C. of this Order (Public Information and Participation Program).

Concern- The discharge authorization for landscape irrigation is granted from the RWQCB to the discharger. The requirement for municipal permittees to expend limited public resources for what the RWQCB authorizes is clearly is inappropriate.

Proposed Solution- Based on the premise that this authorization is granted from the RWQCB to the discharger, procedures to minimize the discharge should remain with the RWQCB.

7. Part III A.7. – Each Permittee shall evaluate the monitoring data collected pursuant to Attachment X (Monitoring and Reporting Program – Non-Storm Water Outfall Based Monitoring), and any other relevant information, and determine whether any of the **categories** of non-storm water discharges identified in Section A.3 and A.4 above is a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations in Part V. and/or Water Quality Based Effluent Limitations in Part VI.D.... Based on this determination, the Permittee shall also either:
7.a. Prohibit the non-storm water discharge **category** from entering the MS4 or receiving waters;...

Concern: The word **category(ies)** implies that in a city that has more than one community water system and if it is determined to be a source of pollution, this prohibition would penalize all the community water systems in said city.

Proposed Solution: Clearly define prohibition to limit respective discharger.

8. Part III.A.8. describes the following:

If a Permittee demonstrates that a specific non-storm water discharge from a

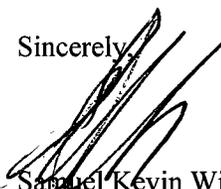
potable water supply or distribution system not otherwise regulated by a separate NPDES permit, but required by state or federal statute and/or regulation, caused [further definition to be provided] a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, the Permittee shall not be found in violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations for that specific sampling event. Such demonstration must be based on monitoring data from the specific non-storm water discharge, other relevant information regarding the specific non-storm water discharge as identified in Table X, and documentation of the state or federal statute and/or regulation requiring such non-storm water discharge, including the conditions under which the specific discharge was required.

Concern- This section limits regulatory relief for permittees only for potable water supplies despite the several other categories of discharges authorized by the RWQCB.

Proposed solution- Expand the list of discharge categories, allowing for Permittee regulatory relief, to include all of the categories authorized by the RWQCB.

The City of Vernon appreciates your efforts and will continue to work with the RWQCB staff to protect the environment. Please contact Claudia Arellano at 323-583-8811 extension 258 or Jerrick Torres at 323-583-8811 extension 204 of the City of Vernon staff if you have any questions or comments.

Sincerely,



Samuel Kevin Wilson, P.E.

Director of Community Services & Water

SKW/ca/jt

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ANTONIO R. VILLARAIGOSA

MAYOR

April 18, 2012

Mr. Sam Unger
Executive Officer
Los Angeles Regional Water Quality Control Board
320 4th Street, Suite 210
Los Angeles, CA 90013

Attention: Renee Purdy, Regional Program Section Chief
Ivar Ridgeway, Storm Permitting Chief

Greetings:

TECHNICAL COMMENTS ON LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD STAFF WORKING PROPOSAL FOR THE GREATER LOS ANGELES COUNTY MS4 PERMIT – NON-STORMWATER DISCHARGES

The City of Los Angeles (City) appreciates the opportunity to provide technical comments on the Los Angeles Regional Water Quality Control Board (Regional Board) Staff Working Proposal for the Greater Los Angeles County MS4 Permit. The City appreciates the time your staff has dedicated to meeting with us and the process that has provided the opportunity for substantial engagement and input. The City recognizes that this Working Proposal for Non-stormwater Discharges is part of the overall process and appreciates your consideration of our comments at this time. The following highlights a few key technical issues. Additional detailed technical comments are also provided in the associated attachments.

Watershed-Based Program

The City supports Regional Board staff's Watershed-Based Program approach. A watershed based program is the quintessential approach allowing for integration of all program elements (referred to by Regional Board staff as "Watershed Management Programs" during the April 5, 2012 workshop) and affords agencies the opportunity to comply with requirements while focusing efforts on the highest priorities for each watershed through customization. This approach also considers the current efforts undertaken by agencies to obtain grant funding for water quality projects, for the reason that criteria for many water quality grants are based on watersheds. Finally, this approach supports implementation of TMDLs, which are developed



and implemented based on watersheds. The City recognizes that the specific requirements regarding the Watershed Management Programs have not yet been developed and that this aspect of the Permit will continue to evolve over the next several months. Comments provided herein are intended therefore to inform the process at this point in time. The Bureau looks forward to working with Regional Board staff to continue to develop the Watershed Management Programs.

Natural Flows

Non-stormwater discharges that can be categorized as natural flows (e.g., natural springs, uncontaminated groundwater infiltration) are inherently different than the other categories of authorized discharges. Such discharges should not be conditioned for discharge and be subject to additional targeted monitoring. For example, the conditions presented in Table X require (1) MS4s to evaluate alternative means of disposal for natural springs and (2) the segregation of flow for natural springs from potential sources of pollutants, which interpreted literally could include the very geological formations from which the springs originate. The City therefore requests that natural flows are identified and conditions related to such discharges are removed.

Permittee Requirements

The requirements in this section apply universally to all of the listed authorized non-stormwater discharges regardless of the type and amount. However, particular requirements may not be relevant for certain types of discharges. For example, requirements for notifying the Permittee in advance and ensuring the discharger has explored alternatives prior to discharge do not seem relevant for certain discharges, such as residential car washing, sidewalk washing, and fire fighting. The City requests that Regional Board staff review and refine these requirements for applicability and feasibility, considering all discharge categories.

Table X

Table X includes a column for general conditions under which a discharge is allowed and a separate column for conditions that are required to be implemented prior to discharge. The distinction between the two columns is not clear. Additionally, since many discharge categories include phrasing such as “where possible” and “should be,” it is unclear if the last column (conditions required to be implemented) is intended to be an enforceable condition or if the identified BMPs are suggestions to mitigate any possible impacts. For example, under residential car washing, the last column includes the following:

“Where possible, wash cars on permeable surface where wash water can percolate into the ground (e.g., gravel or grassy areas).”

“Use biodegradable, phosphate free detergents and non-toxic cleaning products.”

The column heading seems to imply that all of the conditions are required prior to discharge, including the requirement that residents to use biodegradable, phosphate free detergents for car washing. However, the included list of conditions appears to be intended as suggestions to mitigate any possible impacts. The City requests that clarity is provided to distinguish between (1) the intent of the second and fourth columns and (2) the conditions that are enforceable and required prior to discharge and those items that are suggestions to mitigate possible impacts.

Renee Purdy and Ivar Ridgeway, LARWQBC

April 18, 2012

Page 3

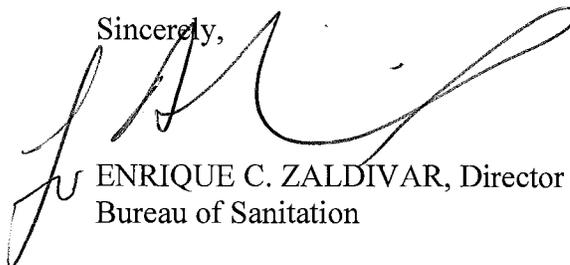
Attached is a list of detailed comments for the various discharges listed in Table X.

Cause or Contribute Language

Consistent with comments provided by the Bureau in the April 13, 2012 comment letter on the Working Proposal for Minimum Control Measures, language relating to "cause or contribute to water quality exceedances" should be addressed solely within the Receiving Water Limitations provision of the Permit.

Thank you for considering our technical comments on the Working Proposal. We look forward to continuing to work with you and your staff. If there are any questions, please contact Dr. Shahram Kharaghani, Stormwater Program Manager, at (213) 485-0587.

Sincerely,



ENRIQUE C. ZALDIVAR, Director
Bureau of Sanitation

Cc: Deborah J. Smith, Los Angeles Regional Water Quality Control Board
Michael Mullin, Mayor's Office
Traci Minamide, Bureau of Sanitation/EXEC
Varouj S. Abkian, Bureau of Sanitation/EXEC
Adel Hagekhalil, Bureau of Sanitation/EXEC
Shahram Kharaghani, Bureau of Sanitation/WPD
Mas Dojiri, Bureau of Sanitation/EMD
Omar Moghaddam, Bureau of Sanitation/RAD

Table X Comments

Discharge Category	Comment
Natural Springs	The proposed requirement to segregate flows would be more appropriate to appear when discussing the “authorized non-stormwater” flows as to eliminate confusion.
Flows form riparian habitats and wetlands	Clarify that these flows do not apply to constructed wetlands or BMPs. The conditions for exemption are more understandable for constructed wetlands than natural wetlands and riparian habitats. Please consider removing the proposed conditions.
Dewatering of lakes	Clarify that these provisions would not apply if the purpose of these work is improve the water quality of the lake or the discharging waterbody. A number of our proposition O projects may not comply with these conditions; however they will have lasting water quality benefit. For these projects the City will take every necessary precaution to avoid re-suspension of sediments. However, please understand that any agitation from dewatering equipment, even the slightest, will cause resuspension.
Rising ground waters	Consider renaming the discharges that are covered under the NPDES Permit No. CAG994003.
Uncontaminated pumped ground vault	We anticipate that in addition to the discharges that are covered under the three cited general permits, there are many additional discharges. Besides being an unmanageable number of discharge points, these flows (outside of the three cited general permits) should also be viewed similarly to uncontaminated groundwater infiltration.
Landscape irrigation using potable water	The City supports the proposed general conditions for this type of discharge. The City will work with its Department of Water and Power to ensure that these provisions can be easily met. Consider replacing the proposed IPM requirement with a broader requirement for the municipalities to encourage proper pesticide use by their residents and businesses.
Gravity flows from foundation drains, footing drains, and crawl space pumps	There is an incredibly large number of this type of discharges. We do not believe the vast majority of these discharges are currently covered by the cited NPDES permit. Buildings constructed before the advent of stormwater regulations are piped to discharge (from said drains) directly to the storm drain system. Many of these buildings have operated (and discharged) without an individual or general NPDES permit. To require building owners or operators to do so will be cumbersome. Moreover, ensuring and regulating that each operator obtains a permit will be difficult for the City. Please consider exempting this category without conditions similarly to the uncontaminated groundwater infiltration.
Air conditioning condensate	Air conditioning condensate has purity equivalent to that of distilled water, and its discharge, therefore, should not be regulated under an NPDES permit. Harvesting air conditioning condensate is being used in other states for infiltration or reuse. Please consider exempting this category without conditions.

Dechlorinated/ debrominated swimming pool/spa discharges	The testing required for residential pool/spa owners prior to discharging dechlorinated/debrominated pool water is cumbersome and much too sophisticated for them to conduct. In addition, in Los Angeles County alone, there are 16,000 public pools which will be subject to this testing prior to discharge. The cost of testing kits or laboratory analysis will pose a huge burden on the homeowners, as well as recreation and parks departments within the City and County. Please consider deleting this condition. Finally, there is no sediment build-up in pools. Please consider deleting the resuspension condition.
Dewatering of decorative fountains	These are minor discharges that we do not foresee impacting water quality. Please consider removing all the proposed conditions.
Non-commercial car washing by residents or by non-profit organizations	The use of berms and pumps seem to be impractical measures. Blocking the storm drain could create a liability for the City or other municipality if sand bags are left after the car washing activity and cause flooding of the streets. Please consider revising the proposed BMPs.
Street/sidewalk wash water	The transient population is dense in downtown Los Angeles. Some congregate close to the Missions while many others are spread out in downtown. As a result, the unsanitary conditions of the sidewalk and streets is a widespread problem. Store owners take to daily hosing down store front areas and parking lots to clean their respective territories. As such, collection and diversion of street and alley wash water to the sanitary sewer will be a difficult and cumbersome measure to implement; no citizen will take this amount of time to do so. The City, on the other hand, may be able to do so of its own street washing activities, whenever practicable. Please specify the use of this BMP as a condition that should apply solely to City street/sidewalk washing activities, and only whenever practicable.
Flows from fire fighting activities (nonemergency)	It may be more feasible to place this type of discharge under a general NPDES permit, with conditions that have been negotiated with all fire departments in Los Angeles County. The BMPs specified for discharges from training activities are impractical and cumbersome. We would like instead to work with our fire department and other fire departments across the county in developing and proposing a set of more practicable BMPs.

ALBERT ROBLES, PRESIDENT
LILLIAN KAWASAKI, VICE PRESIDENT
WILLARD H. MURRAY, JR., SECRETARY
SERGIO CALDERON, TREASURER
ROBERT KATHERMAN, DIRECTOR
ROBB WHITAKER, P.E., GENERAL MANAGER



April 18, 2012

Sent via Electronic Mail

Renee Purdy, Chief of Regional Programs Section
Ivar Ridgeway, Chief of Stormwater Permitting Unit
California Water Resources Control Board, Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Emails: rpurdy@waterboards.ca.gov;
iridgeway@waterboards.ca.gov

Subject: **Comment Letter on LARWQCB's Staff Working Proposal on LA County MS4 Permit- Non-Storm Water Discharge Provisions**

Dear Ms. Purdy and Mr. Ridgeway:

The Water Replenishment District of Southern California (WRD) appreciates this opportunity to submit comments on the Los Angeles Regional Water Quality Control Board (LARWQCB)'s staff working proposal on Los Angeles County Municipal Separate Storm Sewer (MS4) permit- non-storm water discharge provisions, dated March 28, 2012. WRD manages the groundwater supply for nearly four million residents in 43 cities of Southern Los Angeles County. Our groundwater replenishment activities include supplementing local groundwater supplies with recycled water in the Central Basin and West Coast Basin via the Montebello Forebay Spreading Grounds and the injection projects at the West Coast, Dominguez Gap and Alamitos Gap Seawater Barriers.

In order to accomplish our regional groundwater monitoring and to comply with monitoring requirements under the water recycling permits issued by the LARWQCB (namely, Orders No. R4-2005-0061, CI-8956; No. R4-2003-0134, CI-8654; and No. 91-100, File No. 71-67), WRD has sought coverage under the general National Pollutant Discharge Elimination System (NPDES) Permit (CAG994005 Order No. R4-2003-0108) for the discharge of groundwater associated with well purging, a necessary step prior to well sampling.

Based on a phone conversation with Mr. Ridgeway on April 16, 2012, we understand that the Permittee requirements described in provisions 5 through 7 (including but not limited to requiring dischargers of non-storm water discharges to provide advanced notification to the Permittee, obtain local permits, conduct appropriate monitoring, etc.) are intended specifically for the conditionally authorized non-storm water discharges not otherwise covered under a separate NPDES permit (i.e. for those listed under Part III.A.3.b). However, this intent is not clearly conveyed in the staff working proposal (March 28th version). We are concerned that this lack of clarity may subject our currently permitted discharges to additional regulatory burdens placed by local agencies, jeopardize our ability to discharge monitoring-related groundwater, and thus compromise our future compliance with the permits issued by the LARWQCB.

Ms. Renee Purdy & Mr. Ivar Ridgeway
LARWQCB

April 18, 2012

As a solution, we propose the following revisions (insertions underlined, deletions stricken through):

3. ~~“Exemptions from Effective Prohibition. The following categories of non-storm water discharge are conditionally authorized as specified below in all areas regulated by this Order with the exception of direct discharges to Areas of Special Biological Significance (ASBS) within Los Angeles County. Exemptions from the effective prohibition on non-storm water discharges into the MS4 and from the MS4 directly to an ASBS are identified in section A.4 below. The Permittee shall effectively prohibit non-storm water discharges into the MS4 and watercourses, except where such discharges:~~
 - a. Are covered by a separate individual or general NPDES permit for non-storm water discharges; or Those that are regulated by a separate individual or general NPDES permit for non-storm water discharges, including, but not limited to: (also, remove the list of general NPDES permits)
 - b. Those that Fall within one of the conditionally authorized categories of non-storm water specified below, with the exception of direct discharges to Areas of Special Biological Significance (ASBS) within Los Angeles County, provided they are not a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations in Part V, and/or Water Quality Based Effluent Limitatins in Part VI.D., and meet all required conditions specified in Table X or as otherwise specified or approved by the Regional Water Board Executive Officer:
 - i. Natural springs;
 - ix. Discharges from potable water sources, including water line flushing (supply and distribution system releases), where not otherwise regulated by a separate NPDES permit;....”
6. “If the discharger of the conditionally authorized non-storm water discharge is not a named Permittee in this Order....”
7. “Each Permittee shall evaluate...in Part VI.D.

If the Permittee determines that any one of the categories of conditionally authorized non-storm water discharges identified in sections A.3.b and A.4.a and A.4.c above is a source of pollutants that causes or contributes to an exceedance....the Permittee shall also either:

- a. Prohibit the conditionally authorized non-storm water discharge category from entering the MS4 or receiving waters; or...
- b. Impose conditions in addition to those in Table X, subject to approval by the Regional Board Executive Officer, on the conditionally authorized non-storm water discharge category...”

We thank you in advance for your careful consideration of these comments. Should you have any questions concerning this letter or need assistance in reviewing future draft changes pertaining to these comments, please feel free to contact the undersigned at (562) 275-4245 or cchang@wrld.org.

Very truly yours,



Dr. Cathy Chang, P.E, D.Env
Water Quality Program Manager

ALBERT ROBLES, PRESIDENT
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ROBB WHITAKER, P.E., GENERAL MANAGER



April 18, 2012

Sent via Electronic Mail

Renee Purdy, Chief of Regional Programs Section
Ivar Ridgeway, Chief of Stormwater Permitting Unit
California Water Resources Control Board, Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Emails: rpurdy@waterboards.ca.gov;
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Subject: **Comment Letter on LARWQCB's Staff Working Proposal on LA County MS4 Permit- Minimum Control Measures Provisions (Dated March 21, 2012)**

Dear Ms. Purdy and Mr. Ridgeway:

Water Replenishment District of Southern California (hereinafter, WRD or District) was established by the State of California in 1959 to manage the Central Basin and West Coast Basin (CBWCB), which serve the water needs for nearly four million residents in 43 cities of southern Los Angeles County. We are involved with projects and activities to manage the infiltration of water into the groundwater basins and protect and improve groundwater quality. Infiltration of water into the basins is very important since infiltration facilitates groundwater recharge and supports pumping from the basins. WRD implements a proactive monitoring program for water recharged by the District to evaluate its impact on the quality and the level of groundwater.

We have reviewed the Los Angeles Regional Water Quality Control Board (LARWQCB)'s staff working proposal on Los Angeles County Municipal Separate Storm Sewer (MS4) permit - Minimum Control Measures provisions, dated March 21, 2012. WRD recognizes and appreciates the environmental benefits of low-impact development and the goals of reducing pollution caused by urban runoff. However, infiltration of urban runoff needs to be implemented carefully so that the water infiltrated into the ground does not negatively impact groundwater quality.

The following comments and concerns address the stormwater infiltration requirements under the New Development/ Redevelopment Project Performance Criteria section (pages 23 to 37). First and foremost, we are pleased to see the inclusion of offsite regional groundwater replenishment as an alternative compliance method under "most preferred stormwater management options" alongside with on-site retention of stormwater. Planned regional recharge facilities offer many advantages in that they have already considered factors important to safe and efficient infiltration of water, such as suitability of location (based on hydrogeology, water supply sources, conveyance systems, locations of contaminant sites, etc.), long-term operation and maintenance, necessary monitoring, institutional oversight and funding.



Ms. Renee Purdy & Mr. Ivar Ridgeway
LARWQCB

April 18, 2012

However, we are concerned about the lack of language or the minimum requirements necessary to ensure that the stormwater infiltration activities required in the staff working proposal do not cause a groundwater quality problem. Minimum requirement should include but are not limited to:

- Required planning review process by Permittees with respect to planned land use and proposed treatment design to verify that installed stormwater treatment systems with no under-drain, and at the same time, function primarily as infiltration device, should not cause or contribute to groundwater degradation at project site;
- Minimum setbacks (e.g. 100 feet) for structural infiltration BMPs from drinking water wells, septic systems, and underground storage tanks with hazardous materials;
- Minimum vertical distance (e.g. 10 feet) from the bottom of the infiltration system (rather than from the ground surface) to the seasonal high groundwater mark;
- Prohibition to protect against illegal dumping;
- Implementation of pollution prevention and source control measures to protect groundwater at the project site;
- Implementation of necessary pretreatment for certain categories of projects (e.g. areas of industrial or light industrial activity; areas subject to high vehicular traffic; automotive repair shops; car washes; fleet storage areas; nurseries; and other land uses that pose a high threat to water quality);
- Implementation of adequate maintenance of the infiltration devices to maximize pollutant removal capabilities; and
- A comprehensive monitoring system to assess impacts on groundwater quality.

Similar groundwater protection requirements appear in the MS4 permits issued by several Regional Boards in California, including Regions 2 (San Francisco Bay), 5 (Central Valley), 8 (Santa Ana), and 9 (San Diego). For reference, the following documents/sections contain relevant language on groundwater protection or limitations on structural stormwater infiltration devices:

- San Francisco Bay Region MS4 Permit (Order No. R2-2009-0074, as amended by Order No. R2-2011-0083, pages 31-32)
- East Contra County MS4 Permit (Order No. R5-2010-0102, pages 36-37)
- Orange County MS4 Permit (Order No. R8-2009-0030 as amended by Order No. R8-2010-0062, section XII.B.5, page 52)
- Riverside County MS4 Permit (Order No. R9-2010-0016, section F.1.c. (6) Infiltration and Groundwater Protection, pages 29 - 30).

We urge you to develop a similar set of groundwater protection requirements to accompany the stormwater infiltration provision.

We are also concerned with a couple of perceived restrictions or disincentives to implementing offsite regional groundwater replenishment option- i.e. requirements to: 1) achieve equal or greater benefit to surface water quality in the same subwatershed as the proposed project; and 2) provide onsite pollutant reduction (through treatment of the SWQDv¹ at the project site), which appears top of page 26. We feel that requiring those who implement offsite regional recharge option to achieve equal or greater benefit to surface water quality is important, but to limit it to the same subwatershed is deemed too limiting, which means either the offsite regional recharge facility should be located in the same subwatershed as the project or onsite treatment is required in addition to the participation in an offsite regional recharge. We advocate for greater flexibility by expanding the application of "equal or greater benefit to surface water

¹ Defined in the March 21, 2012 staff working proposal as "runoff from the 0.75 inch, 24-hour storm event or the 85th percentile storm, whichever is greater"

Ms. Renee Purdy & Mr. Ivar Ridgeway
LARWQCB

April 18, 2012

quality” to be attained in the same watershed, rather than same subwatershed, especially since regional groundwater recharge facilities are not numerous in the Los Angeles/Ventura region. Also, we request that the onsite pollutant reduction be required only in cases where offsite regional recharge (the portion contributed by the project sponsor) does not completely offset the estimated pollutant reduction afforded by onsite retention/treatment of SWQDv, and only for the incremental difference in the pollutant loads from the two systems (i.e. offsite regional vs. onsite).

Furthermore, we believe that the proposed permit should require large stormwater infiltration projects be coordinated with and the prioritized list of offsite mitigation, groundwater replenishment and/or retrofit projects (to be developed by Ms4 Permittees, per section c.iii.3(d) on page 29 of the staff working proposal) be reviewed by the local groundwater management agencies, such as WRD.

We thank you in advance for your careful consideration of these comments. Should you have any questions concerning this letter or need assistance in reviewing future draft changes concerning these comments, please feel free to contact the undersigned at (562) 275-4245 or cchang@wrdd.org.

Very truly yours,



Dr. Cathy Chang, P.E, D.Env
Water Quality Program Manager

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

KEY TO MARKUP/COMMENTS

- A. Language in black font is from the 3/28/12 Staff Working Proposal
- B. [Language in blue font is from the current Ventura County MS4 Permit](#)
- C. [Revisions in reddish brown/strikeouts are comments provided by MWD & LADWP \(4/18/12\)](#)

STAFF WORKING PROPOSAL

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

FINDINGS

F. Implementation

This Order ~~references industry standard incorporates BMPs guidance to documents to~~ ensure that ~~Conditionally Exempt Essential authorized~~ Non-Storm Water Discharges are not a source of pollutants to the MS4, ~~Table 1 (Required' Conditions for Non-Storm Water Discharges)~~. The BMPs ~~referenced in the guidance documents included~~ are for the purpose of dechlorination and/or for prevention of erosion and sediment loss, or to reduce other harmful pollutants during the discharge of ~~conditionally exempt essential authorized~~ non-storm water discharges to the MS4, The ~~referenced BMPs guidance documents for potable water discharges include listed in part 1.A of the Order were selected from~~ the American Water Works Association A WWA Guidelines For The Development Of Your Best Management Practices (BMP) Manual For Drinking Water System Releases Developed by the CA -NV A WW A Environmental Compliance Committee (2005) which serves as an industry standard for California, from the results of studies directed by the Los Angeles Water Board, - *Evaluation of Non-Storm Water Discharges to California Storm Drains and Potential Policies for Effective Prohibition Methods, Final Report*, University of California, Los Angeles, Contract No. 5-104-140-0 (1997), and *Water Quality Concerns and Regulatory Controls for Non Storm Water Discharges to Storm Drains*, Duke L.D. and M. Kihara, Journal of the American Water Resources Association, Vol. 34: 661-676, (1998), and from the Water Boards' experience of controlling authorized non-storm discharges to the MS4 since 1990. ~~The referenced BMP guidance documents for flows from fire fighting activities include (insert reference to State Fire Fighting BMP Guidance Manual)~~. The BMPs ~~guidance documents identified in the Table are include~~ technically feasible, practicable, and cost-effective ~~BMPs~~. ~~Where an identified BMP maybe impracticable, this Order includes a provision to select and implement an alternative BMP; through the BMP substitution provisions in subpart 4.A.2.~~ The implementation of measures set forth in this Order are reasonably expected to reduce the discharge of minimal pollutants to the maximum extent practicable from conditionally exempt essential non-storm water discharges. ~~At this time it is impractical and economically infeasible for Conditionally Exempt Essential Non-Storm Water Discharges including fire fighting and potable water discharges from conveyance and distribution systems to provide treatment methods beyond appropriate industry standard BMPs and control measures.~~

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Part III. DISCHARGE PROHIBITIONS

A. Non-Storm Water Discharges

1. General Definitions

- a. **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.
- b. **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 (16 November 1990)).
- c. **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 regulated by an ~~individual or general~~ separate NPDES permit; ~~conditionally authorized~~ non-storm water discharges specifically identified in Part III.A.3 of this Order; and ~~essential~~ non-storm water discharges ~~specifically identified in Part III.A.4~~ ~~resulting from emergency fire fighting activities~~ (pursuant to 40 CFR § 122.26(b)(2)).
- d. **Authorized Non-Storm Water Discharge:** Authorized non-storm water discharges include all discharges that are regulated by an individual or general NPDES permit and are allowed by the LARWQCB to discharge to the MS4 when in compliance with all NPDES permit conditions.
- e. **Conditionally Authorized Non-Storm Water Discharge:** Conditionally a Authorized non-storm water discharges are certain categories of discharges ~~that are either not sources of pollutants or may contain only minimal amounts of pollutants and when in compliance with specified BMPs that are not composed entirely of storm water but contain only minimal amounts of pollutants and therefore~~ do not result in significant environmental effects. (See 55 *Fed. Reg.* 47990, 47995 (16 November 1990)).
- f. **Conditionally Exempt Essential Non-Storm Water Discharge:** Conditionally exempt essential non-storm water discharges include the following categories of discharges 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 and/or are directly or indirectly required by other State or Federal statute and/or regulation. Conditionally exempt essential non-storm water discharges may contain

Comment [u1]: New Category of discharges for all NPDES Permitted sources discharging to the MS4.

Comment [u2]: Separate category for discharges related to incidental urban activities.

Comment [u3]: New Category of exempt discharges for essential public services discharges (fire fighting and drinking water providers)

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

only 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 (16 November 1990)).

- Discharges from Fire Fighting Activities¹ provided appropriate BMPs are implementation based on the (insert reference to State Fire Fighting BMP Guidance Manual); and
- Discharges from Potable Water Sources², where not otherwise regulated by an individual or general NPDES permit, provided appropriate BMPs are implemented based on the AWWA Guidelines for the Development of Your Best Management Practices Manual for Drinking Water System Releases

a. **Receiving Water:** A “water of the United States” into which waste and/or pollutants are or may be discharged.

2. Effective Prohibition of Non-Storm Water Discharges. Each Permittee shall, within its respective jurisdiction, effectively prohibit non-storm water discharges into the MS4 and from the MS4 to receiving waters except where such discharges are either specifically: 1) authorized non-storm water discharges that are regulated by an individual or general NPDES permit as identified in section A.3.a; authorized by a separate individual or general National Pollutant Discharge Elimination System (NPDES) permit or 2) conditionally authorized non-storm water discharges in accordance with sections A.3.b through A.6 below; or 3) conditionally exempt essential non-storm water discharges in accordance with section A.3.c.

3. Exemptions from Effective Prohibition of Non-Storm Water Discharges. The following categories of non-storm water discharges are conditionally authorized-allowed by the Regional Water Board as specified below 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

¹ This includes emergency fire fighting and fire fighting training activities, which simulate emergency responses.

² The required larger volume periodic releases from the wholesale and/or larger water purveyors are included until such time as a General Permit or other compliance measures are established that specifically addresses these types of releases.

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~~Significance (ASBS) within Los Angeles County. Exemptions from the effective prohibition on non-storm water discharges into the MS4 and from the MS4 directly to an ASBS are identified in section A.4 below. Additionally, these dischargers must explore and consider alternative methods of disposal, such as water conservation, reuse of water and groundwater recharge, and determine prior to discharge that no feasible or economical alternative method of disposal exists. Pursuant to Section 2 of Article X of the California Constitution, water resources of the State shall be put to beneficial use to the fullest extent of which they are capable.~~

~~2.~~

- a. Authorized Non-Storm Water Discharges:** Those that are regulated by ~~an~~ **separate** individual or general NPDES permit for non-storm water discharges, including, but not limited to:
- i. Discharges of non-process waste water regulated by NPDES Permit No. CAG994003, including, but not limited to:
 - (a) Air conditioning condensate;
 - (b) Swimming pool filter backwash water;
 - (c) Swimming pool drainage, where the discharge is not authorized below or is otherwise prohibited by a Permittee; and
 - (d) Groundwater seepage.
 - ii. Discharges of low threat hydrostatic test water³ regulated by NPDES Permit No. CAG674001;
 - iii. Discharges of ground water from construction and project dewatering⁴ regulated by NPDES Permit No. CAG994004;

³ 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.

⁴ Discharges of ground water from construction and project dewatering include treated or untreated waste water 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 waste water discharges that meet the eligibility criteria and could not be covered under another specific general NPDES permit.

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- iv. Discharges of ground water from potable water supply wells⁵ regulated by NPDES Permit No. CAG994005;
 - v. Discharges of treated ground water from investigation and/or cleanup of volatile organic compound (VOC) contaminated sites regulated by NPDES Permit No. CAG914001;
 - vi. Discharges of treated ground water and other waste waters from investigation and/or cleanup of petroleum fuel contaminated sites regulated by NPDES Permit No. CAG834001;
 - vii. Short-term, intermittent discharges from utility vaults and underground structures regulated by NPDES Permit No. CAG990002; ~~or~~
- b. **Conditionally Authorized Non-Storm Water Discharges:** Those that fall within one of the categories below, ~~provided they are not a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations in Part V. and/or Water Quality Based Effluent Limitations in Part VI.D.,~~ and meet all required conditions specified in Table X, or as otherwise specified or approved by the Regional Water Board Executive Officer:
- i. Natural springs;
 - ii. Flows from riparian habitats and wetlands;
 - iii. Diverted stream flows, authorized by the State or Regional Water Board;
 - iv. Dewatering of lakes;
 - v. Rising ground waters, where ground water seepage is not otherwise regulated by a separate NPDES permit⁶;
 - vi. Uncontaminated ground water infiltration⁷;

⁵ 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.

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

⁷ 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).)

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- vii. Uncontaminated pumped ground water, where not otherwise regulated by a separate NPDES permit⁸;
- viii. Landscape irrigation;
- ~~ix. Discharges from potable water sources, including water line flushing (supply and distribution system releases), where not otherwise regulated by a separate NPDES permit⁹;~~
- ~~x-ix.~~ Gravity flow from foundation drains, footing drains, and crawl space pumps, where ground water seepage is not otherwise regulated by a separate NPDES permit;
- ~~xi-x.~~ Air conditioning condensate, where not otherwise regulated by a separate NPDES permit;
- ~~xii-xi.~~ Dechlorinated/debrominated swimming pool/spa discharges,¹⁰ where not otherwise regulated by a separate NPDES permit;
- ~~xiii-xii.~~ Dewatering of decorative fountains;
- ~~xiv-xiii.~~ Non-commercial car washing by residents or by non-profit organizations;
- ~~xv-xiv.~~ Street/sidewalk wash water¹¹; ~~and~~

⁸ Ibid.

~~⁹ Potable water distribution system releases means sources of flows from drinking water storage, supply and distribution systems (including flows from system failures), pressure releases, system maintenance, distribution line testing, fire hydrant flow testing; and flushing and dewatering of pipes, reservoirs, vaults, and minor non-invasive well maintenance activities not involving chemical addition(s) where not otherwise regulated by NPDES Permit No. CAG674001 or NPDES Permit No. CAG994005. Releases from potable water supplies or distribution systems not otherwise regulated by an existing NPDES permit shall be allowed with the implementation of appropriate and effective BMPs (as specified in Table X and consistent with American Water Works Association guidelines, and/or as required by the Regional Water Board Executive Officer) until such time as a general NPDES permit is adopted that addresses those types of releases.~~

¹⁰ Authorized dechlorinated/debrominated swimming pool/spa discharges do not include swimming pool/spa filter backwash or swimming pool/spa water containing bacteria, detergents, wastes, algaecides, or cyanuric acid in excess of 50 parts per million, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.

¹¹ Authorized 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. Authorized 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.

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~~xvi.xv. Flows from emergency fire fighting activities (i.e., flows necessary for the protection of life or property).¹²~~

c. Conditionally Exempt Essential Non-Storm Water Discharges: Those that fall within one of the categories below, meet all required BMPs as specified, are essential public services discharge activities, and/or are otherwise required by other state or federal statute and/or regulation, including:

i. Discharges from Fire Fighting Activities provided appropriate BMPs are implemented based on the (insert reference to State Fire Fighting BMP Guidance Manual) and;

i.ii. Discharges from Potable Water Sources, where not otherwise regulated by an individual or general NPDES permit, provided appropriate BMPs are implemented based on the AWWA Guidelines for the Development of Your Best Management Practices Manual for Drinking Water System Releases.

4. Exemptions from Effective Prohibition within an ASBS. The following non-storm water discharges to the MS4 and from the MS4 directly to an ASBS are conditionally authorized pursuant to the California Ocean Plan as specified below, provided that:

a. The discharges are for essential public service, or for emergency response purposes, structural stability, slope stability or occur naturally, including the following discharges:

~~a. Discharges associated with emergency fire fighting activities (i.e., flows necessary for the protection of life or property)¹³;~~

~~b.a. Foundation and footing drains;~~

~~e.b. Water from crawl space or basement pumps;~~

~~d.c. Hillside dewatering;~~

~~e.d. Naturally occurring groundwater seepage via a storm drain; and~~

¹² ~~Discharges from vehicle washing, building fire suppression system maintenance (e.g., sprinkler line flushing), and other routine maintenance activities are not authorized to be discharged to the MS4.~~

¹³ ~~-Ibid.~~

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~~f.e.~~ Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.

- b. The discharges fall within one of the specified categories in sub-part A.3-a ~~and are specifically authorized by the Los Angeles Water Board.~~
- c. Authorized non-storm water discharges shall not cause or contribute to an exceedance violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations in this Order of the water quality objectives in Chapter II of the Ocean Plan or alter natural ocean water quality in an ASBS.

- 5. Permittee Requirements.** Each Permittee shall: ~~develop and implement procedures to ensure all conditionally authorized non-storm water discharges into the MS4 and from the MS4 into receiving waters identified in sections A.3 and A.4 above comply with the applicable conditions specified in Table X. These procedures shall include, at a minimum, the following:~~

~~Procedures for ensuring that all necessary permits and water quality certifications are obtained by a discharger prior to discharge to the MS4 as specified in Table X.~~

~~Procedures for ensuring a discharger has explored and considered alternatives to discharge to the MS4, including for example, water conservation, reuse of water and ground water recharge, and has determined no feasible or economical alternative to discharge to the MS4 exists.~~

- a. Promote measures that minimize runoff and pollutant loading from excess irrigation by promoting and/or working with potable water purveyors to promote conservation programs ~~Procedures to minimize the discharge of landscape irrigation water into the MS4. For landscape irrigation water to be discharged, each Permittee shall, within its respective jurisdiction:~~
 - i. Enact a municipal ordinance that specifies landscape irrigation standards to minimize irrigation runoff and eliminate irrigation overspray. The Permittee shall have legal authority to enforce the ordinance and levy fines. ~~In addition, the Permittee may coordinate with the local water purveyor(s), where applicable, to ~~promote/enforce~~ 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.~~

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

ii.

~~Coordinate with the water purveyor(s) within its jurisdiction to~~
Ddevelop and implement a work plan that results in a coordinated outreach and education program to minimize the discharge of irrigation water and pollutants associated with irrigation water consistent with Part VI.C. of this Order (Public Information and Participation Program).

b.

If the discharger¹⁴ of the conditionally exempt essential non-storm water discharge is not a named Permittee in this Order, the Regional Water Board Permittee shall require the discharger to provide advanced notification to the Permittee of the discharge, ~~obtain local permits, conduct appropriate monitoring, and/or implement additional BMPs and/or control measures as a condition of the approval to discharge into the Permittee's MS4, according to its local authorities.~~

c. ~~The Regional Water Board~~Each Permittee shall evaluate the monitoring data collected pursuant to Attachment X (Monitoring and Reporting Program - Non-Storm Water Outfall Based Monitoring), and any other relevant information, and determine whether any of the conditionally authorized categories of non-storm water discharges identified in sections A.3.b and A.4 above ~~is are~~ are a source of pollutants that maybe causing an exceedance of an applicable water quality objective for the receiving water.

~~6. causes or contributes to an exceedance of applicable Receiving Water Limitations in Part V. and/or Water Quality Based Effluent Limitations in Part VI.D.~~

d. If the Regional Water Board Permittee determines that any one of the categories of conditionally authorized non-storm water discharges identified in sections A.3.b and A.4 above are a source of pollutants that maybe causing an exceedance of an applicable water quality objective for the receiving water ~~is a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations, the Permittee shall report its findings to~~

¹⁴ Dischargers not named a Permittee in this Order may include, but are not limited to, potable water supply and distribution agencies, wastewater treatment agencies/sanitation districts, and other Federal, State, and local governmental entities.

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~~the Regional Water Board in its annual report. Based on this determination, the Regional Water Board Permittee may~~ shall also either:

- ~~d. Prohibit the non-storm water discharge category from entering the MS4 or receiving waters; or~~
- ~~i. Impose conditions in addition to those in Table X, subject to approval by the Regional Water Board Executive Officer, on the conditionally authorized non-storm water discharge category such that the discharge category will not be a source of pollutants that causes or contributes to an exceedance of applicable for the receiving water Receiving Water Limitations and/or Water Quality Based Effluent Limitations; or~~
- ~~ii. Require the conditionally authorized non-storm water discharger to obtain coverage under a separate individual or general State or Regional Water Board NPDES permit prior to discharge to the MS4.~~

~~7. If a Permittee demonstrates that a specific non-storm water discharge from a potable water supply or distribution system not otherwise regulated by a separate NPDES permit, but required by state or federal statute and/or regulation, caused [further definition to be provided] a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, the Permittee shall not be found in violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations for that specific sampling event. Such demonstration must be based on monitoring data from the specific non-storm water discharge, other relevant information regarding the specific non-storm water discharge as identified in Table X, and documentation of the state or federal statute and/or regulation requiring such non-storm water discharge, including the conditions under which the specific discharge was required.~~

~~d. Upon a demonstration that such a discharge has caused a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, the Permittee shall immediately take actions to:~~

- ~~a. Evaluate the potential long-term effects of such continued discharges on the receiving water;~~
- ~~b. Identify alternative discharge pathways to less sensitive receiving waters in coordination with the discharger;~~
- ~~c. Impose conditions in addition to those identified in Table X, subject to approval by the Regional Water Board Executive Officer, on the~~

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~~discharge such that it will not be a source of pollutants that causes or contributes to an exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations; and/or~~

~~d. Require the discharger to obtain coverage under a separate State or Regional Water Board permit prior to discharge to the MS4.~~

~~e. The Permittee shall provide the results of its evaluation and follow up actions to the Regional Water Board in its annual report.~~

~~8. If a Permittee demonstrates that a specific non-storm water discharge from emergency fire fighting activities caused [further definition to be provided] a short-term exceedance of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations during a specific sampling event, the Permittee shall not be found in violation of applicable Receiving Water Limitations and/or Water Quality Based Effluent Limitations for that specific sampling event. Such demonstration must be based on relevant information regarding the location, date, time and duration of the emergency fire fighting activity, the discharge pathway and receiving water(s) of the fire fighting flows, and an estimate of the volume of the non-storm water discharge.~~

~~9-6. Notwithstanding the above, the Regional Water Board Executive Officer, based on a comprehensive analysis ~~his or her own and~~ evaluation of monitoring data and other relevant information for specific categories of discharges, may modify a category or remove categories of conditionally authorized non-storm water discharges from sections A.3 b and A.4 above in consideration of antidegradation policies and/or TMDLs, or 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. The Executive Officer may also require that a discharger obtain coverage under a separate individual or general State or Regional Water Board permit for non-storm water discharges to the MS4 or from the MS4 to receiving waters.~~

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Table X. Required Conditions for **Authorized and Conditionally Authorized** Non-Storm Water Discharges

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
All Discharge Categories	See discharge specific conditions below.	--	<p><u>Explore and Evaluate</u> alternative means of disposal (e.g., sanitary sewer, land disposal) or opportunities for <u>water conservation</u>, capture, reclamation, <u>groundwater recharge</u>, and reuse <u>to determine if any feasible or economical alternative methods of disposal exist</u>. Pursuant to Section 2 of Article X of the California Constitution, <u>water resources of the State shall be put to beneficial use to the fullest extent of which they are capable</u>.</p> <p>Segregate authorized non-storm water discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.</p> <p><u>Whenever there is a discharge of 500,000 gallons or more into the MS4, the discharger shall 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 of the discharge.</u></p>
Natural Springs	N/A	N/A	Segregate authorized non-stormwater discharges from potential sources of pollutants to prevent introduction of pollutants to the MS4 and receiving water.

¹⁵ The general orders/NPDES permits identified are those currently available to dischargers under which authorization to discharge could be provided. Alternatively, a discharger could seek authorization for the non-storm water discharge under an individual NPDES permit.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Flows from riparian habitats and wetlands	Discharge allowed only if all necessary permits/water quality certifications for water diversions are obtained prior to discharge.	N/A	All necessary permits and water quality certifications must be obtained prior to diverting flows to the MS4. Discharges shall comply with all conditions specified in permits and water quality certifications.
Diverted stream flows	Discharge allowed only if authorized by the State or Regional Water Board.	N/A	Discharges shall comply with all conditions specified by the State or Regional Water Board.

STAFF WORKING PROPOSAL

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
<p>Dewatering of lakes (<u>this does not include discharges from potable or raw water reservoirs and tanks</u>)</p>	<p>Discharge allowed only if all necessary permit/water quality certifications for dredge and fill activities, including water diversions, are obtained prior to discharge.</p>	<p>N/A</p>	<p>All necessary permits and water quality certifications must be obtained prior to dewatering.</p> <p>ProvideEnsure procedures for advanced notification by the lake owner / operator to the Permittee(s) within 72 hours of 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 MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p> <p>Discharges shall be volumetrically and velocity controlled to prevent resuspension of sediments.</p> <p>Measures shall be taken to stabilize lake bottom sediments.</p> <p>Ensure procedures for water qualityAs applicable, monitoring for of pollutants of concern¹⁶ that may be mobilized by in the lake dewatering through the MS4 to a receiving water.</p> <p>Ensure rRecord-keeping of lake dewatering <u>shall be maintained</u> by the lake owner / operator.¹⁷</p>

¹⁶ 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. for the lake and/or receiving water.

¹⁷ Permittees shall require that the following information is maintained by the lake owner / operator: name of discharger, date of notification, method of notification, location of discharge, discharge pathway, receiving water, date of discharge, time of the beginning and end of the

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Rising ground waters	Discharge from ground water seepage allowed only if authorized under a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	Discharges shall comply with all NPDES permit conditions for the discharge.
Uncontaminated ground water infiltration	N/A	N/A	None
Uncontaminated pumped ground water	Discharge is allowed only if authorized under a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG990002 – Discharges from Utility Vaults and Underground Structures to Surface Waters	Discharges shall comply with all NPDES permit conditions for the discharge. Pursuant to NPDES Permit No. CAG990002, whenever there is a discharge of 50,000 gallons or more from utility vaults and underground structures to the MS4, the discharger (i.e., utility company) shall 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 of the discharge.

Comment [u4]: Deleted because this is a permit condition of the Vault Dewatering General NPDES Permit (CAG990002) so it does not need to be repeated here, which is consistent with the rest of Table X.

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 monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Landscape irrigation using potable water	Discharge allowed if potable landscape irrigation due to runoff 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.	N/A	<p>Implement BMPs, including Integrated Pest Management (IPM), to minimize runoff and prevent introduction of pollutants to the MS4 and receiving water.</p> <p>Implement water conservation programs to <u>methods to</u> minimize discharge by using less water.</p> <p>Utilize water delivery rates that do not exceed the infiltration rate of the soil.</p> <p>Promote erosion repair (i.e., cover or repair areas of exposed soils in yards/landscaping).</p>
Landscape irrigation using reclaimed or recycled water	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.	N/A	Discharges must comply with applicable O&M Plans, and all relevant portions thereof, including the Irrigation Management Plan.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Potable drinking water supply and distribution system releases	<p>Discharge of ground water from potable water supply wells is allowed only if authorized under a separate NPDES permit (see below).</p> <p>Discharge of other potable drinking water supply and distribution releases allowed after implementation of specified BMPs.</p>	N/A	<p>Implement BMPs to prevent introduction of pollutants to potable water supply or distribution system release prior to discharge to the MS4 and receiving water. BMPs shall be consistent with CA-NV American Water Works Association BMP Manual for Drinking Water System Releases and other applicable guidelines.¹⁸</p> <p>Ensure procedures for advanced notification by the water supplier to the Permittee(s) within 72 hours of planned discharge and as soon as possible after an unplanned discharge.</p> <p>Ensure procedures for monitoring of pollutants of concern¹⁹ that may be mobilized by the potable water supply release through the MS4 to a receiving water.</p> <p>Ensure record keeping by water supplier(s) for all discharges greater than [volume to be determined].²⁰</p>

Comment [u5]: All these BMPs and more are included in the AWWA Guidance Manual for Potable Water Discharges so it is more appropriate to reference the AWWA Manual in its entirety.

¹⁸ See, for example, Awwa Research Foundation and US EPA. Environmental Impacts of Non-Treatment Discharges from Drinking Water Utilities. Prepared by Narasimham Consulting, Inc. (2007); Golden State Water Company Water Pollution Control Program – Potable Water Distribution System Releases for Unincorporated Areas of Los Angeles County (last updated June 2007) and City of Los Angeles Department of Water and Power Pollution Prevention Plan for Water System Discharges (last updated April 2008).

¹⁹ Pollutants of concern include, at a minimum, trash and debris, including organic matter, TSS, and any pollutant for which there is a Water Quality Based Effluent Limitation in Part VI. for the receiving water.

²⁰ Permittees shall require that the following information is maintained by the water supplier(s) for all discharges (planned and unplanned) greater than [volume to be determined]: name of discharger, date of notification (for planned discharges), method of notification, alternatives to discharge considered and justification for finding of infeasibility of capture and reuse or ground water infiltration, 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, total number of gallons captured for reuse or infiltrated to ground water, type of dechlorination equipment used, type of

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			<p>To be discharged, this type of water shall be dechlorinated using aeration and/or sodium thiosulfate and/or other appropriate means. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Discharges from water lines and potable water sources shall be pH adjusted if necessary and be within the range of 6.5 and 8.5.</p> <p>Discharges from water lines and potable water sources shall be volumetrically and velocity controlled to prevent resuspension of sediments.</p> <p>BMPs such as sand bags or gravel bags, or other appropriate means, shall be utilized to prevent sediment transport.</p> <p>Immediately prior to discharge, the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p> <p>All debris and sediments in the flow path that are trapped by the BMPs shall be collected and disposed of in a legal and appropriate manner.</p>
	<p>Discharge of potable water used in hydrostatic testing allowed only if: 1)</p>	<p>NPDES No. CAG674001— Discharges From Hydrostatic Test Water to Surface Waters in</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</p>

~~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 monitoring data. Records shall be made available upon request by the Permittee or Regional Water Board.~~

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
	<p>the discharger documents in its record-keeping that potential uses of the hydrostatic test water and potable water were considered to ensure use to the fullest extent possible and in compliance with Article 10, Section 2 of the California Constitution, and 2) authorized by a separate NPDES permit.</p>	<p>Coastal Watersheds of Los Angeles and Ventura Counties</p>	
	<p>Discharges from activities that occur at wellheads, such as well construction, well development (e.g., aquifer pumping tests, well purging), or major well maintenance are allowed only if authorized by a separate NPDES permit.</p>	<p>NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</p> <p>NPDES Permit No. CAG994005 – Discharges of Ground Water from Potable Water Supply Wells to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</p>

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
<p><u>Hydrostatic test water</u></p>	<p>Discharge of hydrostatic test water is allowed only if: 1) the discharger documents in its record-keeping that potential uses of the hydrostatic test water and potable water were considered to ensure use to the fullest extent possible and in compliance with Article 10, Section 2 of the California Constitution, and 2) authorized by a separate NPDES permit.</p>	<p>NPDES No. CAG674001 - Discharges From Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</p>
<p><u>Discharges from wellhead activities, such as well construction, well development (e.g., aquifer pumping tests, well purging), or major well maintenance</u></p>	<p>Discharges from activities that occur at wellheads, such as well construction, well development (e.g., aquifer pumping tests, well purging), or major well maintenance are allowed only if authorized by a separate NPDES permit.</p>	<p>NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994005 – Discharges of Ground Water from Potable Water Supply Wells to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties</p>	<p>Discharges shall comply with all NPDES permit conditions for the discharge.</p>

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
Gravity flow from foundation drains, footing drains, and crawl space pumps	Discharge is allowed only if authorized by a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG994004 – Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties NPDES Permit No. CAG990002 – Discharges from Utility Vaults and Underground Structures to Surface Waters	Discharges shall comply with all NPDES permit conditions for the discharge.
Air conditioning condensate	Discharge is allowed only if authorized by a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	Discharges shall comply with all NPDES permit conditions for the discharge.
Dechlorinated/debrominated swimming pool/spa discharges	Discharges allowed after implementation of specified BMPs. Pool or spa water containing copper-based algaecides is not allowed to be discharged to the MS4.	N/A	Implement BMPs and <u>segregate discharge from potential sources of pollutants controls</u> to prevent introduction of pollutants prior to discharge to the MS4 and receiving water. 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.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			<p>Swimming pool water shall not contain any detergents, wastes, algaecides, or cyanuric acid in excess of 50 parts per million, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.²¹</p> <p>Swimming pool discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Swimming pool discharges shall be volumetrically and velocity controlled to promote evaporation and/or infiltration and prevent resuspension of sediments.</p> <p><u>Whenever there is a discharge of 500,000 gallons or more into the MS4, the discharger shall 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 of the discharge.</u></p> <p>Ensure procedures for advanced notification by the pool owner to the Permittee(s) within 72 hours of planned discharge.</p> <p>Immediately prior to discharge, the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall<u>directed shall</u> be inspected and cleaned out.</p>

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

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Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
	Discharges of cleaning waste water and filter backwash allowed only if authorized by a separate NPDES permit.	NPDES Permit No. CAG994003 – Discharges of Nonprocess Wastewater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties	Discharges shall comply with all NPDES permit conditions for the discharge.
Dewatering of decorative fountains	<p>Discharges allowed after implementation of specified BMPs.</p> <p>Fountain water containing copper-based algaecides is not allowed to be discharged to the MS4.</p> <p>Fountain water containing dyes is not allowed to be discharged to the MS4.</p>	N/A	<p>Implement BMPs <u>and segregate discharge from potential sources of pollutants</u> to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Fountain water must be dechlorinated or debrominated using holding time, aeration, and/or sodium thiosulfate. Chlorine residual in the discharge shall not exceed 0.1 mg/L.</p> <p>Fountain discharges are to be pH adjusted, if necessary, and be within the range of 6.5 and 8.5 standard units.</p> <p>Fountain discharges shall be volumetrically and velocity controlled to prevent resuspension of sediments.</p> <p><u>Whenever there is a discharge of 500,000 gallons or</u></p>

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			<p><u>more into the MS4, the discharger shall 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 of the discharge.</u></p> <p>Immediately prior to discharge, the MS4 inlet to which the discharge is directed, and the MS4 outlet from which the water will be discharged to the receiving water, shall be inspected and cleaned out.</p>
Non-commercial car washing by residents or by non-profit organizations	Discharges allowed after implementation of specified BMPs.	N/A	<p>Implement BMPs to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Minimize the amount of water used by turning off nozzles or kinking the hose when not spraying a car, and by using a low volume pressure washer.</p> <p>Use biodegradable, phosphate free detergents and non-toxic cleaning products.</p> <p>Where possible, wash cars on a permeable surface where wash water can percolate into the ground (e.g. gravel or grassy areas).</p> <p>Create temporary berms or block off the storm drains. Use pumps or vacuums to direct water to pervious areas.</p> <p>Empty buckets of soapy or rinse water into the sanitary sewer system (e.g., sinks or toilets).</p>
Street/sidewalk wash water	Discharges allowed after implementation of specified BMPs.	N/A	<p>Implement BMPs to prevent introduction of pollutants prior to discharge to the MS4 and receiving water.</p> <p>Sweeping should be used as an alternate BMP</p>

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			<p>whenever possible and sweepings should be disposed of in the trash.</p> <p>BMPs shall be in accordance with Regional Water Board Resolution No. 98-08 that requires: 1) removal of trash, debris, and free standing oil/grease spills/leaks (use absorbent material if necessary) from the area before washing, 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, and 3) in areas of unsanitary conditions, collection and diversion of street and alley wash water to the sanitary sewer. Each Permittee is required to implement (3) in areas where the congregation of transient populations can reasonably be expected to result in a significant threat to water quality.</p>
	<p>Discharge allowed only when necessary for the protection of life or property.</p>	<p>N/A</p>	<p>Flows resulting from emergency fire fighting necessary for the protection of life or property do not require implementation of specific BMPs.</p>
<p>Flows from fire fighting activities</p>	<p>Discharges resulting from training activities, which simulate emergency responses, are allowed after implementation of specified BMPs.</p>	<p>N/A</p>	<p>Live and simulated fire training should be conducted, where feasible, in facilities where runoff controls protecting the MS4 have been engineered and built into the facility.</p> <p>Direct water flows to landscaped, greenway or green belt areas whenever possible.</p> <p>Survey the area prior to the training exercise to</p>

Comment [u6]: All these BMPs and more are included in the Fire Fighters BMP Manual so it is more appropriate to reference the manual in its entirety.

LA County MS4 Permit – Non-Storm Water Discharge Prohibitions

Discharge Category	General Conditions Under Which Discharge to the MS4 is Allowed	Applicable NPDES Permit for Which Coverage is Required Prior to Discharge to the MS4 and/or Receiving Waters ¹⁵	Conditions/BMPs that are Required to be Implemented Prior to Discharge to the MS4 and Receiving Waters
			<p>ensure that debris will not enter the MS4 and receiving water as a result of the flows generated during the drill.</p> <p>When practicable, divert flows to the sanitary sewer with the permission of the local sewer agency.</p> <p>Use fog streams or straight streams for short durations when practicable.</p> <p>Use low volume nozzle settings.</p> <p>If training activities involve the use of foam, block off all potentially affected MS4 inlets with plastic sheeting and sandbags or temporary berms to prevent discharge of foam or other additives to the MS4 and receiving water.</p>

N/A – Not Applicable

STAFF WORKING PROPOSAL

**LOS ANGELES PERMIT GROUP COMMENTS
NON-STORM WATER DISCHARGE PROHIBITION – 3/28/2012 STAFF WORKING PROPOSAL
LOS ANGELES COUNTY MUNICIPAL STORMWATER PERMIT**

No.	Page	Citation	Comment
1	1	III.A.1.a and III.A.2	<p>RB staff proposed language requires the permittees to “effectively prohibit non-stormwater discharges into the MS4 and from the MS4 to receiving waters” except where authorized by a separate NPDES permit or conditionally authorized in sections III.A.3-6.</p> <p>This may overstep the required legal authority provisions in the federal regulations since 40CFR122.26 (d)(1)(ii) requires legal authority to control discharges to the MS4 but not from the MS4. Additionally, with respect to the definition of an illicit discharge at 40CFR122.26(b)(2), an illicit discharge is defined as “a discharge to the MS4 that is not composed entirely of stormwater”. In issuing its final rulemaking for stormwater discharges on Friday, November 16, 1990¹, USEPA states that:</p> <p align="center"><i>Section 405 of the WQA alters the regulatory approach to control pollutants in storm water discharges by adopting a phased and tiered approach. The new provision phases in permit application requirements, permit issuance deadlines and compliance with permit conditions for different categories of storm water discharges. The approach is tiered in that storm water discharges associated with industrial activity must comply with sections 301 and 402 of the CWA (requiring control of the discharge of pollutants that utilize the Best Available Technology (BAT) and the Best Conventional Pollutant Control Technology (BCT) and where necessary, water quality-based controls), but permits for discharges from municipal separate storm sewer systems must require controls to the maximum extent practicable, and where necessary water quality-based controls, and must include a requirement to effectively prohibit non-stormwater discharges into the storm sewers.</i></p> <p>This is further illuminated by the section on Effective Prohibition on Non- Stormwater Discharges²:</p> <p align="center"><i>“Section 402(p)(3)(B)(ii) of the amended CWA requires that permits for discharges from municipal storm sewers shall include a requirement to effectively prohibit non-storm water</i></p>

¹ 55 FR 47990-01 VI.G.2. Effective Prohibition on Non-Stormwater Discharges

² 55 FR 47990-01 VI.G.2. Effective Prohibition on Non-Stormwater Discharges

LOS ANGELES PERMIT GROUP COMMENTS
NON-STORM WATER DISCHARGE PROHIBITION – 3/28/2012 STAFF WORKING PROPOSAL
LOS ANGELES COUNTY MUNICIPAL STORMWATER PERMIT

No.	Page	Citation	Comment
			<p><i>discharges into the storm sewers. Based on the legislative history of section 405 of the WQA, EPA does not interpret the effective prohibition on non-storm water discharges to municipal separate storm sewers to apply to discharges that are not composed entirely of storm water, as long as such discharge has been issued a separate NPDES permit. Rather, an 'effective prohibition' would require separate NPDES permits for non-storm water discharges to municipal storm sewers"</i></p> <p>The rulemaking goes on to say that the permit application:</p> <p><i>"requires municipal applicants to develop a recommended site-specific management plan to detect and remove illicit discharges (or ensure they are covered by an NPDES permit) and to control improper disposal to municipal separate storm sewer systems."</i></p> <p>Nowhere in the rulemaking is the subject of prohibiting discharges <i>from</i> the MS4 discussed.</p> <p>Furthermore, USEPA provides model ordinance language on the subject of discharge prohibitions: http://www.epa.gov/owow/NPS/ordinance/mol5.htm. Section VII Discharge Prohibitions of this model ordinance provides discharge prohibition language as follows:</p> <p><i>No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water.</i></p> <p>Thus we recommend that staff eliminate the "from" language at both Part III.A.1.a. and Part III.A.2.</p>
2	3	III.A.3.b	<p>This provisions outlined in this section are not clear. The provisions may be interpreted as the discharge being "exempt" as long as Table "X" does not contain an issue that is highlighted. Requiring the Permittees to look to Part V or Part VI.D or contact the Executive Officer to verify that there is no new information that will change the original permit determination is confusing.</p>

LOS ANGELES PERMIT GROUP COMMENTS
NON-STORM WATER DISCHARGE PROHIBITION – 3/28/2012 STAFF WORKING PROPOSAL
LOS ANGELES COUNTY MUNICIPAL STORMWATER PERMIT

No.	Page	Citation	Comment
			We'd suggest that Table "X" be revised to include specific sections in Part V or VI.D that may modify the exempt determination. We'd respectfully request that, based on the Executive Officer's determination of a problem, a reopener clause is added so the Permit may be amended to account for changes exempt/conditionally exempt status.
3	3	III.A.3.b.i and III.A.3.b.ii	MS4 Permittees do not have the legal authority to divert and/or treat water from natural springs or riparian wetlands (including those which are spring fed) before they enter the MS4. We believe such flows should be unconditionally exempt from the discharge prohibitions.
4	3	III.A.3.b.iii	MS4 Permittees do not have the legal authority to override State or Regional Board authorized discharges from stream diversions. Once the State or Regional Board authorizes a discharge, the State or Regional Board becomes responsible for any pollutants in that discharge. For MS4 Permittees, this discharge should be unconditionally exempt.
5	4	III.A.3.b.x	The combination of gravity flow and a pumped flow is not appropriate. Gravity flow is not dewatering while pumped flow is dewatering. Please separate the two types of discharge. The installation of drain piping around a below grade foundation wall is intended to provide safety so that water pressure does not build up against a below grade wall. If the built-up water, which is generally not ground water but rather infiltrating rain water, then it can be drained by gravity which is not dewatering and therefore should not require an NPDES permit.
6	4	III.A.3.b.xv	The conditional exemption of street/sidewalk water is inconsistent with the requirement in the industrial/commercial MCM section that street washing must be diverted to the sanitary sewer. Sidewalk water should be conditionally exempt, but so also should patios and pool deck washing. If street washing has to be diverted to the sanitary sewer for industrial/commercial facilities, then it should for all facilities and so should parking lot wash water as they are similar in their pollutant loads.
7	4	III.A.3.b.xvi	Emergency fire fighting flows should be unconditionally exempt since they are necessary to protect life and property, regardless of whether or not they cause or contribute to an exceedance of RWL and/or WQBEL. To be consistent with the Ventura county permit, and because of the close link between emergency and non-emergency fire-fighting flows, we request all fire-fighting flows be unconditionally exempt or at minimum consider revising some of the proposed conditions of Table X to be more practicable and flexible.
8	4	III.A.3.b.xvi	Footnote No.10 which expressly prohibits building fire suppression system maintenance (e.g. fire line flushing) discharges to the MS4. With no viable alternative than discharging to the MS4, this prohibition directly conflict with California Health and Safety Code and the State Fire Marshall on the necessity to flush the system. Please delete this explicit prohibition.
9	6	III.A.5.c.i	The requirement to "eliminate irrigation overspray" is impossible to attain. An ordinance that

LOS ANGELES PERMIT GROUP COMMENTS
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			requires Permittees to levy monetary fines against residents is overreach. Please delete this requirement.
10	6	III.A.6	The provision to require dischargers to notify the Permittee of the discharge, obtain local permits and implement BMPs may not be feasible for many dischargers such as car washing and sidewalk washing. Alternatively municipalities can be required to implement ordinances that require anyone within their jurisdiction to comply with a series of conditions when performing those tasks.
11	6	III.A.7	The requirement to determine whether any of the conditionally exempted non-stormwater discharges is a source of pollutants is a requirement to monitor every non-stormwater discharge. This requirement is overly burdensome on Permittee staff, very costly, and a responsibility that will come into question. Please delete this requirement.
12	7	III.A.8	The requirement of the Permittee to demonstrate that a specific non-stormwater discharge from a potable water supply caused an exceedance is a requirement to monitor every potable water supply discharge. This requirement places all the responsibility on the MS4 Permittees to monitor and test the samples. The burden of proof is placed on the Permittee for any exceedance until proven innocent by way of the monitoring results. Like emergency fire fighting discharges, potable water discharges should be exempt.
13	4	III.A.8	We support an exemption for a Permittee from a violation of RWL and or WQBELs caused by a non-stormwater discharge from a potable water supply or distribution system not regulated by an NPDES permit but required by state or federal statute. This should clearly apply to all NPDES permits issued to others within, or flow through, the MS4 Permittees jurisdiction. We would request that emergency releases caused by potable water line breaks, which are unexpected, and have to be dealt with as an emergency. MS4 permittees should be exempt from RWL or WQBEL violations associated with any permitted NPDES discharges that are effectively authorized by LARWQCB under the Clean Water Act.
14	8	III.A.9	The requirement of the Permittee to demonstrate that a specific non-stormwater discharge from a fire fighting activity caused an exceedance is a requirement to monitor every fire fighting activity, including location, date, time, duration, discharge pathway, and flow volume. This requirement places all the responsibility on the MS4 Permittees to monitor and test the samples, which is both labor intensive with limited personnel and extraordinarily costly. The burden of proof is placed on the Permittee for any exceedance until proven innocent by way of the monitoring results. It should be acknowledged by the Regional Board that fire fighting activity causes pollutants to be discharged. Discharges from all fire fighting activities should be unconditionally exempt, as protection of life and property is paramount.

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No.	Page	Citation	Comment
15	Table X	General	Enforcing NPDES permits issued for the various NSWDS referenced in this table should be the responsibility of the State/Regional Board, not the MS4 permittee. Therefore, it is inappropriate to include a condition that places a responsibility on the MS4 permittee to ensure requirements of NPDES permits are being implemented or effective in order for the pertaining NSWDS category to be exempt. Proper enforcement of the various NPDES permits mentioned in this table should ensure impacts from these discharges are negligible.
16	Table X	Rising Groundwater	The condition that an NPDES permit is required when rising groundwater occurs where a sump pump is necessary in basement of residential buildings may become a significant burden to the LARWQCB—the number of such occurrences in the LA Basin will be very large.
17	Table X	Landscape Irrigation	Conditions should distinguish new landscape installation from retrofits. These conditions are much easier to require on new landscapes than on existing landscapes.
18	Table X	Swimming Pool/spa dischargers	By imposing additional criteria for the proper discharge of swimming pool water, it greatly increases the complexity for the thousands of homeowners in Los Angeles county to comply with these conditions and may result in fewer amounts of these flows from being dechlorinated. Consider simplifying the proposed conditions.

LENNAR[®]

Mr. Ivar Ridgeway, Chief, Storm Water Permitting

California Regional Water Quality Control Board

Los Angeles Region

320 West 4th Street, Suite 200

Los Angeles, CA 90013

iridgeway@waterboards.ca.gov

VIA ELECTRONIC MAIL

Re: Comments on Staff Working Proposal for Provisions Regarding Minimal Control Measure for the Greater LA County Municipal Separate Storm Sewer Permit

Dear Mr. Ridgeway:

Thank you for this opportunity to submit written comments on the staff working proposal for provisions regarding the minimal control measures for the LA County Municipal Separate Storm Sewer Permit.

Lennar is one of the largest homebuilders in the Los Angeles region. We are concerned about the proposed requirements for new development and redevelopment; they are exceedingly rigid and restrictive. We submit the following comments:

The staff working proposal is inflexible and confusing.

The permit limits modern stormwater management technology that is considered LID; specifically biofiltration. The Staff proposal relegates biofiltration LID to an afterthought in a selection process that is unlike anything in practice currently. We believe the selection process and use of "preferred" options is unnecessary. The established hierarchy should be adhered to.

The Clean Water Act standard is to reduce pollution to the Maximum Extent Practicable. There is no mention of this anywhere in the staff proposal, and without some balance of technical and economic feasibility, some of the requirements in the staff working proposal will render projects unviable. For example, green roofs and harvesting projects may not be the preferred option for a jurisdiction or a project.

The staff working proposal regulates a project's runoff twice: first, it mandates using a very restrictive set of LID BMPs, which when applied won't allow most projects to manage the water

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quality volume on-site. For the remaining runoff volume, the project proponent must then install treatment controls on-site and the staff proposal sets pollution benchmarks for that runoff (p 31). And then, the staff proposal requires that the runoff volume which undergoes treatment control on-site be mitigated at an offsite location using LID BMPs. This unnecessarily burdens a project proponent. Not only do they have to install treatment controls and monitor discharges several times a year, they have to pay to have the volume of runoff managed off-site as well.

We respectfully request staff consider our comments and revise the proposed minimum control measures for new development and redevelopment.

Sincerely,



Bob Tummolo
Division Manager

Lennar Homes - L/A Ventura
391 N Main St Suite300
Corona Ca.92880
O- 951 817 3517 Corona
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Los Angeles Regional Water Quality Control Board

New Revised
Notice of Public Meeting
Thursday, May 3, 2012
9:00 a.m.

Meeting Location:

California Science Center (CSC)
(Loker Conference Center)
700 Exposition Park Drive (39th & Figueroa Street)
(Paid parking is available at entrance to CSC, 39th and Figueroa Street)
Los Angeles, California

Agenda

The Regional Board strives to conduct an accessible, orderly, and fair meeting. During the meeting, the Chair will conduct the meeting and establish appropriate rules and time limitations for each 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 Regional Board meeting procedures is included after the last agenda item.

To ensure a fair hearing and that the Regional 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 April 19, 2012. Please consult the agenda description for specific items, 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

(Items 5.a, and 7 were slated to be heard in the afternoon, but are now scheduled for the morning session of the meeting prior to the MS4 Permit Workshop.)

1. **Roll Call.**
2. **Order of Agenda.** 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 April 5, 2012 Board meeting.**
[Ronji Moffett, (213) 576-6612]
4. **Board Member Communications.**

Los Angeles Water Board Meeting Agenda

- 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.a. **Executive Officer's Report.** [Sam Unger, (213) 576-6605]
- 6. **Update from State Board.** [Fran Spivy-Weber, (916) 341-5607]
- 7. **Public Forum.** Any person may address the Board regarding any matter within the Board's jurisdiction provided the matter does not appear elsewhere on this agenda, has not been scheduled to appear on a future agenda, and is not expected to be imminently scheduled for the Board's consideration. Remarks will be limited to three (3) minutes, unless otherwise directed by the Chair. If a person intends to use a PowerPoint presentation or other visual aid, you must contact Ronji Moffett, (213) 576-6612, at the Regional Board at least 48 hours prior to the meeting to arrange for equipment use and be prepared to load any PowerPoint presentation on the computer prior to the meeting to assure the orderly conduct of the meeting.

UNCONTESTED 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. The Chair will determine the appropriate time to consider an item removed from the consent calendar.)

Waste Discharge Requirements that Serve as NPDES Permits**Termination -**

- *8. The City of Santa Paula, Santa Paula Wastewater Reclamation Facility, Santa Paula; NPDES No. CA0054224 [Veronica Cuevas, (213) 576-6662]

Non-NPDES State Discharge Requirements**New-**

- *9. San Miguel Produce, Incorporated (San Miguel Produce Wastewater Treatment Plant), Oxnard; CI No. 9784, File No. 04-168 (Comment submittal deadline was April 9, 2012) [Mercedes Merino, (213) 620-6156] **(This item is being continued to a future meeting.)**

Los Angeles Water Board Meeting Agenda

Termination-

- *10. SA Recycling Scrap Metal Recycling Facility, Order No. 96-020, File No. 90-47; Terminal Island. (Comment submittal deadline was April 12, 2012.) [Enrique Casas, (213) 620-2299]
- *11. Port of Long Beach, Toyota Expansion Parcel, Order No. 93-067, File No. 77-047; Wilmington (Comment submittal deadline April 16, 2012.) [Douglas Cross, (213) 620-2246]
- *12. Port of Long Beach, TCL Consent Order Study Area, Order No. 96-022, File No. 65-121; Wilmington (Comment submittal deadline was April 16, 2012.) [Douglas Cross, (213) 620-2246]
- *13. Port of Long Beach, Pier G/S Terminal Redevelopment Project, Order No. R4-2006-0084; File No. 01-009; Long Beach (Comment submittal deadline was April 13, 2012) [Michael Lyons, (213) 576-6718]
- *14. Port of Long Beach, Former Long Beach Naval Complex Installation Restoration Site 7 Dredging Project, Order No. R4-2010-0164, File No. 08-133; Long Beach (Comment submittal deadline was April 13, 2012) [Michael Lyons, (213) 576-6718]
- *15. Port of Los Angeles, Maintenance Dredging Project, Order No. R4-2004-0091, File No. 04-063; San Pedro (Comment submittal deadline was April 13, 2012) [Michael Lyons, (213) 576-6718]
- *16. Port of Los Angeles, Cabrillo Way Marina Project, Order No. R4-2008-0052, file No. 08-076; San Pedro (Comment submittal deadline was April 13, 2012) [Michael Lyons, (213) 576-6718]
- *17. Port of Los Angeles, berths 145-147 Wharf Improvement Project, Order No. R4-2008-0061, File No. 08-081; San Pedro (Comment submittal deadline was April 13, 2012) [Michael Lyons, (213) 576-6718]

ACTION ITEMS

- 18. **Waste Discharge Requirements that Serve as Individual NPDES Permits**
Renewal-
 BP West Coast Products, LLC, BP Wilmington Calciner, Wilmington; NPDES No. CA0059153 (Comment submittal deadline was April 2, 2012) [Rosario Aston, (213) 576-6653] **(This item is being continued to a future meeting.)**

Los Angeles Water Board Meeting Agenda

Workshop

19. Workshop on the issuance of a new Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit. Staff will make a presentation on provisions related to watershed planning and implementation, TMDL related requirements, and receiving water limitations. Permittees and other interested persons will have the opportunity to make oral comments subject to time limits. (The Board may provide general feedback to staff on development of the permit; however, no action or voting will take place at this workshop.) [Renee Purdy, (213) 576-6622; Ivar Ridgeway, (213) 620-2150]

INFORMATION *(This matter is for informational purposes only. No voting will take place on this matter.)*

20. Informational overview by the City of Signal Hill's on the City's illicit Connection/illicit Discharge program, sediment control procedures, and treatment control Best Management Practices (BMPs) to comply with the existing Los Angeles County MS4 Permit. [Mr. Steve Minor, City of Signal Hill] **(This item was continued from the April 5, 2012 meeting.)**
21. Update on Status of Implementation of SB 346 (Brake Pad Bill). [Mr. Richard Watson, Richard Watson Associates, (949) 855-6272]

CLOSED SESSION

22. As authorized by the 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]
- 22.1 *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)*
- 22.2 *In re Halaco Engineering Company, United States Bankruptcy Court, Central District of California, Northern Division, No. ND-02-12255 RR [Regarding a CDO and CAO at the Oxnard Property]. (JF)*
- 22.3 *In re: Los Angeles Region Water Permit- Ventura County, Commission on State Mandate Test Claim No. 11-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)*

Los Angeles Water Board Meeting Agenda

- 22.4 *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)
- 22.5 *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)
- 22.6 *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)
- 22.7 *In re: Upper Santa Clara River Chloride Total Maximum Daily Load Requirements Imposed by the Los Angeles Regional Water Quality Control Board in Resolution R4-2008-0012.* 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)
- 22.8 *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)
- 22.9 *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)
- 22.10 *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)
- 22.11 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;
 - (c) A matter which, based on existing facts and circumstances, the Regional Board is deciding whether to initiate litigation. (JF/FM)
- 22.12 Consideration of the appointment, employment, or evaluation of performance about a public employee. (JF/FM)
23. **Adjournment of Current Meeting.** The next meeting will be held on June 7, 2012 beginning at 9:00 a.m. at the City of Simi Valley Council Chambers, located at 2929 Tapo Canyon Road, Simi Valley, California.

Los Angeles Water Board Meeting Agenda

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NOTICE

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. If any other party demonstrates prejudice resulting from admission of the written testimony, the Chair may refuse to admit it.

Los Angeles Water Board Meeting Agenda

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

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

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

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

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

LYRIS MAILING

RB-AR2118

LIST NAME: LA County MSJ
 DATE MAILED: 4-23-12

DATEJOINED_	EMAILADDR_	FULLNAME_
2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM	ADRIEN F. MADDALENO
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3/27/2012 13:25	Berry.Ueoka@EverestConsultants.com	Berry Ueoka
3/22/2012 15:22	BryantA@lwa.com	Bryant Alvarado
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com	Carlos Aguilar
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11/16/2011 7:58	DLiu@DiamondBarCA.Gov	David G. Liu
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5/2/2011 6:54	Debbie.Neev@gmail.com	Deborah Neev
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1/19/2010 11:06	Jeremy.Bock@Kiewit.com	Jeremy Bock
3/7/2012 16:27	Jim@CuratingLA.com	Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org	John Beshay
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Los Angeles Regional Water Quality Control Board

TO: Los Angeles County MS4 Permittees and Other Interested Persons

FROM: Renee A. Purdy, Chief 
Regional Programs Section

DATE: April 23, 2012

SUBJECT: TRANSMITTAL OF STAFF WORKING PROPOSALS ON LA COUNTY MS4 PERMIT -
PROVISIONS RELATED TO WATERSHED MANAGEMENT PROGRAMS, TMDLS AND
RECEIVING WATER LIMITATIONS

As staff committed to in previous workshops on the renewal of the Los Angeles County MS4 Permit, attached are working proposals of the permit provisions related to the **Watershed Management Programs, Total Maximum Daily Loads (TMDLs), and Receiving Water Limitations**. Staff of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) is distributing to Los Angeles County MS4 Permittees and other interested persons the attached staff working proposals for preliminary review and discussion purposes only.

Please note the following: Staff will accept both written and oral comments on these working proposals. Please be advised, however, that these staff working proposals neither constitute a "draft permit" or a "proposed permit" as defined in Title 40 Code of Federal Regulations (40 CFR) sections 122.2 or 124.6. Further, distribution of these staff working proposals for review and discussion does not constitute a public comment period pursuant to 40 CFR sections 124.10 or 124.17. Accordingly, while staff will accept and consider written comments on these working proposals, staff does not intend to formally respond to written comments received that pertain to the working proposals. In addition to, or in lieu of, written comments, Permittees and interested persons are also encouraged to make oral comments to staff during telephone conversations, in-person meetings, and/or at the upcoming board workshop on May 3, 2012. Staff looks forward to input on this working proposal from Permittees and other interested persons.

For written and oral comments on these working proposals to be considered by staff in preparing the forthcoming draft Los Angeles County MS4 Permit, comments need to be made and/or submitted no later than **May 11, 2012**. Written comments should be submitted by e-mail to LAMS42012@waterboards.ca.gov.

MARIA MEHRANIAN, CHAIR | SAM UNGER, EXECUTIVE OFFICER

Written comments received will be included in the administrative record for the renewal of the Los Angeles County MS4 Permit, but will not be provided to the individual Los Angeles Water Board members. When a draft permit is released, interest persons will be provided an opportunity to submit written comments in compliance with 40 CFR sections 124.10 or 124.17. Consistent with federal regulations, staff will prepare responses to significant comments received on the draft permit submitted in compliance with the public notice and will make comments and responses available to the Los Angeles Water Board members.

Staff looks forward to further discussions on this working proposal. Please do not hesitate to contact Mr. Ivar Ridgeway, Chief, Storm Water Permitting at (213) 620-2150 or myself at (213) 576-6622 if you wish to schedule a meeting with us or if you have any questions or comments.

Attachments

LA County MS4 Permit – Watershed Management Program

VI. PROVISIONS

C. Special Provisions: Watershed Management Programs

1. General

- a. The purpose of this Part is to allow Permittees 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 allows a Permittee to customize the requirements in Part VI.D [Special Provisions: Minimum Control Measures] to address the highest watershed priorities, including achieving compliance with the requirements of Part VI.E and Attachments X through X [Special Provisions: TMDL Provisions].
- 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 the Watershed Management Program.
- d. The goal of the Watershed Management Programs is to ensure that discharges from the Los Angeles County MS4 (i) achieve applicable water quality based effluent limitations in Part VI.E and Attachments X through X [TMDL Provisions], (ii) do not cause or contribute to exceedances of receiving water limitations in Parts V.A and VI.E and Attachments X through X [Receiving Water Limitations and TMDL Provisions], and do not cause exceedances of non-storm water action levels in Part [TBD – MRP].
- e. Watershed Management Programs shall be developed using the Regional Water Board's Watershed Management Areas. Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water.
- f. Each Watershed Management Program shall:
 - i. Prioritize water quality issues resulting from storm water and non-storm water discharges from the MS4 to receiving waters within each Watershed Management Area,

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- ii. Identify and implement strategies, control measures, and BMPs to achieve applicable water quality based effluent limitations, receiving water limitations, and/or non-storm water action levels consistent with corresponding compliance schedules in this Order,
- iii. Execute a monitoring and assessment program to determine progress towards achieving applicable limitations and/or action levels in Part VI.C.1.f. ii, and
- iv. Revise strategies, control measures, and BMPs as necessary to maintain progress towards achieving applicable limitations and/or action levels in Part VI.C.1.f.ii.

2. Process

a. Timelines for Implementation

- i. Each Permittee shall ensure implementation of the following requirements per the schedule specified in Table [TBD] below:

Table [TBD]

Part	Provision	Due Date
VI.C.2.b	Notify Regional Water Board of intent to develop Watershed Management Program	6 months after Order adoption
VI.C.2.b	Submit draft plan to Executive Officer	1 year after Order adoption
VI.C.2.c	Submit final plan to Executive Officer	3 months after receipt of Regional Water Board comments on draft plan
VI.C.4	Begin implementation of Watershed Management Program	Upon submittal of final plan
VI.C.6.a.ii	First evaluation of Watershed Management Program and submittal of revisions to plan	1½ years after submittal of final plan
VI.C.6.a.ii	Second evaluation of Watershed	180 days prior to expiration

LA County MS4 Permit – Watershed Management Program

Management Program and submittal of revisions to plan	date of Order
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- b. Permittees that elect to develop a Watershed Management Program must notify the Regional Water Board no later than six months after the adoption of this Order.
- c. Permittees that elect to develop a Watershed Management Program shall submit a draft plan to the Executive Officer no later than one year after the adoption of this Order.
- d. Permittees that do not elect to develop a Watershed Management Program shall be subject to the baseline requirements in Part VI.D [MCMs] and shall demonstrate compliance with applicable water quality based effluent limitations in Part VI.E [TMDL] pursuant to subparts VI.E.4 or VI.E.5.

3. Program Development

a. Identification of Water Quality Priorities

Permittees shall identify the water quality priorities within each Watershed Management Area 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 [TBD] through [TBD] 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. **Waterbody-Pollutant Classification.** On the basis of the evaluation of existing water quality conditions, waterbody-pollutant combinations shall be classified into one of the following four categories:
 - (1) **Category 1 (Highest Priority):** Waterbody-pollutant combinations for which water quality based effluent limitations and/or receiving water limitations are

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established in Part VI.E and Attachments [TBD] to [TBD] 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 Listing Policy.
 - (3) Category 3 (Medium Priority): Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable water quality standards.
 - (4) Category 4 (Low Priority): Pollutants for which data do not indicate any exceedances of applicable water quality standards.
- iii. Source Assessment. Utilizing existing information, potential sources within the watershed for the pollutants in Categories 1 and 2 shall be identified.
- (1) Permittees shall identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the highest water quality priorities (Categories 1 and 2). The identification of known and suspected sources of the highest water quality priorities shall consider the following:
 - (a) Review of available data, including but not limited to:
 - (i) Findings from the Permittees' illicit discharge detection and elimination programs;
 - (ii) Findings from the Permittees' commercial/industrial facilities pollutant control programs;
 - (iii) Findings from the Permittees' development construction programs;
 - (iv) Findings from the Permittees' public agency activities;
 - (v) TMDL source assessments;

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- (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 Watershed Management Area.
- 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 September 6, 2017.
 - (2) Other Receiving Water Considerations
 - (a) Controlling pollutants for which data indicate impairment in the receiving water and the findings from the source assessment implicates discharges

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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 and/or receiving water limitations in Part VI.E and Attachments X through X;
 - (2) Retrofitting areas of existing development known or suspected to contribute to the highest water quality priorities with regional or site-specific controls or management measures; and
 - (3) Stream and/or habitat rehabilitation or restoration projects where stream and/or habitat rehabilitation or restoration are necessary for, or will contribute to demonstrable improvements in the physical, chemical, and biological receiving water conditions and restoration and/or protection of water quality standards in receiving waters.

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iv. The following provisions of this Order shall be incorporated as part of the Watershed Management Program:

(1) Minimum Control Measures

(a) Permittees shall assess the minimum control measures (MCMs) as defined in Part VI.D.4 to Part VI.D.9 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) New Development/ Redevelopment Program
- (ii) Development Construction Program
- (iii) Industrial/Commercial Program
- (iv) Illicit Connection/Illicit Discharge Detection and Elimination Program
- (v) Public Agency Activities Program
- (vi) 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 Part VI.D.4 to Part VI.D.9, the Permittee(s) shall provide a justification for its elimination.

(d) Such customized actions, once approved as part of the Watershed Management Program, shall replace in part or in whole the requirements in Part VI.D.4 to Part VI.D.9 for participating Permittees.

(2) Non-Storm Water Discharge Measures. Where Permittees identify non-storm water discharges from the MS4 as a source of pollutants in the source assessment, the Watershed Control Measures shall include strategies, control measures, and/or BMPs that must be implemented to effectively eliminate the source of

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pollutants consistent with Parts III.A [Discharge Prohibitions – Non-Storm Water Discharges] and VI.D.9 [Special Provisions: Minimum Control Measures – Illicit Connection and Illicit Discharge Elimination Program]. 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. If not sufficiently identified in previous documents, or if implementation plans have not yet been developed (e.g., EPA 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 plan 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

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- water quality-based effluent limitations and receiving water limitations contained in this Part and Attachments X through X 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) At a minimum, structural controls shall be sized to treat the volume of stormwater runoff from the 85th percentile, 24-hour storm specific to the watershed in question;
 - (d) For any pollution prevention measures, the nature, scope, and timing of implementation;
 - (e) 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;
 - (f) The plan shall clearly identify the responsibilities of each participating Permittee for implementation of watershed control measures.
- (5) Permittees shall conduct a Reasonable Assurance Analysis for each TMDL as follows:
- (a) Permittees shall conduct an assessment (through a quantitative analysis / modeling effort) to demonstrate 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 with compliance deadlines during the permit term.
 - (b) Where the TMDL Provisions in Part VI.E and Attachments X through X 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.

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- (6) Permittees shall provide documentation that it has the necessary legal authority to implement or compel implementation of the Watershed Control Measures identified in the plan.

c. Compliance Schedules

Permittees shall incorporate compliance schedules in Attachments [TBD] to [TBD] 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 twice during the permit term.
- 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 X through X 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 X through X, 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,

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- (b) A schedule with dates for achieving the milestones as soon as possible, and
- (c) A final date for achieving the receiving water limitations within the permit term.
- (d) The milestones and implementation schedule in (a)-(c) fulfill the requirements in Part V.A.3.a to prepare a Receiving Water Limitations Compliance Report.

4. Watershed Management Program Implementation

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

5. Integrated Watershed Monitoring and Assessment

Permittees in each Watershed Management Area shall develop an integrated program to assess progress toward achieving the water quality based effluent limitations and/or receiving water limitations per the compliance schedules, and progress toward addressing the highest water quality priorities for each Watershed Management Area. The integrated watershed monitoring and assessment program shall be consistent with the general monitoring and assessment requirements of Part [TBD – MRP].

6. Adaptive Management Process

- a. Watershed Management Program Adaptive Management Process
 - i. Permittees in each Watershed Management Area shall 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 interim and/or final water quality based effluent limitations and/or receiving water limitations in Part VI.E and Attachments X through X, according to established compliance schedules;
 - (2) Progress toward achieving improved water quality in MS4 discharges and achieving receiving waters limitations through implementation of the watershed control measures

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based on an evaluation of outfall-based monitoring data and receiving water monitoring data;

- (3) Achievement of interim milestones;
 - (4) Re-evaluation of the highest water quality priorities identified for the 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;
 - (5) 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;
 - (6) Regional Water Board recommendations; and
 - (7) Recommendations for modifications to the Watershed Management Program solicited through a public participation process.
- ii. Based on the results of the adaptive management process, Permittees shall report any modifications, including where appropriate new compliance deadlines and interim milestones, necessary to improve the effectiveness of the Watershed Management Program in the Annual Report required pursuant to Part [TBD], or as part of the Report of Waste Discharge (ROWD) required pursuant to Part [TBD].
- (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 upon acceptance by the Regional Water Board Executive Officer.
- b. Jurisdictional Storm Water Management Program Adaptive Management Process
- i. Permittees in the Watershed Management Area shall implement the adaptive management process at least annually with regard to its jurisdictional storm water management program to improve its effectiveness, based on, but not limited to the following:

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- (1) Measurable or demonstrable reductions of illicit discharges to the MS4 based on an evaluation of outfall-based monitoring data;
 - (2) Measurable or demonstrable reductions of pollutants in storm water discharges from the Permittee's MS4 through implementation of the storm water management program based on an evaluation of outfall-based monitoring data;
 - (3) Efficiency in implementing the Watershed Management Program; and
 - (4) Progress toward achieving interim and/or final water quality based effluent limitations and/or receiving water limitations in Part VI.E and Attachments X through X, according to established compliance schedules;
 - (5) Progress toward achieving receiving waters limitations through implementation of the storm water management program based on an evaluation of outfall-based monitoring data and receiving water monitoring data;
 - (6) Regional Water Board recommendations during program and/or site inspections.
- ii. Based on the results of the adaptive management process, the Permittee shall report any modifications, including where appropriate new compliance deadlines or interim milestones, necessary to improve the effectiveness its jurisdictional storm water management program in the Annual Report required pursuant to Provision [TBD], or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision [TBD].
- (1) The adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.
- iii. The Permittee shall implement any modifications to its jurisdictional storm water management program upon acceptance by the Regional Water Board Executive Officer.

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E. Special Provisions: Total Maximum Daily Load Provisions

1. The provisions of this Part 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 Watershed Management Area (WMA) in Attachments X through X.
 - b. The Permittees subject to each TMDL are identified in Attachment I.
 - c. The Permittees shall comply with the applicable water quality-based effluent limitations and/or receiving water limitations contained in Attachments X through X, consistent with the assumptions and requirements of the WLAs established in the TMDLs, including implementation plans and schedules, where provided for in the State adoption and approval of the TMDL (40 CFR §122.44(d)(1)(vii)(B); Cal. Wat. Code §13263(a)).
 - d. A Permittee may comply with water quality-based effluent limitations and/or receiving water limitations in Attachments X through X using any lawful means.
2. Compliance Determination
 - a. General
 - i. A Permittee shall demonstrate compliance at compliance monitoring points established in each TMDL or an approved TMDL monitoring plan or in accordance with an approved integrated monitoring plan per Attachment X [Monitoring and Reporting Program] and 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 X through X.
 - 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 Executive Officer a Watershed Management Program that addresses all water quality-based effluent limitations and receiving

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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.
- iv. For purposes of compliance determination, each Permittee is responsible for demonstrating that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation(s) at the outfall or receiving water limitation(s) in the target receiving water.
- v. A Permittee may demonstrate that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation or receiving water limitation in any of the following ways:
 1. Demonstrate that there is no discharge from the Permittee's MS4 into the applicable receiving water; or
 2. Demonstrate that the discharge from the Permittee's MS4 is treated to a level that does not exceed the applicable water quality-based effluent limitation; or
 3. Demonstrate through a source investigation pursuant to protocols established under Water Code section 13178 or 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

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- i. For Receiving Water Limitations in Part V.A. associated with waterbody-pollutant combinations addressed in a TMDL, Permittees shall achieve compliance with the Receiving Water Limitations in Part V.A. as outlined in this Part and Attachments X through X of this Order.
 - ii. A Permittee shall not be considered in violation of a Receiving Water Limitation in Part V.A., if it is in compliance with the applicable TMDL requirement(s), including compliance schedules, of this Part and Attachments X through X.
 - iii. A Permittee shall not be considered in violation of a Receiving Water Limitation in Part V.A., if it is in compliance with the applicable TMDL requirements contained in a time schedule order.
- d. Interim Water Quality-Based Effluent Limitations and Receiving Water Limitations**
- i. A Permittee shall be considered in compliance with an applicable interim water quality-based effluent limitation and/or interim receiving water limitation for the pollutant(s) associated with a specific TMDL if any of the following is demonstrated:
 - 1. There are no violations of the interim water quality-based effluent limitation for the pollutant(s) associated with a specific TMDL at the Permittee's applicable MS4 outfall(s),¹ including an outfall to the receiving water that collects discharges from multiple Permittees' jurisdictions;
 - 2. There are no exceedances of the applicable receiving water limitation for the pollutant(s) associated with a specific TMDL in the receiving water(s) at, or downstream of, the Permittee's outfall(s);
 - 3. There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL; or
 - 4. The Permittee has submitted and is fully implementing an approved Watershed Management Program pursuant to Part VI.C.
 - a. To be considered fully implementing an approved Watershed Management Program, a Permittee must

¹ An outfall may include a manhole or other point of access to the MS4 at the Permittee's jurisdictional boundary.

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be implementing actions consistent with the approved program and applicable compliance schedules, including structural BMPs.

- b. Structural storm water BMPs must be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm, and maintenance records must be up-to-date and available for inspection by the Los Angeles 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 subpart VI.E.2.d.i.1-3, above.

e. Final Water Quality Based Effluent Limitations and/or Receiving Water Limitations

- i. A Permittee shall be deemed in compliance with an applicable final water quality-based effluent limitation and/or final receiving water limitation for the pollutant(s) associated with a specific TMDL if any of the following is demonstrated:
 - 1. There are no violations of the final water quality-based effluent limitation for the specific pollutant at the Permittee's applicable MS4 outfall(s)²;
 - 2. There are no exceedances of applicable receiving water limitation for the specific pollutant in the receiving water(s) at, or downstream of, the Permittee's outfall(s); or
 - 3. There is no direct or indirect discharge from the Permittee's MS4 to the receiving water during the time period subject to the water quality-based effluent limitation and/or receiving water limitation for the pollutant(s) associated with a specific TMDL.

3. USEPA Established TMDLs

TMDLs established by the USEPA, to which Permittees are subject, do not have an implementation schedule adopted pursuant to Cal. Water Code section 13242. Therefore, a compliance schedule for attaining the water quality-based effluent limitations and/or receiving water limitations is not provided within this Order. However, any Permittee that is subject to water

² Ibid.

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quality-based effluent limitations and/or receiving water limitations to implement a USEPA established TMDL may [insert timeframe] request a time schedule order (TSO) pursuant to Cal. Water Code section 13300 for the Regional Water Board's consideration.

- a. 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 USEPA established TMDL.
- b. At a minimum, a request for a TSO 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 time schedule of specific actions the Permittee will take in order to achieve the water quality-based effluent limitations and/or receiving water limitations;
 - iii. 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 water quality-based effluent limitation(s); and
 - iv. 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:
 - a. Effluent limitation(s) for the pollutant(s) of concern; and
 - b. Actions and milestones leading to compliance with the effluent limitation(s).
- c. A Permittee that is in compliance with the requirements of a Regional Water Board issued TSO is not considered in violation of the applicable final receiving water limitations and/or water quality-based effluent limitations for the pollutant(s) subject to the provisions in this Part and Attachments X through X.

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.

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- 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 [insert timeframe] request a time schedule order (TSO) pursuant to Cal. 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 TSO 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:

 - a.** Effluent limitation(s) for the pollutant(s) of concern; and
 - b.** Actions and milestones leading to compliance with the effluent limitation(s).
- e.** A Permittee that is in compliance with the requirements of a Regional Water Board issued TSO is not considered in violation of the applicable final receiving water limitations and/or water quality based effluent

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limitations for the pollutant(s) subject to the provisions in this Part and Attachments X through X.

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 X through X for the following Trash TMDLs:

- i. Lake Elizabeth Trash TMDL
- ii. Santa Monica Bay Nearshore and Offshore Debris TMDL
- iii. Malibu Creek Watershed Trash TMDL
- iv. Ballona Creek Trash TMDL
- v. Machado Lake Trash TMDL
- vi. Los Angeles River Trash TMDL
- vii. Legg Lake Trash TMDL
- viii. Peck Road Park Lake Trash TMDL
- ix. Echo Park Lake Trash TMDL
- x. Lincoln Park Lake Trash TMDL

b. Compliance

i. Pursuant to 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 Los Angeles Region's Basin Plan authorizes the 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." (See Appendix X)³

³ The Los Angeles 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.

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- (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, Malibu Creek, Ballona Creek, Machado Lake, the Los Angeles River system, Legg Lake, Peck Road Park Lake, Echo Park Lake, and/or Lincoln 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, Malibu Creek (and its tributaries), Ballona Creek (and its tributaries), Machado Lake, the Los Angeles River (and its tributaries), Legg Lake, Peck Road Lake, Echo Park Lake, and/or Lincoln Park Lake where certified *full capture systems* treat all drainage from the area, provided that the *full capture systems* are adequately sized and maintained, and that maintenance records are up-to-date and available for inspection by the Regional Water Board.
- (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

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installation of *partial capture devices* and the application of *institutional controls*.⁴

- (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.⁵ 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.⁶ 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 events⁷, and shall be re-calculated every year thereafter unless a less frequent period for recalculation is approved by the Executive Officer. The DGR shall be calculated as the total amount of trash collected during this period divided by the length of the collection period.

DGR = (Amount of trash collected during a 30-day collection period⁸) / (30 days)

The DGR for the applicable area under the Permittees' jurisdiction and/or authority shall be extrapolated from that of the representative drainage area(s). A mass balance equation shall be used to estimate the amount of trash discharged during a storm event.⁹ 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.¹⁰ For each day of a storm event that generates precipitation greater than 0.25 inch, the Permittee shall calculate a *Storm Event Trash Discharge*.

⁴ 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*.

⁵ Performance shall be demonstrated under different conditions (e.g. low to high trash loading).

⁶ 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.

⁷ Provided no special events are scheduled that may affect the representative nature of that collection period.

⁸ Between June 22nd and September 22nd

⁹ Amount of trash shall refer to the uncompressed volume (in gallons) or drip-dry weight (in pounds) of trash collected.

¹⁰ Any negative values shall be considered to represent a zero discharge.

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Storm Event Trash Discharge = [(Days since last street sweeping*DGR)] – [Amount of trash recovered from catch basins]¹¹

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

Total Storm Year Trash Discharge = ∑Storm Event Trash Discharges from Drainage Area

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

Permittees may comply with their interim and final effluent limitations through a combination of *full capture systems*, *partial capture devices*, and *institutional controls*. Where a Permittee relies on a combination of approaches, it shall demonstrate compliance with the interim and final effluent limitations as specified in (1)(c) in areas where *full capture systems* are installed and as specified in (2)(b) 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 effluent limitations by implementing a program for *minimum frequency of assessment and collection* (MFAC) in conjunction with BMPs. To the satisfaction of the Executive Officer, the MFAC/BMP program must meet the following criteria:

- (a) The MFAC/BMP Program includes an initial minimum frequency of trash assessment and collection and suite of structural and/or nonstructural BMPs. The MFAC/BMP program shall include collection and disposal of all trash found in the receiving water and shoreline. Permittees shall implement an initial suite of BMPs based on current trash management practices in land areas that are found to be sources of trash to the water body. The initial minimum frequency of trash assessment and collection shall be set as specified in the following TMDLs:
- (i) Malibu Creek Watershed Trash TMDL

¹¹ When more than one storm event occurs prior to the next street sweeping the discharge shall be calculated from the date of the last assessment.

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- (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 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 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 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 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 X through X, 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

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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 this Part B(1)(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 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 Director or other agency head (or their delegee) that 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 October 31, 2012 TMDL Compliance Report.

(1) Reporting Compliance based on Full Capture Systems: Permittees shall provide information on the number and location of full capture

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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 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 subsection (a) for areas where *full capture systems* are installed and that are specified in subsection (b)(1) or (b)(2), 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 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, subdivision (a)(3), and/or section 13385.1, subdivision (a)(1).

ATTACHMENT I. PERMITTEES AND TMDLS MATRIX

Note: For all tables in this Attachment, Permittees listed in *italics* are Multi-Watershed Permittees.

Table A: Santa Clara River Watershed Management Area TMDLs

SANTA CLARA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	Santa Clara River Nitrogen Compounds TMDL	Upper Santa Clara River Chloride TMDL	Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL	Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X
<i>Santa Clarita</i>	X	X		X

Table B-1: 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

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Table B-2: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed				Marina del Rey Subwatershed		
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Agoura Hills							
Beverly Hills	X	X	X	X	X		
Calabasas							
Culver City	X	X	X	X	X	X	X
El Segundo							
Hermosa Beach							
Hidden Hills							
Inglewood	X	X	X	X	X		
Los Angeles (City of)	X	X	X	X	X	X	X
Los Angeles (County of)	X	X	X	X	X	X	X
Los Angeles County Flood Control		X	X	X	X	X	X
Malibu							
Manhattan Beach							
Palos Verdes Estates							
Rancho Palos Verdes							
Redondo Beach							
Rolling Hills							
Rolling Hills Estates							

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Santa Monica	X	X	X	X	X		
<i>Torrance</i>							
West Hollywood	X	X	X	X	X		
Westlake Village							

Table C: Dominguez Channel Watershed Management Area TMDLs

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Carson</i>		X	X	X	X
<i>Compton</i>					X
El Segundo					X
Gardena					X
Hawthorne					X
<i>Inglewood</i>					X
Lawndale					X
Lomita		X	X	X	
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X
<i>Manhattan Beach</i>					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
<i>Palos Verdes Estates</i>		X	X	X	
<i>Rancho Palos Verdes</i>		X	X	X	
<i>Redondo Beach</i>		X	X	X	X
<i>Rolling Hills</i>		X	X	X	
<i>Rolling Hills Estates</i>		X	X	X	
<i>Torrance</i>		X	X	X	X

Table D: 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	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Alhambra</i>	X	X	X	X			
<i>Arcadia</i>	X	X	X	X		X	
<i>Bell</i>	X	X	X	X			
<i>Bell Gardens</i>	X	X	X	X			
<i>Bradbury</i>	X	X	X	X		X	
<i>Burbank</i>	X	X	X	X			
<i>Calabasas</i>	X	X	X	X		X	
<i>Carson</i>	X	X	X	X			
<i>Commerce</i>	X	X	X	X			
<i>Compton</i>	X	X	X	X			X
<i>Cudahy</i>	X	X	X	X			
<i>Downey</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	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Duarte</i>	X	X	X	X		X	
<i>El Monte</i>	X	X	X	X		X	
<i>Glendale</i>	X	X	X	X			
<i>Hidden Hills</i>	X	X	X	X			
<i>Huntington Park</i>	X	X	X	X			
<i>Inglewood</i>							
<i>Irwindale</i>	X	X	X	X		X	
<i>La Canada Flintridge</i>	X	X	X	X			
<i>Lakewood</i>	X	X					X
<i>Los Angeles (City of)</i>	X	X	X	X		X	X
<i>Los Angeles (County of)</i>	X	X	X	X		X	X
<i>Los Angeles County Flood Control</i>		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			
<i>Rosemead</i>	X	X	X	X			
<i>San Fernando</i>	X	X	X	X			
<i>San Gabriel</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	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabajas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
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			
South Gate	X	X	X	X			
South Pasadena	X	X	X	X			
Temple City	X	X	X	X			
Vernon	X	X	X	X			

Table E: San Gabriel River Watershed Management Area TMDLs

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Arcadia</i>	X			
<i>Artesia</i>	X			
<i>Azusa</i>	X		X	
<i>Baldwin Park</i>	X			
<i>Bellflower</i>	X			X
<i>Bradbury</i>	X			
<i>Cerritos</i>	X			
<i>Claremont</i>	X		X	
<i>Covina</i>	X			
<i>Diamond Bar</i>	X			
<i>Downey</i>	X			
<i>Duarte</i>	X			
<i>El Monte</i>	X	X	X	
<i>Glendora</i>	X			
<i>Hawaiian Gardens</i>	X			
<i>Industry</i>	X			
<i>Irwindale</i>	X		X	
<i>La Habra Heights</i>	X			
<i>La Mirada</i>	X			
<i>La Puente</i>	X			
<i>La Verne</i>	X		X	
<i>Lakewood</i>	X			
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Monrovia				
Norwalk	X			
<i>Pico Rivera</i>	X			
Pomona	X		X	
San Dimas	X		X	
Santa Fe Springs	X			
South El Monte	X	X	X	
Walnut	X			
West Covina	X			
Whittier	X			

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Table F: Los Cerritos Channel and Alamitos Bay Watershed Management Area TMDLs

LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	Los Cerritos Channel Metals TMDL	Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Bellflower</i>	X		X
<i>Cerritos</i>	X		
<i>Downey</i>	X		
<i>Lakewood</i>	X		
<i>Los Angeles (County of)</i>	X		X
<i>Los Angeles County Flood Control</i>	X	X	X
<i>Paramount</i>	X		
<i>Signal Hill</i>	X		

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Table G: Middle Santa Ana River Watershed Management Area TMDLs

MIDDLE SANTA ANA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDL
	Middle Santa Ana River Watershed Bacterial Indicator TMDL
Claremont	X
Pomona	X

Table H: 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	

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>Hidden Hills</i>					X
<i>Huntington Park</i>	X	X			
<i>Inglewood</i>					
<i>Irwindale</i>		X			
<i>La Canada Flintridge</i>		X	X		
<i>Lakewood</i>					
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X
<i>Lynwood</i>	X	X			
<i>Maywood</i>		X			
<i>Monrovia</i>		X			
<i>Montebello</i>		X			
<i>Monterey Park</i>		X			
<i>Paramount</i>		X			
<i>Pasadena</i>		X	X		
<i>Pico Rivera</i>		X			
<i>Rosemead</i>		X			
<i>San Fernando</i>				X	
<i>San Gabriel</i>		X			
<i>San Marino</i>		X			
<i>Santa Clarita</i>					
<i>Sierra Madre</i>		X			
<i>Signal Hill</i>	X				
<i>South El Monte</i>		X			
<i>South Gate</i>	X	X			
<i>South Pasadena</i>		X			

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Temple City		X			
Vernon	X	X			

Table I: 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				

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>Huntington Park</i>		X									X					
<i>Inglewood</i>																
<i>Irwindale</i>														X		
<i>La Canada Flintridge</i>			X				X									X
<i>Lakewood</i>	X															
<i>Los Angeles (City of)</i>		X	X	X	X	X	X	X	X	X	X	X	X		X	X
<i>Los Angeles (County of)</i>	X	X	X		X	X	X	X	X		X	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lynwood</i>	X	X									X					
<i>Maywood</i>		X														
<i>Monrovia</i>														X		
<i>Montebello</i>		X												X		
<i>Monterey Park</i>		X												X		
<i>Paramount</i>	X	X														
<i>Pasadena</i>		X	X				X							X		X
<i>Pico Rivera</i>														X		
<i>Rosemead</i>														X		
<i>San Fernando</i>															X	
<i>San Gabriel</i>														X		
<i>San Marino</i>														X		
<i>Santa Clarita</i>									X							
<i>Sierra Madre</i>														X		
<i>Signal Hill</i>	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>South El Monte</i>														X		
<i>South Gate</i>		X									X			X		
<i>South Pasadena</i>		X					X							X		
<i>Temple City</i>														X		
<i>Vernon</i>		X									X					

Table J: 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
<i>Agoura Hills</i>									X
<i>Beverly Hills</i>								X	
<i>Calabasas</i>	X								X
<i>Culver City</i>								X	
<i>El Segundo</i>		X			X				
<i>Hermosa Beach</i>					X	X			
<i>Hidden Hills</i>									X
<i>Inglewood</i>								X	
<i>Los Angeles (City of)</i>	X	X	X				X	X	
<i>Los Angeles (County of)</i>	X	X		X	X	X	X	X	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
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X
<i>Malibu</i>	X			X					X
<i>Manhattan Beach</i>					X	X			
<i>Palos Verdes Estates</i>							X		
<i>Rancho Palos Verdes</i>							X		
<i>Redondo Beach</i>						X			
<i>Rolling Hills</i>							X		
<i>Rolling Hills Estates</i>							X		
<i>Santa Monica</i>		X	X					X	
<i>Torrance</i>						X			
<i>West Hollywood</i>								X	
<i>Westlake Village</i>									X

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Table J: San Gabriel River Watershed Management Area Metals TMDLs by Reach

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
<i>Arcadia</i>							X	
<i>Artesia</i>			X	X				
<i>Azusa</i>	X							X
<i>Baldwin Park</i>	X					X	X	
<i>Bellflower</i>				X				
<i>Bradbury</i>								
<i>Cerritos</i>			X	X				
<i>Claremont</i>	X	X						
<i>Covina</i>	X							
<i>Diamond Bar</i>		X	X					
<i>Downey</i>				X	X			
<i>Duarte</i>								X
<i>El Monte</i>						X	X	
<i>Glendora</i>	X							X
<i>Hawaiian Gardens</i>			X					
<i>Industry</i>	X	X			X	X		
<i>Irwindale</i>	X					X	X	X
<i>La Habra Heights</i>		X	X					
<i>La Mirada</i>			X					
<i>La Puente</i>	X	X				X		
<i>La Verne</i>	X	X						
<i>Lakewood</i>			X	X				
<i>Los Angeles (County of)</i>	X	X	X		X	X		X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
Monrovia								
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		

WORKING PROPOSAL

LA County MS4 Permit – TMDL Provisions for the Santa Clara River WMA

A. TMDLs in the Santa Clara River Watershed Management Area (WMA)

1. Santa Clara River Nitrogen Compounds TMDL

- a) Permittees subject to the provisions below are identified in Table A.
- b) 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

2. Upper Santa Clara River Chloride TMDL

- a) Permittees subject to the provisions below are identified in Table A.
- b) 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

3. Lake Elizabeth Trash TMDL

- a) Permittees subject to the provisions below are identified in Table A.
- b) 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.
- c) 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

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.

LA County MS4 Permit – TMDL Provisions for the Santa Clara River WMA

- d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].

4. Santa Clara River Indicator Bacteria TMDL

- a) Permittees subject to the provisions below are identified in Table A.
- b) 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

c) Receiving Water Limitations

- (1) Permittees shall comply with the following grouped interim bacteria receiving water limitations 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

- (2) Permittees shall comply with the following grouped final bacteria receiving water limitations 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

- (3) 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

² Wet weather is defined as days with 0.1 inch of rain or more and the three days following the rain event.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

B. TMDLs in the Santa Monica Bay Watershed Management Area

1. Santa Monica Bay Beaches Bacteria TMDL

- a) Permittees subject to the provisions below are identified in Table B-1.
- b) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2013¹:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

c) Receiving Water Limitations

- (1) If an approved Integrated Water Resources Approach is implemented, each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group as identified in Table 1
July 15, 2013	25%
July 15, 2018	50%

¹ 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 during wet weather no later than July 15, 2021.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

Table 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 (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	SMB 1-1	221	212	197
			Carbon Canyon	SMB 1-13			
			Corral Canyon	SMB 1-11, SMB 1-12			
			Encinal Canyon	SMB 1-3			
			Escondido Canyon	SMB 1-8			
			Las Flores Canyon	SMB 1-14			
			Latigo Canyon	SMB 1-9			
			Los Alisos Canyon	SMB 1-2			
			Pena Canyon	SMB 1-16			
			Piedra Gorda Canyon	SMB 1-15			
			Ramirez Canyon	SMB 1-6, SMB 1-7			
			Solstice Canyon	SMB 1-10			
			Topanga Canyon	SMB 1-18			
			Trancas Canyon	SMB 1-4			
Tuna Canyon	SMB 1-17						
Zuma Canyon	SMB 1-5						
2	City of Los Angeles	County of Los Angeles El Segundo (DW only) Manhattan Beach (DW only) Culver City (MDR only) Santa Monica	Castlerock	SMB 2-1	342	324	294
			Dockweiler	SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15			
			Marina del Rey	SMB 2-8, SMB 2-9			
			Pulga Canyon	SMB 2-4, SMB 2-5			
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies*	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
3	Santa Monica	City of Los Angeles County of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6 SMB 3-7, SMB 3-8 [#] SMB 3-9	257	237	203
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	14	14	14
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach	Hermosa	SMB 5-1 [#] , SMB 5-2, SMB 5-3 [#] , SMB 5-4 [#] , SMB 5-5 [#]	29	29	29
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 [#] , SMB 6-3, SMB 6-4, SMB 6-5 [#] , SMB 6-6 [#]	58	57	56

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies*	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
7	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Redondo Beach Rolling Hills Rolling Hills Estates Torrance County of Los Angeles	Palos Verdes Peninsula	SMB 7-1 [#] , SMB 7-2 [#] , SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	36	36	36

For those beach monitoring locations subject to the antidegradation provision, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified below in Section B.1.c)(4).

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group. Caltrans will be required under the Statewide Storm Water Permit for State of California Department of Transportation to jointly complying with the allowable number of exceedance days.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

- (2) Permittees shall comply with the following grouped² final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to antidegradation provision, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2013³:

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 ⁴	17	3

- (3) Permittees shall comply with the following grouped² final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation provision as of the effective date of this Order:

Station ID	Beach Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)			
		Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-4	Trancas Creek at Broad Beach	0	0	17	3
SMB 1-5	Zuma Creek at Zuma Beach	0	0	17	3
SMB 2-13	Imperial Highway storm drain	2	1	17	3
SMB 3-8	Windward Ave. storm drain at Venice Pavilion	2	1	13	2
SMB 4-1	San Nicholas Canyon Creek at Nicholas Beach	0	0	14	2
SMB 5-1	Manhattan Beach at 40th Street	1	1	4	1
SMB 5-2	28th Street storm drain at Manhattan Beach	0	0	17	3
SMB 5-3	Manhattan Beach Pier	1	1	5	1
SMB 5-4	Hermosa City Beach at 26th St.	3	1	12	2
SMB 5-5	Hermosa Beach Pier, southern drain	2	1	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south	3	1	14	2
SMB 6-5	Avenue I storm drain at Redondo Beach	3	1	6	1
SMB 6-6	Malaga Cove, Palos Verdes Estates	1	1	3	1

² The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 permittees and Caltrans.

³ 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 during wet weather no later than July 15, 2021.

⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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		Annual Allowable Exceedance Days of the Single Sample Objective (days)			
Station ID	Beach Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 7-1	Malaga Cove, Palos Verdes Estates	1	1	14	2
SMB 7-2	Bluff Cove, Palos Verdes Estates	1	1	0	0
SMB 7-3	Long Point, Rancho Palos Verdes	1	1	5	1
SMB 7-4	Abalone Cove, Rancho Palos Verdes	0	0	1	1
SMB 7-5	Portuguese Bend Cove, Rancho Palos Verdes	1	1	2	1
SMB 7-6	White's Point, Royal Palms County Beach	1	1	6	1
SMB 7-8	Point Fermin/Wilder Annex, San Pedro	1	1	2	1
SMB 7-9	Outer Cabrillo Beach	1	1	3	1

- (4) 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, 2013⁵:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

2. Santa Monica Bay Nearshore and Offshore Debris TMDL

- a) Permittees subject to the provisions below are identified in Table B-1.
- b) 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, 2020, and every year thereafter.
- c) Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged into Santa Monica Bay or on the shoreline of Santa Monica Bay, per the schedule below:

Permittees	Baseline	Mar 20, 2016 (80%)	Mar 20, 2017 (60%)	Mar 20, 2018 (40%)	Mar 20, 2019 (20%)	Mar 20, 2020 (0%)
		Annual Trash Discharge (gals/yr)				

⁵ 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 during wet weather no later than July 15, 2021.

LA County MS4 Permit – TMDL Provisions for Santa Monica Bay WMA

Agoura Hills ⁶	1,044	835	626	418	209	0
Calabasas ⁷	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 ⁷	3,131	2,505	1,879	1,252	626	0

- d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [*Permit Provisions to Implement Trash TMDLs*].

3. Santa Monica Bay TMDL for DDTs and PCBS (U.S. EPA established)

- a) Permittees subject to the provisions below are identified in Table B-1.
- b) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay:

Constituent	Annual Mass-Based Effluent Limitations (g/yr)
DDT	27.08
PCBs	140.25

- c) Compliance shall be determined based on a three-year averaging period.

4. TMDLs in the Malibu Creek Subwatershed

- a) Malibu Creek and Lagoon Bacteria TMDL

- (1) Permittees subject to the provisions below are identified in Table B-1.

⁶ Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established by the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established by the Malibu Creek Watershed Trash TMDL.

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(2) 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 January 24, 2016:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- (ii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped⁷ 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 January 24, 2016⁸:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ⁹	17	3

- (ii) Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather

⁷ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 permittees, Ventura MS4 permittees and Caltrans.

⁸ The Regional Water Board may extend the wet weather compliance date up to July 15, 2021, at the Regional Water Board's discretion.

⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- (iii) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

b) Malibu Creek Watershed Trash TMDL

- (1) Permittees subject to the provisions below are identified in Table B-1.
- (2) Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Malibu Creek from Malibu Lagoon to Malibu Lake, Malibu Lagoon, Malibu 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.
- (3) 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

- (4) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].

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- c) Malibu Creek Watershed Nutrients TMDL (USEPA established)
 - (1) Permittees subject to the provisions below are identified in Table B-1.
 - (2) Permittees shall comply with the following grouped¹⁰ water quality-based effluent limitations as of the effective date of this Order for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibou 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	Effluent Limitations	
	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus
	Daily Maximum	Daily Maximum
Summer (April 15 to November 15)	3 lbs/day	0.3 lbs/day
Winter (November 16 to April 14)	8 mg/L	n/a

5. TMDLs in the Ballona Creek Subwatershed

- a) Ballona Creek Trash TMDL
 - (1) Permittees subject to the provisions below are identified in Table B-2.
 - (2) 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.
 - (3) 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 Year¹¹ (pounds of drip-dry trash)

Permittees	Baseline	Sept 30, 2012	Sept 30, 2013	Sept 30, 2014	Sept 30, 2015 ¹²
		(20%)	(10%)	(3.3%)	(0%)
Annual Trash Discharge (pounds of trash)					
Beverly Hills	79,914	15,983	7,991	2,637	0
Culver City	36,509	7,302	3,651	1,205	0
Inglewood	21,564	4,313	2,156	712	0
Los Angeles, City of	950,238	190,048	95,024	31,358	0

¹⁰ 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.

¹¹ Storm year is defined as October 1 to September 30 herein.

¹² Permittees shall achieve their final effluent limitation of zero trash discharge for the 2014-2015 storm year and every year thereafter.

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Los Angeles, County of	57,920	11,584	5,792	1,911	0
Santa Monica	2,299	460	230	76	0
West Hollywood	13,018	2,604	1,302	430	0

Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year (gallons of uncompressed trash)

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 (0%)
		Annual Trash Discharge (pounds of trash)			
Beverly Hills	79,914	15,983	7,991	2,637	0
Culver City	36,509	7,302	3,651	1,205	0
Inglewood	21,564	4,313	2,156	712	0
Los Angeles, City of	950,238	190,048	95,024	31,358	0
Los Angeles, County of	57,920	11,584	5,792	1,911	0
Santa Monica	2,299	460	230	76	0
West Hollywood	13,018	2,604	1,302	430	0

- (4) Seventy-two (72) hours after each rain event, Permittees shall clean out and measure trash retained.
- (5) Every 3 months during dry weather, Permittees shall clean out and measure trash retained.
- (6) 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 7.X [*Permit Provisions to Implement Trash TMDLs*].

b) Ballona Creek Estuary Toxic Pollutants TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
- (2) Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of pollutants from the sediment discharged 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

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DDTs	10.56	g/yr
Total PCBs	152	g/yr
Total PAHs	26,900	g/yr

- (3) Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads from sediments discharged 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

c) Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
 (2) Water Quality-Based Effluent Limitations

- (i) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- (ii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

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- (iii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	576/100 mL	126/100 mL

- (iv) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
Fecal coliform	4000/100 mL	2000/100 mL

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped¹³ 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 ¹⁴	17*	3	April 27, 2017 ¹⁵

* In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

- (ii) Permittees shall not exceed the single sample bacteria objective of 4000/100 ml in more than 10% of the samples collected from

¹³ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

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 Regional Water Board may extend the wet weather compliance date up to July 15, 2021, at the Regional Water Board's discretion.

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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 April 27, 2017.

- (iii) Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- (iv) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the 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 April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

- (v) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

d) Ballona Creek Metals TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
 (2) Final Water Quality-Based Effluent Limitations
- (i) Permittees shall comply with the following dry weather¹⁶ water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

¹⁶ 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.

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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 weather¹⁷ 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 weather¹⁸ 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)

¹⁷ *Ibid.*

¹⁸ Wet weather is defined as any day when the maximum daily flow in Ballona Creek is equal to or greater than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

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- (3) 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

- e) Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)
- (1) Permittees subject to the provisions below are identified in Table B-2.
 - (2) Permittees shall comply with the following grouped¹⁹ water quality-based effluent limitations as of the effective date of this Order for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual Effluent Limitation (m ³ /yr)
Total Sediment (suspended sediment plus sediment bed load)	44,615

6. TMDLs in Marina del Rey Subwatershed

- a) Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
- (1) Permittees subject to the provisions below are identified in Table B-2.
 - (2) 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 March 18, 2014²⁰:

¹⁹ The water quality-based effluent limitation is group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

²⁰ 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 during wet weather no later than July 15, 2021.

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Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped²¹ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation provisions, during dry weather as of the effective date of this Order and during wet weather no later than March 18, 2014²².

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 ²³	17	3

- (ii) Permittees shall comply with the following grouped²⁴ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation provision as of the effective date of this Order:

Station ID	Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)			
		Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-9	Basin F, center of basin	3	1	8	1

²¹ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

²² 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 during wet weather no later than July 15, 2021.

²³ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁴ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

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- (iii) Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than March 18, 2014²⁵:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

b) Marina del Rey Harbor Toxic Pollutants TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
- (2) Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016²⁶, expressed as an annual loading of pollutants from the sediment discharged to Marina del Rey Harbor Back Basins D, E, and F:

Constituent	Effluent Limitations	
	Annual	Units
Copper	2.01	kg/yr
Lead	2.75	kg/yr
Zinc	8.85	kg/yr
Chlordane	0.0295	g/yr
Total PCBs	1.34	g/yr

- (3) Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads from sediments 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

- (4) If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent

²⁵ 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 during wet weather no later than July 15, 2021.

²⁶ If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented then the Permittees shall comply with the final water quality-based effluent limitations no later than March 22, 2021.

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limitations for pollutant loads from sediments 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

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C. TMDLs in Dominguez Channel and Greater Harbor Waters Watershed Management Area

1. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)
 - a) Permittees subject to the provisions below are identified in Table C.
 - b) Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- c) Receiving Water Limitations
 - (1) Permittees shall comply with the following final single sample bacteria receiving water limitations for the Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach:

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	3	1
Wet Weather ¹	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	15	3

- (2) Permittees shall comply with the following geometric mean receiving water limitations for the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach at all times:

¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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Constituent	Geometric Mean
Total coliform	1,000 MPN/100 mL
Fecal coliform	200 MPN/100 mL
Enterococcus	35 MPN/100 mL

2. Machado Lake Trash TMDL

- a) Permittees subject to the provisions below are identified in Table C.
- b) 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.
- c) 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 ²	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ³ (0%)
		Annual Trash Discharge (gallons/yr)				
Carson	8141.47	6513.18	4884.88	3256.59	1628.29	0
Lomita	9392.99	7514.39	5635.79	3757.20	1878.60	0
City of Los Angeles	12331.17	9864.94	7398.70	4932.47	2466.23	0
Los Angeles County	8304.02	6643.22	4982.41	3321.61	1660.80	0
Los Angeles County Flood Control District	16.41	13.13	9.85	6.56	3.28	0
Palos Verdes Estates	1976.33	1581.06	1185.80	790.53	395.27	0
Rancho Palos Verdes	5226.71	4181.37	3136.03	2090.68	1045.34	0
Redondo Beach	18.16	14.53	10.90	7.26	3.63	0
Rolling Hills	3001.09	2400.87	1800.65	1200.44	600.22	0
Rolling Hills Estates	6498.83	5199.06	3899.30	2599.53	1299.77	0
Torrance	34808.97	27847.18	20885.38	13923.59	6961.79	0

- d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 2(b) and 2(c) above per the provisions in Part 7.X [*Permit Provisions to Implement Trash TMDLs*].
- e) 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).

² The Regional Water Board has determined the following 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.

³ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

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3. Machado Lake Nutrient TMDL

- a) Permittees subject to the provisions below are identified in Table C.
- b) 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

c) Compliance Determination

- (1) 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

- (2) 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. The annual mass-based allocation shall be equal to a monthly average concentrations of 0.1 mg/L total phosphorous and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees must demonstrate total nitrogen and total phosphorous load reductions to be achieved in accordance with a special study work plan approved by the Executive Officer.

- (i) The County of Los Angeles submitted a special study work plan, which was approved by the Executive Officer, and established the following annual mass-based water quality based effluent limitations:

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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 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

4. Machado Lake Pesticides and PCBs TMDL

- a) Permittees subject to the provisions below are identified in Table C.
- b) 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. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

- a) Permittees subject to the provisions below are identified in Table C.
- b) Permittees shall comply with the following interim water quality-based effluent limitations for discharges to Dominguez Channel and Torrance Lateral listed below as of the effective date of this Order:
 - (1) Dominguez Channel Freshwater – Wet Weather

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- (i) Freshwater Toxicity Interim Effluent Limitation shall not exceed the monthly median of 2 TUc.
- (ii) Permittees shall comply with the following interim metals water quality-based effluent limitations for discharges to the Dominguez Channel and Torrance Lateral:

Metals	Interim Effluent Limitation Daily Maximum (µg/L)
Total Copper	207.51
Total Lead	122.88
Total Zinc	898.87

- (2) Permittees shall comply with the following interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Interim Effluent Limitations Daily Maximum (mg/kg sediment)					
	Copper	Lead	Zinc	DDT	PAHs	PCBs
Dominguez Channel Estuary	220.0	510.0	789.0	1.727	31.60	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

- c) Permittees shall comply with the final water quality-based effluent limitations as listed below no later than March 23, 2032, and every year thereafter:

- (1) 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

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	Daily Maximum (g/day)
Total Copper	1,300.3
Total Lead	5,733.7
Total Zinc	9,355.5

(2) 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 (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

(3) 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 discharged 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

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LA River Estuary	35.3	65.7	242.0	2.31
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- (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

- (4) 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 discharged to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (g/yr)	
	DDT total	PCBs total
Dominguez Channel Estuary	0.250	0.207
Consolidated Slip	0.009	0.004
Inner Harbor	0.051	0.059
Outer Harbor	0.005	0.020
Fish Harbor	0.0003	0.0019
Cabrillo Marina	0.000028	0.000025
Inner Cabrillo Beach	0.0001	0.0003
San Pedro Bay	0.049	0.44
LA River Estuary	0.100	0.324

d) Compliance Determination

- (1) 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 5.b)(2) 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 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

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- (iii) Meet the interim water quality-based effluent limitations in the discharge over a three-year averaging period.
- (2) 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 5.c)(1)(ii) and 5.c)(2)(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.
- (3) Permittees shall be deemed in compliance with the final water quality-based effluent limitations for pollutants in the sediment as listed above in parts 5.c)(3)(i) and (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.
- (4) 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 5.c)(4) by meeting any one of the following methods:
 - (i) Fish tissue targets are met in species resident to the specified water bodies⁴; or
 - (ii) Final water quality-based effluent limitations for pollutants in the sediment are met; or
 - (iii) Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period; or
 - (iv) Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan.

⁴ A site-specific study to determine resident species shall be submitted to the Executive Officer for approval.

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D. TMDLs in Los Angeles River Watershed Management Area

1. Los Angeles River Watershed Trash TMDL
 - a) Permittees subject to the provisions below are identified in Table D.
 - b) 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.
 - c) 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	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ³ (0%)
Alhambra	11971	7981	3990	1317	0
Arcadia	15032	10022	5011	1654	0
Bell	4808	3205	1603	529	0
Bell Gardens	4050	2700	1350	446	0
Bradbury	1283	855	428	141	0
Burbank	27777	18518	9259	3055	0
Calabasas	6752	4501	2251	743	0
Carson	2050	1366	683	225	0
Commerce	17620	11747	5873	1938	0
Compton	15957	10638	5319	1755	0
Cudahy	1781	1187	594	196	0
Downey	11719	7813	3906	1289	0
Duarte	3663	2442	1221	403	0
El Monte	12662	8442	4221	1393	0
Glendale	42094	28063	14031	4630	0
Hidden Hills	1099	733	366	121	0
Huntington Park	5748	3832	1916	632	0
Irwindale	3706	2470	1235	408	0
La Cañada Flintridge	10049	6699	3350	1105	0
Los Angeles	412454	274969	137485	45370	0
Los Angeles County	93067	62045	31022	10237	0
Lynwood	8460	5640	2820	931	0
Maywood	1839	1226	613	202	0
Monrovia	14006	9337	4669	1541	0
Montebello	15111	10074	5037	1662	0
Monterey Park	11670	7780	3890	1284	0
Paramount	8236	5490	2745	906	0
Pasadena	33599	22400	11200	3696	0
Pico Rivera	4186	2791	1395	460	0
Rosemead	8192	5461	2731	901	0
San Fernando	4184	2789	1395	460	0
San Gabriel	6103	4069	2034	671	0
San Marino	4317	2878	1439	475	0
Santa Clarita	270	180	90	30	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.

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Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016³ (0%)
Sierra Madre	3483	2322	1161	383	0
Signal Hill	2830	1887	943	311	0
Simi Valley	41	27	14	5	0
South El Monte	4800	3200	1600	528	0
South Gate	13171	8781	4390	1449	0
South Pasadena	4472	2981	1491	492	0
Temple City	5272	3514	1757	580	0
Vernon	14161	9441	4720	1558	0

**Los Angeles River Watershed Trash Effluent Limitations⁴ per Storm Year⁵
(pounds of drip-dry trash)**

Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016⁶ (0%)
Alhambra	20628	13752	6876	2269	0
Arcadia	27911	18607	9304	3070	0
Bell	7601	5067	2534	836	0
Bell Gardens	7011	4674	2337	771	0
Bradbury	3648	2432	1216	401	0
Burbank	51117	34078	17039	5623	0
Calabasas	15669	10446	5223	1724	0
Carson	3062	2042	1021	337	0
Commerce	25644	17096	8548	2821	0
Compton	25907	17271	8636	2850	0
Cudahy	3018	2012	1006	332	0
Downey	20552	13701	6851	2261	0
Duarte	7106	4737	2369	782	0
El Monte	20480	13653	6827	2253	0
Glendale	88049	58700	29350	9685	0
Hidden Hills	3246	2164	1082	357	0
Huntington Park	9279	6186	3093	1021	0
Irwindale	5373	3582	1791	591	0
La Cañada Flintridge	22124	14749	7375	2434	0
Los Angeles	771750	514500	257250	84893	0
Los Angeles County	195542	130361	65181	21510	0
Lynwood	13940	9293	4647	1533	0
Maywood	3165	2110	1055	348	0
Monrovia	30296	20198	10099	3333	0
Montebello	25112	16741	8371	2762	0
Monterey Park	21137	14091	7046	2325	0
Paramount	13347	8898	4449	1468	0
Pasadena	62254	41503	20751	6848	0
Pico Rivera	6765	4510	2255	744	0
Rosemead	14213	9476	4738	1563	0
San Fernando	6923	4615	2308	762	0
San Gabriel	10931	7287	3644	1202	0
San Marino	8744	5829	2915	962	0
Santa Clarita	698	465	233	77	0
Sierra Madre	7558	5038	2519	831	0
Signal Hill	4266	2844	1422	469	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.

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Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ⁶ (0%)
Simi Valley	103	69	34	11	0
South El Monte	7296	4864	2432	803	0
South Gate	21700	14467	7233	2387	0
South Pasadena	8507	5671	2836	936	0
Temple City	9546	6364	3182	1050	0
Vernon	20044	13363	6681	2205	0

d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].

2. Los Angeles River Nitrogen Compounds and Related Effects TMDL

- a) Permittees subject to the provisions below are identified in Table D.
- b) 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

3. Los Angeles River and Tributaries Metals TMDL

- a) Permittees subject to the provisions below are identified in Table D.
- b) Final Water Quality-Based Effluent Limitations
 - (1) 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.

Waterbody	Effluent Limitations Daily Maximum (kg/day)		
	Copper	Lead	Zinc
LA River Reach 6	0.53	0.33	---
LA River Reach 5	0.05	0.03	---
LA River Reach 4	0.32	0.12	---
LA River Reach 3	0.06	0.03	---
LA River Reach 2	0.13	0.07	---
LA River Reach 1	0.14	0.07	---

⁷ The dry weather water quality-based effluent limitations are grouped-based and shared by the MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittee and Caltrans.

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.

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Bell Creek	0.06	0.04	---
Tujunga Wash	0.001	0.0002	---
Burbank Channel	0.15	0.07	---
Verdugo Wash	0.18	0.10	---
Arroyo Seco	0.01	0.01	---
Rio Hondo Reach 1	0.01	0.006	0.16
Compton Creek	0.04	0.02	---

- (2) 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	30	19	---
LA River Reach 4	26	10	---
LA River Reach 3 above LA-Glendale WRP and Verdugo Wash	23	12	---
LA River Reach 3 below LA-Glendale WRP	26	12	---
Burbank Western Channel (above WRP)	26	14	---
Burbank Western Channel (below WRP)	19	9.1	---
LA River Reach 2 and Arroyo Seco	22	11	---
LA River Reach 1	23	12	---
Compton Creek	19	8.9	---
Rio Hondo Reach 1	13	5.0	131

- (3) Permittees shall comply with the following grouped⁹ wet weather¹⁰ 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)

⁹ The wet weather water quality-based effluent limitations are grouped-based and shared by the MS4 Permittees, which includes LA MS4 Permittees, and Long Beach MS4 Permittee.

¹⁰ Wet weather is defined as any day when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cfs measured at the Wardlow gage station.

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Cadmium	2.8×10^{-9} x daily volume (L) – 1.8
Copper	1.5×10^{-8} x daily volume (L) – 9.5
Lead	5.6×10^{-8} x daily volume (L) – 3.85
Zinc	1.4×10^{-7} x daily volume (L) – 83

- c) 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

4. Los Angeles River Watershed Bacteria TMDL

- a) Permittees subject to the provisions below are identified in Table D.
- b) 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 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

- c) Permittees shall comply with the following grouped¹¹ 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 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

¹¹ The interim dry weather water quality-based effluent limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittees, and Caltrans.

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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

d) Receiving Water Limitations

- (1) Permittees shall comply with the following grouped¹² 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 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 ¹³ Waterbodies Wet Weather	15	2
HFS Waterbodies Wet Weather	10 (not including HSF days)	2 (not including HSF days)

- (2) Permittees shall comply with the following geometric mean receiving water limitation for discharges to the Los Angeles River and its tributaries

¹² The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4, Long Beach MS4, and Caltrans.

¹³ HFS stands for high flow suspension as defined in Chapter 2 of the Basin Plan.

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during dry weather according to the schedule in Table 1, and during wet weather no later than March 23, 2037:

Constituent	Geometric Mean (MPN or cfu)
<i>E. coli</i>	126/100 mL

Table 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
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

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Implementation Action	Responsible Parties	Deadline
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
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

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Implementation Action	Responsible Parties	Deadline
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
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 (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment E	September 23, 2017

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Implementation Action	Responsible Parties	Deadline
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
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

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Implementation Action	Responsible Parties	Deadline
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 (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries	March 23, 2023
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

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- e) Compliance Determination
- (1) 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.
 - (2) 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.
 - (3) 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 Executive Officer.
 - (4) By March 23, 2022, Permittees shall submit an implementation plan for wet weather with interim milestones.

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- 5. Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL
 - a) Permittees subject to the provisions below are identified in Table D.
 - b) Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles River Estuary as of the effective date of this Order:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- c) Receiving Water Limitations
 - (1) Permittees shall comply with the following grouped¹⁴ final single sample bacteria receiving water limitations for the Los Angeles River Estuary as of the effective date of this Order:

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 ¹⁵	17	3

- (2) Permittees shall comply with the following geometric mean receiving water limitations for all monitoring stations in the Los Angeles River Estuary as of the effective date of this Order:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- d) Compliance Determination
 - (1) Permittees may demonstrate compliance with the final dry or weather limitations by demonstrating that final receiving water limitations are met

¹⁴ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittees, and Caltrans.

¹⁵ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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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 water quality-based effluent limitations in part 5.b. above, based on a weighted-average using flow rates from all measured outfalls; or
 - (ii) Zero discharge during dry weather.
- (2) 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 water quality-based effluent limitations in part 5.b. 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.

6. Los Angeles Area Lakes TMDLs

a) Lake Calabastas Nutrient TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Permittee	Total Phosphorus (lb-P/yr) ^{16,17}	Total Nitrogen (lb-N/yr) ^{16,17}
City of Calabastas	48.5	220

- (3) The following concentration based water quality-based receiving water limitations apply during both wet and dry weather if:

¹⁶ Measured as a summer average (May – September) and annual average.

¹⁷ Measured at the point of discharge.

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- The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met.
- The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average.
- U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice.
- The concentration-based receiving water limits must be met in the lake. However, if the applicable water quality criteria for ammonia, dissolved oxygen, pH, and the chlorophyll *a* targets are met, then the total phosphorus and total nitrogen limits are considered attained.

Permittee	Total Phosphorus Monthly Average (mg-P/L) ^{18,19}	Total Nitrogen Monthly Average (mg-N/L) ^{18,19}
City of Calabasas	0.1	1.0

b) Echo Park Lake Nutrient TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr) ^{19,20}	Total Nitrogen (lb-N/yr) ^{19,20}
Northern	City of Los Angeles	24.7	156
Southern	City of Los Angeles	7.129	49.69

¹⁸ Measured as an in-lake concentration.

¹⁹ Measured as a summer average (May – September) and annual average.

²⁰ Measured at the point of discharge.

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- (3) In assessing compliance with wasteload allocations, responsible jurisdictions assigned both northern and southern subwatershed allocations may have their allocations combined.

c) Echo Park Lake PCBs TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{21,22}	Total PCBs in the Water Column (ng/L) ^{21,22}
Northern	City of Los Angeles	1.77	0.17
Southern	City of Los Angeles	1.77	0.17

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{22,23}	Total PCBs in the Water Column (ng/L) ^{21,22}
Northern	City of Los Angeles	59.8	0.17
Southern	City of Los Angeles	59.8	0.17

d) Echo Park Lake Chlordane TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

²¹ Applied as an annual average.
²² Measured at the point of discharge.
²³ Applied as a 3-year average.

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Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{24,25}	Total Chlordane in the Water Column (ng/L) ^{24,25}
Northern	City of Los Angeles	2.10	0.59
Southern	City of Los Angeles	2.10	0.59

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{24,26}	Total Chlordane in the Water Column (ng/L) ^{24,25}
Northern	City of Los Angeles	3.24	0.59
Southern	City of Los Angeles	3.24	0.59

e) Echo Park Lake Dieldrin TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
(2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{24,25}	Dieldrin in the Water Column (ng/L) ^{24,25}
Northern	City of Los Angeles	0.80	0.14
Southern	City of Los Angeles	0.80	0.14

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the

²⁴ Measured at the point of discharge.

²⁵ Applied as an annual average.

²⁶ Applied as a 3-year average.

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Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{27,28}	Dieldrin in the Water Column (ng/L) ^{27,29}
Northern	City of Los Angeles	1.90	0.14
Southern	City of Los Angeles	1.90	0.14

f) Echo Park Lake Trash TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitation as of the effective date of this Order:

Permittee	Trash (Gal/year)
City of Los Angeles	0

g) Peck Road Park Lake Nutrient TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr) ^{27,29}	Total Nitrogen (lb-N/yr) ^{27,29}
Eastern	Arcadia	383	2,320
Eastern	Bradbury	497	3,223
Eastern	Duarte	1,540	9,616

²⁷ Measured at the point of discharge.

²⁸ Applied as a 3-year average.

²⁹ Applied as an annual average.

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Eastern	Irwindale	496	3,487
Eastern	County of Los Angeles	924	5,532
Eastern	Monrovia	6,243	38,736
Near Lake	Arcadia	158	1,115
Near Lake	El Monte	96.2	602
Near Lake	Irwindale	28.2	207
Near Lake	County of Los Angeles	129	773
Near Lake	Monrovia	60.4	415
Western	Arcadia	2,840	16,334
Western	County of Los Angeles	467	2,818
Western	Monrovia	425	2,678
Western	Sierra Madre	695	4,254

h) Peck Road Park Lake PCBs TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{30,31}	Total PCBs in the Water Column (ng/L) ^{30,31}
Eastern	Arcadia	1.29	0.17
Eastern	Bradbury	1.29	0.17
Eastern	Duarte	1.29	0.17
Eastern	Irwindale	1.29	0.17
Eastern	County of Los Angeles	1.29	0.17
Eastern	Monrovia	1.29	0.17
Near Lake	Arcadia	1.29	0.17
Near Lake	El Monte	1.29	0.17
Near Lake	Irwindale	1.29	0.17
Near Lake	County of Los Angeles	1.29	0.17
Near Lake	Monrovia	1.29	0.17
Western	Arcadia	1.29	0.17
Western	County of Los Angeles	1.29	0.17
Western	Monrovia	1.29	0.17
Western	Sierra Madre	1.29	0.17

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing that the fish tissue target of 3.6

³⁰ Measured at the point of discharge.

³¹ Applied as an annual average.

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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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{32,33}	Total PCBs in the Water Column (ng/L) ^{32,34}
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

i) Peck Road Park Lake Chlordane TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{32,34}	Total Chlordane in the Water Column (ng/L) ^{32,34}
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

³² Measured at the point of discharge.

³³ Applied as a 3-year average.

³⁴ Applied as an annual average.

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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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{35,36}	Total Chlordane in the Water Column (ng/L) ^{35,37}
Eastern	Arcadia	3.24	0.59
Eastern	Bradbury	3.24	0.59
Eastern	Duarte	3.24	0.59
Eastern	Irwindale	3.24	0.59
Eastern	County of Los Angeles	3.24	0.59
Eastern	Monrovia	3.24	0.59
Near Lake	Arcadia	3.24	0.59
Near Lake	El Monte	3.24	0.59
Near Lake	Irwindale	3.24	0.59
Near Lake	County of Los Angeles	3.24	0.59
Near Lake	Monrovia	3.24	0.59
Western	Arcadia	3.24	0.59
Western	County of Los Angeles	3.24	0.59
Western	Monrovia	3.24	0.59
Western	Sierra Madre	3.24	0.59

³⁵ Measured at the point of discharge.

³⁶ Applied as a 3-year average.

³⁷ Applied as an annual average.

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j) Peck Road Park DDT TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{38,39}	4-4' DDT in the Water Column (ng/L) ^{38,39}
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

k) Peck Road Park Lake Dieldrin TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{38,39}	Dieldrin in the Water Column (ng/L) ^{38,39}
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

³⁸ Measured at the point of discharge.

³⁹ Applied as an annual average.

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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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{40,41}	Dieldrin in the Water Column (ng/L) ^{40,42}
Eastern	Arcadia	1.90	0.14
Eastern	Bradbury	1.90	0.14
Eastern	Duarte	1.90	0.14
Eastern	Irwindale	1.90	0.14
Eastern	County of Los Angeles	1.90	0.14
Eastern	Monrovia	1.90	0.14
Near Lake	Arcadia	1.90	0.14
Near Lake	El Monte	1.90	0.14
Near Lake	Irwindale	1.90	0.14
Near Lake	County of Los Angeles	1.90	0.14
Near Lake	Monrovia	1.90	0.14
Western	Arcadia	1.90	0.14
Western	County of Los Angeles	1.90	0.14
Western	Monrovia	1.90	0.14
Western	Sierra Madre	1.90	0.14

l) Peck Road Park Lake Trash TMDL

- (1) Permittees subject to the provisions below are identified in Table D.

⁴⁰ Measured at the point of discharge.

⁴¹ Applied as a 3-year average.

⁴² Applied as an annual average.

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- (2) Permittees shall comply with the following water quality-based effluent limitation as of the effective date of this Order:

Permittee	Trash (gal/year)
Arcadia	0
Bradbury	0
Duarte	0
El Monte	0
Irwindale	0
County of Los Angeles	0
Monrovia	0
Sierra Madre	0

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E. TMDLs in San Gabriel River Watershed Management Area

1. San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL (USEPA established)
 - a) Permittees subject to the provisions below are identified in Table E.
 - b) Permittees shall comply with the following grouped¹ wet weather² water quality-based effluent limitations as of the effective date of this Order, expressed as total recoverable metals discharged to all upstream reaches and tributaries of the San Gabriel River Reach 2 and Coyote Creek:

Water Body	Effluent Limitation Daily Maximum (kg/day)		
	Copper	Lead	Zinc
San Gabriel Reach 2	---	81.34 x daily storm volume (L)	---
Coyote Creek	24.71 x daily storm volume (L)	96.99 x daily storm volume (L)	144.57 x daily storm volume (L)

- c) Permittees shall comply with the following grouped¹ dry weather water quality-based effluent limitations as of the effective date of this Order, 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:

Water Body	Effluent Limitation Daily Maximum	
	Copper	Selenium
San Gabriel Reach 1	18 ug/L	---
Coyote Creek	0.941 kg/day	---
San Gabriel River Estuary	3.7 ug/L	---
San Jose Creek Reach 1 and 2	---	5 ug/L

2. Legg Lake Trash TMDL
 - a) Permittees subject to the provisions below are identified in Table E.
 - b) Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Legg Lake no later than March 6, 2016.
 - c) If the Permittees choose to comply with the water quality-based effluent limitations by implementing an Executive Officer certified full capture system on conveyances that discharge to Legg Lake through a progressive

¹ The wet weather and dry weather water quality-based effluent limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittees, Orange County MS4 Permittees 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.

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implementation schedule of full capture devices, they will be deemed in compliance with the water quality-based effluent limitations.

- d) 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 Limitations³ (gallons of uncompressed trash per year)

Permittees	Baseline ⁴ (100%)	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ⁵ (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

³ Water quality-based effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table XX of the Basin Plan.

⁴ The Regional Water Board has determined the following baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 6677 gallons of uncompressed trash per square mile per year.

⁵ Permittees shall achieve their final effluent limitation of zero trash discharge for the year and every year thereafter.

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- e) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 2(b) and 2(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].
 - f) 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).
3. Los Angeles Area Lakes TMDLs⁶ (USEPA in progress)
- a) Legg Lake System Nutrient TMDL
 - (1) Permittees subject to the provisions below are identified in Table E.
 - (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the following annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Flow (ac-ft/yr)	Total Phosphorus (lb-P/yr) ^{7,8}	Total Nitrogen (lb-N/yr) ^{7,8}
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

- (3) The following concentration based water quality-based receiving water limitations apply during both wet and dry weather if:
 - The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met.

⁶ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

⁷ Measured as a summer average (May – September) and annual average.

⁸ Measured at the point of discharge.

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- The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average.
- U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice.
- The concentration-based receiving water limits must be met in the lake. However, if the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets are met, then the total phosphorus and total nitrogen limits are considered attained.

Subwatershed	Permittee	Total Phosphorus Monthly Average (mg-P/L) ^{9,10}	Total Nitrogen Monthly Average (mg-N/L) ^{9,10}
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

b) Puddingstone Reservoir Nutrient TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr) ^{10,11}	Total Nitrogen (lb-N/yr) ^{10,11}
Northern	Claremont	169	745
Northern	County of Los Angeles	741	829
Northern	La Verne	2,772	11,766
Northern	Pomona	6.30	28.3
Northern	San Dimas	31.1	137

⁹ Measured as an in-lake concentration.

¹⁰ Measured as a summer average (May – September) and annual average.

¹¹ Measured at the point of discharge.

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- (3) The following concentration based water quality-based receiving water limitations apply during both wet and dry weather if:
- The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met.
 - The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average.
 - U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice.
 - The concentration-based receiving water limits must be met in the lake.

Subwatershed	Permittee	Total Phosphorus Monthly Average (mg-P/L) ^{12,13}	Total Nitrogen Monthly Average (mg-N/L) ^{12,13}
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

c) Puddingstone Reservoir Mercury TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees shall comply with the following water quality-based effluent limitations during both wet and dry weather as of the effective date of this Order:

Subwatershed	Permittee	Total Mercury (g-Hg/yr) ^{14,15}
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

¹² Measured as an in-lake concentration.

¹³ Measured as a summer average (May – September) and annual average.

¹⁴ Measured at the point of discharge.

¹⁵ Applied as an annual average.

LA County MS4 Permit – TMDL Provisions for the San Gabriel River WMA

d) Puddingstone Reservoir PCBs TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{16,18}	Total PCBs in the Water Column (ng/L) ^{16,18}
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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{16,17}	Total PCBs in the Water Column (ng/L) ^{16,18}
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

e) Puddingstone Reservoir Chlordane TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total Chlordane associated with	Total Chlordane in the Water
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¹⁶ Measured at the point of discharge.

¹⁷ Applied as a 3-year average.

¹⁸ Applied as an annual average.

LA County MS4 Permit – TMDL Provisions for the San Gabriel River WMA

		Suspended Sediment (ug/kg dry weight)^{19,20}	Column (ng/L)^{19,20}
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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight)^{19,21}	Total Chlordane in the Water Column (ng/L)^{19,20}
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

f) Puddingstone Reservoir Dieldrin TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
(2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight)^{19,20}	Dieldrin in the Water Column (ng/L)^{19,20}
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

¹⁹ Measured at the point of discharge

²⁰ Applied as an annual average.

²¹ Applied as a 3-year average.

LA County MS4 Permit – TMDL Provisions for the San Gabriel River WMA

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{22,23}	Dieldrin in the Water Column (ng/L) ^{22,24}
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

g) Puddingstone Reservoir DDT TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{22,24}	4-4' DDT in the Water Column (ng/L) ^{22,24}
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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it

²² Measured at the point of discharge.

²³ Applied as a 3-year average.

²⁴ Applied as an annual average.

LA County MS4 Permit – TMDL Provisions for the San Gabriel River WMA

is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{25,26}	4-4' DDT in the Water Column (ng/L) ^{25,27}
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

²⁵ Measured at the point of discharge.

²⁶ Applied as a 3-year average.

²⁷ Applied as an annual average.

F. TMDLs in Los Cerritos Channel and Alamitos Bay Watershed Management Area

1. Los Cerritos Channel Metals TMDL (USEPA established)

- a) Permittees subject to the provisions below are identified in Table F.
- b) Permittees shall comply with the following dry weather¹ water quality-based effluent limitations as of the effective date of this Order, expressed as total recoverable metals discharged to Los Cerritos Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	67.2

- c) Permittees shall comply with the following wet weather² water quality-based effluent limitations as of the effective date of this Order, expressed as total recoverable metals discharged to Los Cerritos Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	$4.709 \times 10^{-6} \times$ daily storm volume (L)
Lead	$26.852 \times 10^{-6} \times$ daily storm volume (L)
Zinc	$46.027 \times 10^{-6} \times$ daily storm volume (L)

2. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

- a) Permittees subject to the provisions below are identified in Table F.
- b) 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.

LA County MS4 Permit – TMDL Provisions for the Los Cerritos Channel and Alamitos Bay WMA

- c) 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 ($\mu\text{g}/\text{dry kg}$)
Chlordane	0.50
Dieldrin	0.02
Lead	46,700
Zinc	150,000
PAHs	4,022
PCBs	22.70
DDT	1.58

- d) The mass-based water quality-based effluent limitations are shared by the MS4 Permittees, which includes LA MS4, Long Beach MS4 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

- e) 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.

LA County MS4 Permit – TMDL Provisions for the Middle Santa Ana River WMA

G. Middle Santa Ana River Watershed Management Area (Santa Ana Region TMDL)

1. Middle Santa Ana River Watershed Bacteria Indicator TMDL
 - a) Permittees subject to the provisions below are identified in Table G.
 - b) Permittees shall comply with the following final effluent limitations for discharges to San Antonio Channel during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - (1) Fecal coliform¹: log mean less than 200 organisms/100 mL based on five or more samples per 30 day period, and not more than 10% of the samples exceed 400 organisms/100 mL for any 30 – day period.
 - (2) *E. coli*: log mean less than 126 organisms/100 mL based on five or more samples per 30 – day period, and not more than 10% of the samples exceed 235 organisms/100mL for any 30 day period.
 - c) Permittees shall comply with the following receiving water limitations for discharges to San Antonio Channel during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - (1) Fecal coliform²: 5 sample/30 – day logarithmic mean less than 180 organisms/100 mL, and not more than 10% of the samples exceed 360 organisms/100 mL for any 30 – day period.
 - (2) *E. coli*: 5 sample/30 – day logarithmic mean less than 113 organisms/100 mL, and not more than 10% of the samples exceed 212 organisms/100mL for any 30 day period.
 - d) Permittees may demonstrate compliance with the receiving water limitations by developing for approval by the Regional Water Board a Comprehensive Bacteria Reduction Plan (CBRP) describing, in detail, the specific actions that have been taken or will be taken to achieve compliance with the water quality-based effluent limitations.

¹ The fecal coliform effluent limitations become ineffective upon the replacement of the REC1 fecal coliform objectives with REC1 *E. coli* objectives in the Santa Ana Region Basin Plan.

² The fecal coliform receiving water limitations become ineffective upon the replacement of the REC1 fecal coliform objectives with REC1 *E. coli* objectives in the Santa Ana Regional Basin Plan.

LA County MS4 Permit – List of TMDLs by Watershed Management Area

TOTAL MAXIMUM DAILY LOADS (TMDL) BY WATERSHED MANAGEMENT AREA (WMA)

- A. Santa Clara River Watershed Management Area
 - 1. Santa Clara River Nitrogen Compounds TMDL
 - 2. Upper Santa Clara River Chloride TMDL
 - 3. Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (*Lake Elizabeth only*)
 - 4. Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL

- B. Santa Monica Bay Watershed Management Area
 - 1. Santa Monica Bay Beaches Bacteria TMDL
 - 2. Santa Monica Bay Nearshore and Offshore Debris TMDL
 - 3. Santa Monica Bay TMDL for DDTs and PCBs (*USEPA established*)

 - 4. Malibu Creek Subwatershed
 - a. Malibu Creek and Lagoon Bacteria TMDL
 - b. Malibu Creek Watershed Trash TMDL
 - c. Malibu Creek Watershed Nutrients TMDL (*USEPA established*)

 - 5. Ballona Creek Subwatershed
 - a. Ballona Creek Trash TMDL
 - b. Ballona Creek Estuary Toxic Pollutants TMDL
 - c. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL
 - d. Ballona Creek Metals TMDL
 - e. Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (*USEPA established*)

 - 6. Marina del Rey Subwatershed
 - a. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
 - b. Marina del Rey Harbor Toxic Pollutants TMDL

- C. Dominguez Channel and Greater Harbors Waters Watershed Management Area
 - 1. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)
 - 2. Machado Lake Trash TMDL
 - 3. Machado Lake Nutrient TMDL
 - 4. Machado Lake Pesticides and PCBs TMDL
 - 5. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

- D. Los Angeles River Watershed Management Area
 - 1. Los Angeles River Watershed Trash TMDL
 - 2. Los Angeles River Nitrogen Compounds and Related Effects TMDL
 - 3. Los Angeles River and Tributaries Metals TMDL
 - 4. Los Angeles River Watershed Bacteria TMDL
 - 5. Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (*USEPA established*)
 - 6. Los Angeles Area Lakes TMDLs¹ (*USEPA established for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake*)

¹ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

LA County MS4 Permit – List of TMDLs by Watershed Management Area

- E. San Gabriel River Watershed Management Area
 - 1. San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (*USEPA established*)
 - 2. Legg Lake Trash TMDL
 - 3. Los Angeles Area Lakes TMDLs¹ (*USEPA established for Legg Lake and Puddingstone Reservoir*)

- F. Los Cerritos Channel and Alamitos Bay Watershed Management Area
 - 1. Los Cerritos Channel Metals TMDL (*USEPA established*)
 - 2. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

- G. Middle Santa Ana River Watershed Management Area (Santa Ana Region TMDL)
 - 1. Middle Santa Ana River Watershed Bacteria Indicator TMDL

¹ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

LA County MS4 Permit – Receiving Water Limitations

V. RECEIVING WATER LIMITATIONS¹

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 responsible², shall not cause or contribute to a condition of nuisance.
3. The Permittees shall comply with Sections 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 notify³ and thereafter submit a Receiving Water Limitations (RWL) Compliance Report (as described in the Program Reporting Requirements, Section [TBD] of the Monitoring and Reporting Program) to the Regional Water Board for approval. The RWL Compliance Report shall describe the BMPs that are currently being implemented by the Permittee and additional BMPs, including modifications to current BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedances of Receiving Water Limitations. The RWL Compliance Report shall include an implementation schedule. This RWL Compliance Report may be incorporated in the annual Storm Water Report and Assessment unless the Regional Water Board directs an earlier submittal. The Regional Water Board may require modifications to the RWL Compliance Report.

¹ **Receiving Water Limitation:** Any applicable numeric or narrative water quality standard, or limitation to implement the applicable water quality standard, for the receiving water as contained in the *Water Quality Control Plan for the Los Angeles Region* (Basin Plan), water quality control plans or policies adopted by the State Water Resources Control Board, or federal regulations, including but not limited to, 40 CFR § 131.38.

² 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.

³ Within 30 days of receipt of analytical results from the sampling event.

Theresa Rodgers - CLARIFICATION OF THE MAY 3, 2012 PUBLIC WORKSHOP ON THE LA COUNTY MS4 PERMIT

From: <lyris@swrcb18.waterboards.ca.gov>
To: Theresa Rodgers <trodgers@waterboards.ca.gov>
Date: 4/26/2012 12:16 PM
Subject: CLARIFICATION OF THE MAY 3, 2012 PUBLIC WORKSHOP ON THE LA COUNTY MS4 PERMIT
Attachments: 05-03-12.pdf

Please see revised Agenda clarifying the location of the May 3, 2012 Regional Board Public Workshop at the California Science Center.

You are currently subscribed to reg4_sw_lacounty_ms4 as: trodgers@waterboards.ca.gov.

To unsubscribe click here: http://swrcb18.waterboards.ca.gov/u?id=74153.73238969e4d494a864d5bc6313ac524e&n=T&l=req4_sw_lacounty_ms4&o=333899

(It may be necessary to cut and paste the above URL if the line is broken)

or send a blank email to leave-333899-74153.73238969e4d494a864d5bc6313ac524e@swrcb18.waterboards.ca.gov

LYRIS MAILING

RB-AR2246

LIST NAME: SW-MS4-LACO

DATE MAILED: 4/26/2012

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2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM	ADRIEN F. MADDALENO
6/22/2010 11:57	AEMiller@waterboards.ca.gov	Alan E. Miller
3/27/2012 13:25	Berry.Ueoka@EverestConsultants.com	Berry Ueoka
3/22/2012 15:22	BryantA@lwa.com	Bryant Alvarado
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com	Carlos Aguilar
7/6/2009 13:38	City_manager@ci.glendora.ca.us	Chris Jeffers
11/16/2011 7:58	DLiu@DiamondBarCA.Gov	David G. Liu
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5/2/2011 6:54	Debbie.Neev@gmail.com	Deborah Neev
7/6/2009 13:58	EKiepke@WILLDAN.com	E. Kiepke
7/6/2009 13:21	FredLatham@santafesprings.org	Frederick W. Latham
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1/19/2010 11:06	Jeremy.Bock@Kiewit.com	Jeremy Bock
3/7/2012 16:27	Jim@CuratingLA.com	Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org	John Beshay
7/28/2011 16:10	Joyntventr@aol.com	Jayne Staley
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3/22/2011 15:43 calmetals@gmail.com	heather kline
7/6/2009 13:54 cammc@jlha.net	John Hunter Cameron McCullo
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5/3/2011 10:15	cchang@wrd.org	Cathy Chang
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7/6/2009 13:18	cconsunji@ci.norwalk.ca.us	Chino Consunji
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5/31/2011 16:57	charpole@newhall.com	Corey Harpole
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7/30/2009 8:44	chris@athrone.com	Chris Rillamas
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4/23/2012 20:12	chrism@lwa.com	chris minton
7/6/2009 13:08	citymanager@hiddenhillscity.org	Cherie L. Paglia
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Theresa Rodgers - MS4 PERMIT WILL BEGIN IN THE MORNING FOLLOWING THE INTRODUCTORY AGENDA ITEMS

From: <lyris@swrcb18.waterboards.ca.gov>
To: Theresa Rodgers <trodgers@waterboards.ca.gov>
Date: 5/2/2012 4:04 PM
Subject: MS4 PERMIT WILL BEGIN IN THE MORNING FOLLOWING THE INTRODUCTORY AGENDA ITEMS
Attachments: Short_form_agenda_05-03-12R3.PDF

The Board Workshop on the LA County MS4 Permit (Agenda Item #19) will begin in the morning, following the Introductory Agenda Items.

Please see the Revised Agenda for exact order of the Board Meeting.

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7/6/2009 13:41 emansfield@aei-casc.com	Ernie Mansfield
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4/10/2012 12:43 emka_researcher@yahoo.com	godly e thankgod
1/21/2012 19:26 emmanuel.riclet@gmail.com	EMMANUEL RICLET
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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
7/6/2009 13:04 tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57 tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33 tiffanyshedrick@santafesprings.org	Tiffany Shedrick
12/13/2011 10:32 tliddell@kirklandwa.gov	Tommy Liddell
5/31/2011 16:30 tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51 tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19 tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20 tony@csstudios.com	Tony Ignacio
2/20/2012 13:01 tracy@egoscuelaw.com	Tracy Egoscue
7/26/2010 10:25 traczegoscue@paulhastings.com	Tracy Egoscue
7/6/2009 13:10 trobinson@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29 trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33 tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59 ttait@ci.arcadia.ca.us	Tom Tait
7/6/2009 13:22 tybarra@soelmonte.org	Tony Ybarra
4/3/2011 19:01 uhden@metro.net	Roger Uhden
6/17/2011 20:16 uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42 vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02 vcastro@covinaca.gov	Vivian Castro
1/24/2011 11:30 vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/7/2011 11:10 victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39 vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38 vsalazar@ldcla.com	Victor Salazar PE

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2/18/2011 11:31 wade@grahamstudio.net	Wade Graham
3/9/2010 16:40 wblistserv@gmail.com	SWRCB Listserv
2/21/2012 4:06 wbotha@brownandwinters.com	Wentzelee Botha
6/29/2011 9:59 wcaffrey@vandermostconsulting.com	wade caffrey
12/29/2011 11:17 welchrc@pbworld.com	Robert Welch
11/14/2011 16:14 wgross@lacs.org	bill gross
2/18/2011 10:21 willrolph@truxaw.com	William Rolph
7/6/2009 13:52 wrlindinc@aol.com	Wes Lind
8/17/2011 11:33 wynesta@earthlink.net	Wynesta Dale
11/16/2011 8:58 ykwan@lcf.ca.gov	Ying Kwan
7/6/2009 13:35 ys@cityofrh.net	Yolanta Schwartz
12/6/2010 17:34 ysim@dpw.lacounty.gov	Youn Sim
9/17/2010 8:45 zora.baharians@lacity.org	Zora



Los Angeles Regional Water Quality Control Board

TO: Board Members

FROM: Samuel Unger, P.E.
Executive Officer

DATE: April 24, 2012

SUBJECT: MATERIALS FOR MAY 3, 2012 BOARD WORKSHOP ON LA COUNTY MS4 PERMIT

As you recall, at the last board workshop held on April 5, 2012, staff discussed working proposals for permit provisions addressing (1) non-storm water discharges to the MS4 and (2) the minimum control measures that comprise Permittees' baseline storm water management programs. We are currently evaluating the working proposals in light of the oral and written comments that we received. The tentative Order will reflect revisions to the working proposals based on our consideration of these comments.

Enclosed herein are working proposals for the remaining major parts of the LA County MS4 Permit, which staff will discuss at the upcoming board workshop on May 3, 2012. The three working proposals include:

- Permit provisions for the development and implementation of Watershed Management Programs;
- Permit provisions to implement all applicable wasteload allocations from total maximum daily loads (TMDLs); and
- Permit provisions for Receiving Water Limitations consistent with the State Water Board's precedential order, Order WQ 99-05.

These working proposals have been distributed to Permittees and other interested persons for their review.

As was noted at the last board workshop, the provisions for the development and implementation of Watershed Management Programs integrate many of the other components of the permit. The release of these three working proposals in conjunction with the two previous working proposals will allow Permittees and interested persons to see how all the major parts of the permit will work together.

The upcoming board workshop on May 3, 2012 will operate in similar fashion to the previous two board workshops. Staff will provide an overview of the three working proposals and then Permittees and interested persons will have the opportunity to provide comments. If you have any questions in advance of the board workshop, please do not hesitate to contact me or Renee Purdy, Chief, Regional Programs Section at (213) 576-6622 or via e-mail at rpurdy@waterboards.ca.gov.

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

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Regular Board Meeting of the California Regional Water Quality Control Board
Los Angeles Region

Workshop on the issuance of a new Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit. Staff will make a presentation on provisions related to watershed planning and implementation, TMDL related requirements, and receiving water limitations.

1. Working Proposal of Watershed Management Program Provisions	19-1
2. Working Proposal of TMDL Provisions	19-14
Proposals List	19-27
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g. TMDLs Provisions for San Gabriel River WMA	19-101
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i. TMDLs Provisions for Santa Ana River WMA	19-112
3. Working Proposal of Receiving Water Limitation Provisions	19-113

LA County MS4 Permit – Receiving Water Limitations

V. RECEIVING WATER LIMITATIONS¹

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 responsible², shall not cause or contribute to a condition of nuisance.
3. The Permittees shall comply with Sections 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 notify³ and thereafter submit a Receiving Water Limitations (RWL) Compliance Report (as described in the Program Reporting Requirements, Section [TBD] of the Monitoring and Reporting Program) to the Regional Water Board for approval. The RWL Compliance Report shall describe the BMPs that are currently being implemented by the Permittee and additional BMPs, including modifications to current BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedances of Receiving Water Limitations. The RWL Compliance Report shall include an implementation schedule. This RWL Compliance Report may be incorporated in the annual Storm Water Report and Assessment unless the Regional Water Board directs an earlier submittal. The Regional Water Board may require modifications to the RWL Compliance Report.

¹ **Receiving Water Limitation:** Any applicable numeric or narrative water quality standard, or limitation to implement the applicable water quality standard, for the receiving water as contained in the *Water Quality Control Plan for the Los Angeles Region* (Basin Plan), water quality control plans or policies adopted by the State Water Resources Control Board, or federal regulations, including but not limited to, 40 CFR § 131.38.

² 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.

³ Within 30 days of receipt of analytical results from the sampling event.

LA County MS4 Permit – List of TMDLs by Watershed Management Area

TOTAL MAXIMUM DAILY LOADS (TMDL) BY WATERSHED MANAGEMENT AREA (WMA)

- A. Santa Clara River Watershed Management Area
 - 1. Santa Clara River Nitrogen Compounds TMDL
 - 2. Upper Santa Clara River Chloride TMDL
 - 3. Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL (*Lake Elizabeth only*)
 - 4. Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL

- B. Santa Monica Bay Watershed Management Area
 - 1. Santa Monica Bay Beaches Bacteria TMDL
 - 2. Santa Monica Bay Nearshore and Offshore Debris TMDL
 - 3. Santa Monica Bay TMDL for DDTs and PCBs (*USEPA established*)

 - 4. Malibu Creek Subwatershed
 - a. Malibu Creek and Lagoon Bacteria TMDL
 - b. Malibu Creek Watershed Trash TMDL
 - c. Malibu Creek Watershed Nutrients TMDL (*USEPA established*)

 - 5. Ballona Creek Subwatershed
 - a. Ballona Creek Trash TMDL
 - b. Ballona Creek Estuary Toxic Pollutants TMDL
 - c. Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL
 - d. Ballona Creek Metals TMDL
 - e. Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (*USEPA established*)

 - 6. Marina del Rey Subwatershed
 - a. Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
 - b. Marina del Rey Harbor Toxic Pollutants TMDL

- C. Dominguez Channel and Greater Harbors Waters Watershed Management Area
 - 1. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)
 - 2. Machado Lake Trash TMDL
 - 3. Machado Lake Nutrient TMDL
 - 4. Machado Lake Pesticides and PCBs TMDL
 - 5. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

- D. Los Angeles River Watershed Management Area
 - 1. Los Angeles River Watershed Trash TMDL
 - 2. Los Angeles River Nitrogen Compounds and Related Effects TMDL
 - 3. Los Angeles River and Tributaries Metals TMDL
 - 4. Los Angeles River Watershed Bacteria TMDL
 - 5. Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL (*USEPA established*)
 - 6. Los Angeles Area Lakes TMDLs¹ (*USEPA established for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake*)

¹ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

LA County MS4 Permit – List of TMDLs by Watershed Management Area

- E. San Gabriel River Watershed Management Area
 - 1. San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (*USEPA established*)
 - 2. Legg Lake Trash TMDL
 - 3. Los Angeles Area Lakes TMDLs¹ (*USEPA established for Legg Lake and Puddingstone Reservoir*)

- F. Los Cerritos Channel and Alamitos Bay Watershed Management Area
 - 1. Los Cerritos Channel Metals TMDL (*USEPA established*)
 - 2. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

- G. Middle Santa Ana River Watershed Management Area (Santa Ana Region TMDL)
 - 1. Middle Santa Ana River Watershed Bacteria Indicator TMDL

¹ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

ATTACHMENT I. PERMITTEES AND TMDLS MATRIX

Note: For all tables in this Attachment, Permittees listed in *italics* are Multi-Watershed Permittees.

Table A: Santa Clara River Watershed Management Area TMDLs

SANTA CLARA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	Santa Clara River Nitrogen Compounds TMDL	Upper Santa Clara River Chloride TMDL	Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL	Santa Clara River Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria TMDL
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X
<i>Santa Clarita</i>	X	X		X

Table B-1: 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 B-2: Santa Monica Bay Watershed Management Area TMDLs

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Agoura Hills							
Beverly Hills	X	X	X	X	X		
Calabasas							
Culver City	X	X	X	X	X	X	X
El Segundo							
Hermosa Beach							
Hidden Hills							
Inglewood	X	X	X	X	X		
Los Angeles (City of)	X	X	X	X	X	X	X
Los Angeles (County of)	X	X	X	X	X	X	X
Los Angeles County Flood Control		X	X	X	X	X	X
Malibu							
Manhattan Beach							
Palos Verdes Estates							
Rancho Palos Verdes							
Redondo Beach							
Rolling Hills							
Rolling Hills Estates							

SANTA MONICA BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS						
	Ballona Creek Subwatershed					Marina del Rey Subwatershed	
	Ballona Creek Trash TMDL	Ballona Creek Estuary Toxic Pollutants TMDL	Ballona Creek, Ballona estuary and Sepulveda Channel Bacteria TMDL	Ballona Creek Metals TMDL	Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation	Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	Marina del Rey Harbor Toxic Pollutants TMDL
Santa Monica	X	X	X	X	X		
<i>Torrance</i>							
West Hollywood	X	X	X	X	X		
Westlake Village							

Table C: Dominguez Channel Watershed Management Area TMDLs

DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS				
	Los Angeles Harbor Bacteria TMDL	Machado Lake Trash TMDL	Machado Lake Nutrient TMDL	Machado Lake Pesticides and PCBs TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Carson</i>		X	X	X	X
<i>Compton</i>					X
El Segundo					X
Gardena					X
Hawthorne					X
<i>Inglewood</i>					X
Lawndale					X
Lomita		X	X	X	
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>		X	X	X	X
<i>Manhattan Beach</i>					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
<i>Palos Verdes Estates</i>		X	X	X	
<i>Rancho Palos Verdes</i>		X	X	X	
<i>Redondo Beach</i>		X	X	X	X
<i>Rolling Hills</i>		X	X	X	
<i>Rolling Hills Estates</i>		X	X	X	
<i>Torrance</i>		X	X	X	X

Table D: 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	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Alhambra</i>	X	X	X	X			
<i>Arcadia</i>	X	X	X	X		X	
<i>Bell</i>	X	X	X	X			
<i>Bell Gardens</i>	X	X	X	X			
<i>Bradbury</i>	X	X	X	X		X	
<i>Burbank</i>	X	X	X	X			
<i>Calabasas</i>	X	X	X	X		X	
<i>Carson</i>	X	X	X	X			
<i>Commerce</i>	X	X	X	X			
<i>Compton</i>	X	X	X	X			X
<i>Cudahy</i>	X	X	X	X			
<i>Downey</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	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabasas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Duarte</i>	X	X	X	X		X	
<i>El Monte</i>	X	X	X	X		X	
<i>Glendale</i>	X	X	X	X			
<i>Hidden Hills</i>	X	X	X	X			
<i>Huntington Park</i>	X	X	X	X			
<i>Inglewood</i>							
<i>Irwindale</i>	X	X	X	X		X	
<i>La Canada Flintridge</i>	X	X	X	X			
<i>Lakewood</i>	X	X					X
<i>Los Angeles (City of)</i>	X	X	X	X		X	X
<i>Los Angeles (County of)</i>	X	X	X	X		X	X
<i>Los Angeles County Flood Control</i>		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			
<i>Rosemead</i>	X	X	X	X			
<i>San Fernando</i>	X	X	X	X			
<i>San Gabriel</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	Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL	Los Angeles Area Lake TMDLs for Lake Calabajas, Echo Park Lake, and Peck Road Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
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			
South Gate	X	X	X	X			
South Pasadena	X	X	X	X			
Temple City	X	X	X	X			
Vernon	X	X	X	X			

Table E: San Gabriel River Watershed Management Area TMDLs

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Arcadia</i>	X			
<i>Artesia</i>	X			
<i>Azusa</i>	X		X	
<i>Baldwin Park</i>	X			
<i>Bellflower</i>	X			X
<i>Bradbury</i>	X			
<i>Cerritos</i>	X			
<i>Claremont</i>	X		X	
<i>Covina</i>	X			
<i>Diamond Bar</i>	X			
<i>Downey</i>	X			
<i>Duarte</i>	X			
<i>El Monte</i>	X	X	X	
<i>Glendora</i>	X			
<i>Hawaiian Gardens</i>	X			
<i>Industry</i>	X			
<i>Irwindale</i>	X		X	
<i>La Habra Heights</i>	X			
<i>La Mirada</i>	X			
<i>La Puente</i>	X			
<i>La Verne</i>	X		X	
<i>Lakewood</i>	X			
<i>Los Angeles (County of)</i>	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS			
	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL	Legg Lake Trash TMDL	Los Angeles Area Lakes TMDLs for Legg Lake, Puddingstone Reservoir, and Santa Fe Dam Park Lake	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Monrovia				
Norwalk	X			
<i>Pico Rivera</i>	X			
Pomona	X		X	
San Dimas	X		X	
Santa Fe Springs	X			
South El Monte	X	X	X	
Walnut	X			
West Covina	X			
Whittier	X			

WORKING PROPOSAL

Table F: Los Cerritos Channel and Alamitos Bay Watershed Management Area TMDLs

LOS CERRITOS CHANNEL AND ALAMITOS BAY WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDLS		
	Los Cerritos Channel Metals TMDL	Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL	Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
<i>Bellflower</i>	X		X
<i>Cerritos</i>	X		
<i>Downey</i>	X		
<i>Lakewood</i>	X		
<i>Los Angeles (County of)</i>	X		X
<i>Los Angeles County Flood Control</i>	X	X	X
<i>Paramount</i>	X		
<i>Signal Hill</i>	X		

Table G: Middle Santa Ana River Watershed Management Area TMDLs

MIDDLE SANTA ANA RIVER WATERSHED MANAGEMENT AREA PERMITTEES	ACTIVE TMDL
	Middle Santa Ana River Watershed Bacterial Indicator TMDL
Claremont	X
Pomona	X

Table H: 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	

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>Hidden Hills</i>					X
<i>Huntington Park</i>	X	X			
<i>Inglewood</i>					
<i>Irwindale</i>		X			
<i>La Canada Flintridge</i>		X	X		
<i>Lakewood</i>					
<i>Los Angeles (City of)</i>	X	X	X	X	X
<i>Los Angeles (County of)</i>	X	X	X	X	X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X
<i>Lynwood</i>	X	X			
<i>Maywood</i>		X			
<i>Monrovia</i>		X			
<i>Montebello</i>		X			
<i>Monterey Park</i>		X			
<i>Paramount</i>		X			
<i>Pasadena</i>		X	X		
<i>Pico Rivera</i>		X			
<i>Rosemead</i>		X			
<i>San Fernando</i>				X	
<i>San Gabriel</i>		X			
<i>San Marino</i>		X			
<i>Santa Clarita</i>					
<i>Sierra Madre</i>		X			
<i>Signal Hill</i>	X				
<i>South El Monte</i>		X			
<i>South Gate</i>	X	X			
<i>South Pasadena</i>		X			

LOS ANGELES RIVER WATERSHED MANAGEMENT AREA PERMITTEES	Los Angeles River and Tributaries Metals TMDL				
	Reach 1 and Compton Creek	Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds	Reach 3, Verdugo Wash, and Burbank Western Channel	Reach 4, Reach 5, Tujunga Wash, and all contributing subwatersheds	Reach 6, Bell Creek, and all contributing subwatersheds
Temple City		X			
Vernon	X	X			

Table I: 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				

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
Huntington Park		X									X					
Inglewood																
Irwindale														X		
La Canada Flintridge			X				X									X
Lakewood	X															
Los Angeles (City of)		X	X	X	X	X	X	X	X	X	X	X	X		X	X
Los Angeles (County of)	X	X	X		X	X	X	X	X		X	X	X	X	X	X
Los Angeles County Flood Control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lynwood	X	X									X					
Maywood		X														
Monrovia														X		
Montebello		X												X		
Monterey Park		X												X		
Paramount	X	X														
Pasadena		X	X				X							X		X
Pico Rivera														X		
Rosemead														X		
San Fernando															X	
San Gabriel														X		
San Marino														X		
Santa Clarita									X							
Sierra Madre														X		
Signal Hill	X															

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>South El Monte</i>														X		
<i>South Gate</i>		X									X			X		
<i>South Pasadena</i>		X					X							X		
<i>Temple City</i>														X		
<i>Vernon</i>		X									X					

Table J: 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
<i>Agoura Hills</i>									X
<i>Beverly Hills</i>								X	
<i>Calabasas</i>	X								X
<i>Culver City</i>								X	
<i>El Segundo</i>		X			X				
<i>Hermosa Beach</i>					X	X			
<i>Hidden Hills</i>									X
<i>Inglewood</i>								X	
<i>Los Angeles (City of)</i>	X	X	X				X	X	
<i>Los Angeles (County of)</i>	X	X		X	X	X	X	X	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
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X	X
<i>Malibu</i>	X			X					X
<i>Manhattan Beach</i>					X	X			
<i>Palos Verdes Estates</i>							X		
<i>Rancho Palos Verdes</i>							X		
<i>Redondo Beach</i>						X			
<i>Rolling Hills</i>							X		
<i>Rolling Hills Estates</i>							X		
<i>Santa Monica</i>		X	X					X	
<i>Torrance</i>						X			
<i>West Hollywood</i>								X	
<i>Westlake Village</i>									X

WORKING PROPOSAL

Table J: San Gabriel River Watershed Management Area Metals TMDLs by Reach

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
<i>Arcadia</i>							X	
<i>Artesia</i>			X	X				
<i>Azusa</i>	X							X
<i>Baldwin Park</i>	X					X	X	
<i>Bellflower</i>				X				
<i>Bradbury</i>								
<i>Cerritos</i>			X	X				
<i>Claremont</i>	X	X						
<i>Covina</i>	X							
<i>Diamond Bar</i>		X	X					
<i>Downey</i>				X	X			
<i>Duarte</i>								X
<i>El Monte</i>						X	X	
<i>Glendora</i>	X							X
<i>Hawaiian Gardens</i>			X					
<i>Industry</i>	X	X			X	X		
<i>Irwindale</i>	X					X	X	X
<i>La Habra Heights</i>		X	X					
<i>La Mirada</i>			X					
<i>La Puente</i>	X	X				X		
<i>La Verne</i>	X	X						
<i>Lakewood</i>			X	X				
<i>Los Angeles (County of)</i>	X	X	X		X	X		X
<i>Los Angeles County Flood Control</i>	X	X	X	X	X	X	X	X

SAN GABRIEL RIVER WATERSHED MANAGEMENT AREA PERMITTEES	San Gabriel River and Impaired Tributaries Metals and Selenium TMDL							
	Walnut Creek	San Jose Creek	Coyote Creek	San Gabriel River Reach 1	San Gabriel River Reach 2	San Gabriel River Reach 3	San Gabriel River Reach 4	San Gabriel River Reach 5
Monrovia								
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		

WORKING PROPOSAL

LA County MS4 Permit – TMDL Provisions for the Middle Santa Ana River WMA

G. Middle Santa Ana River Watershed Management Area (Santa Ana Region TMDL)

1. Middle Santa Ana River Watershed Bacteria Indicator TMDL
 - a) Permittees subject to the provisions below are identified in Table G.
 - b) Permittees shall comply with the following final effluent limitations for discharges to San Antonio Channel during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - (1) Fecal coliform¹: log mean less than 200 organisms/100 mL based on five or more samples per 30 day period, and not more than 10% of the samples exceed 400 organisms/100 mL for any 30 – day period.
 - (2) *E. coli*: log mean less than 126 organisms/100 mL based on five or more samples per 30 – day period, and not more than 10% of the samples exceed 235 organisms/100mL for any 30 day period.
 - c) Permittees shall comply with the following receiving water limitations for discharges to San Antonio Channel during dry weather no later than December 31, 2015, and during wet weather no later than December 31, 2025:
 - (1) Fecal coliform²: 5 sample/30 – day logarithmic mean less than 180 organisms/100 mL, and not more than 10% of the samples exceed 360 organisms/100 mL for any 30 – day period.
 - (2) *E. coli*: 5 sample/30 – day logarithmic mean less than 113 organisms/100 mL, and not more than 10% of the samples exceed 212 organisms/100mL for any 30 day period.
 - d) Permittees may demonstrate compliance with the receiving water limitations by developing for approval by the Regional Water Board a Comprehensive Bacteria Reduction Plan (CBRP) describing, in detail, the specific actions that have been taken or will be taken to achieve compliance with the water quality-based effluent limitations.

¹ The fecal coliform effluent limitations become ineffective upon the replacement of the REC1 fecal coliform objectives with REC1 *E. coli* objectives in the Santa Ana Region Basin Plan.

² The fecal coliform receiving water limitations become ineffective upon the replacement of the REC1 fecal coliform objectives with REC1 *E. coli* objectives in the Santa Ana Regional Basin Plan.

LA County MS4 Permit – TMDL Provisions for the Los Cerritos Channel and Alamitos Bay WMA

F. TMDLs in Los Cerritos Channel and Alamitos Bay Watershed Management Area

1. Los Cerritos Channel Metals TMDL (USEPA established)

- a) Permittees subject to the provisions below are identified in Table F.
- b) Permittees shall comply with the following dry weather¹ water quality-based effluent limitations as of the effective date of this Order, expressed as total recoverable metals discharged to Los Cerritos Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	67.2

- c) Permittees shall comply with the following wet weather² water quality-based effluent limitations as of the effective date of this Order, expressed as total recoverable metals discharged to Los Cerritos Channel:

Constituent	Effluent Limitation Daily Maximum (g/day)
Copper	$4.709 \times 10^{-6} \times$ daily storm volume (L)
Lead	$26.852 \times 10^{-6} \times$ daily storm volume (L)
Zinc	$46.027 \times 10^{-6} \times$ daily storm volume (L)

2. Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDL

- a) Permittees subject to the provisions below are identified in Table F.
- b) 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 ($\mu\text{g}/\text{dry kg}$)
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.

LA County MS4 Permit – TMDL Provisions for the Los Cerritos Channel and Alamitos Bay WMA

- c) 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 ($\mu\text{g}/\text{dry kg}$)
Chlordane	0.50
Dieldrin	0.02
Lead	46,700
Zinc	150,000
PAHs	4,022
PCBs	22.70
DDT	1.58

- d) The mass-based water quality-based effluent limitations are shared by the MS4 Permittees, which includes LA MS4, Long Beach MS4 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

- e) 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.

LA County MS4 Permit – TMDL Provisions for the San Gabriel River WMA

E. TMDLs in San Gabriel River Watershed Management Area

1. San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL (USEPA established)
 - a) Permittees subject to the provisions below are identified in Table E.
 - b) Permittees shall comply with the following grouped¹ wet weather² water quality-based effluent limitations as of the effective date of this Order, expressed as total recoverable metals discharged to all upstream reaches and tributaries of the San Gabriel River Reach 2 and Coyote Creek:

Water Body	Effluent Limitation Daily Maximum (kg/day)		
	Copper	Lead	Zinc
San Gabriel Reach 2	---	81.34 x daily storm volume (L)	---
Coyote Creek	24.71 x daily storm volume (L)	96.99 x daily storm volume (L)	144.57 x daily storm volume (L)

- c) Permittees shall comply with the following grouped¹ dry weather water quality-based effluent limitations as of the effective date of this Order, 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:

Water Body	Effluent Limitation Daily Maximum	
	Copper	Selenium
San Gabriel Reach 1	18 ug/L	---
Coyote Creek	0.941 kg/day	---
San Gabriel River Estuary	3.7 ug/L	---
San Jose Creek Reach 1 and 2	---	5 ug/L

2. Legg Lake Trash TMDL
 - a) Permittees subject to the provisions below are identified in Table E.
 - b) Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Legg Lake no later than March 6, 2016.
 - c) If the Permittees choose to comply with the water quality-based effluent limitations by implementing an Executive Officer certified full capture system on conveyances that discharge to Legg Lake through a progressive

¹ The wet weather and dry weather water quality-based effluent limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittees, Orange County MS4 Permittees 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.

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implementation schedule of full capture devices, they will be deemed in compliance with the water quality-based effluent limitations.

- d) 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 Limitations³ (gallons of uncompressed trash per year)

Permittees	Baseline ⁴ (100%)	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ⁵ (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

³ Water quality-based effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table XX of the Basin Plan.

⁴ The Regional Water Board has determined the following baseline water quality-based effluent limitations for the Permittees based on the estimated trash generation rate of 6677 gallons of uncompressed trash per square mile per year.

⁵ Permittees shall achieve their final effluent limitation of zero trash discharge for the year and every year thereafter.

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- e) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 2(b) and 2(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].
- f) 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).
3. Los Angeles Area Lakes TMDLs⁶ (USEPA in progress)
- a) Legg Lake System Nutrient TMDL
- (1) Permittees subject to the provisions below are identified in Table E.
 - (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorous and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the following annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Flow (ac-ft/yr)	Total Phosphorus (lb-P/yr) ^{7,8}	Total Nitrogen (lb-N/yr) ^{7,8}
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

- (3) The following concentration based water quality-based receiving water limitations apply during both wet and dry weather if:

- The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met.

⁶ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

⁷ Measured as a summer average (May – September) and annual average.

⁸ Measured at the point of discharge.

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- The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average.
- U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice.
- The concentration-based receiving water limits must be met in the lake. However, if the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets are met, then the total phosphorus and total nitrogen limits are considered attained.

Subwatershed	Permittee	Total Phosphorus Monthly Average (mg-P/L) ^{9,10}	Total Nitrogen Monthly Average (mg-N/L) ^{9,10}
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

b) Puddingstone Reservoir Nutrient TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr) ^{10,11}	Total Nitrogen (lb-N/yr) ^{10,11}
Northern	Claremont	169	745
Northern	County of Los Angeles	741	829
Northern	La Verne	2,772	11,766
Northern	Pomona	6.30	28.3
Northern	San Dimas	31.1	137

⁹ Measured as an in-lake concentration.

¹⁰ Measured as a summer average (May – September) and annual average.

¹¹ Measured at the point of discharge.

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(3) The following concentration based water quality-based receiving water limitations apply during both wet and dry weather if:

- The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met.
- The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average.
- U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice.
- The concentration-based receiving water limits must be met in the lake.

Subwatershed	Permittee	Total Phosphorus Monthly Average (mg-P/L) ^{12,13}	Total Nitrogen Monthly Average (mg-N/L) ^{12,13}
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

c) Puddingstone Reservoir Mercury TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees shall comply with the following water quality-based effluent limitations during both wet and dry weather as of the effective date of this Order:

Subwatershed	Permittee	Total Mercury (g-Hg/yr) ^{14,15}
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

¹² Measured as an in-lake concentration.

¹³ Measured as a summer average (May – September) and annual average.

¹⁴ Measured at the point of discharge.

¹⁵ Applied as an annual average.

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d) Puddingstone Reservoir PCBs TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{16,18}	Total PCBs in the Water Column (ng/L) ^{16,18}
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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{16,17}	Total PCBs in the Water Column (ng/L) ^{16,18}
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

e) Puddingstone Reservoir Chlordane TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total Chlordane associated with	Total Chlordane in the Water
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¹⁶ Measured at the point of discharge.

¹⁷ Applied as a 3-year average.

¹⁸ Applied as an annual average.

LA County MS4 Permit – TMDL Provisions for the San Gabriel River WMA

		Suspended Sediment (ug/kg dry weight)^{19,20}	Column (ng/L)^{19,20}
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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight)^{19,21}	Total Chlordane in the Water Column (ng/L)^{19,20}
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

f) Puddingstone Reservoir Dieldrin TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
(2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight)^{19,20}	Dieldrin in the Water Column (ng/L)^{19,20}
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

¹⁹ Measured at the point of discharge

²⁰ Applied as an annual average.

²¹ Applied as a 3-year average.

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- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{22,23}	Dieldrin in the Water Column (ng/L) ^{22,24}
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

g) Puddingstone Reservoir DDT TMDL

- (1) Permittees subject to the provisions below are identified in Table E.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{22,24}	4-4' DDT in the Water Column (ng/L) ^{22,24}
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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it

²² Measured at the point of discharge.

²³ Applied as a 3-year average.

²⁴ Applied as an annual average.

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is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{25,26}	4-4' DDT in the Water Column (ng/L) ^{25,27}
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

²⁵ Measured at the point of discharge.

²⁶ Applied as a 3-year average.

²⁷ Applied as an annual average.

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D. TMDLs in Los Angeles River Watershed Management Area

1. Los Angeles River Watershed Trash TMDL
 - a) Permittees subject to the provisions below are identified in Table D.
 - b) 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.
 - c) 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	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ³ (0%)
Alhambra	11971	7981	3990	1317	0
Arcadia	15032	10022	5011	1654	0
Bell	4808	3205	1603	529	0
Bell Gardens	4050	2700	1350	446	0
Bradbury	1283	855	428	141	0
Burbank	27777	18518	9259	3055	0
Calabasas	6752	4501	2251	743	0
Carson	2050	1366	683	225	0
Commerce	17620	11747	5873	1938	0
Compton	15957	10638	5319	1755	0
Cudahy	1781	1187	594	196	0
Downey	11719	7813	3906	1289	0
Duarte	3663	2442	1221	403	0
El Monte	12662	8442	4221	1393	0
Glendale	42094	28063	14031	4630	0
Hidden Hills	1099	733	366	121	0
Huntington Park	5748	3832	1916	632	0
Irwindale	3706	2470	1235	408	0
La Cañada Flintridge	10049	6699	3350	1105	0
Los Angeles	412454	274969	137485	45370	0
Los Angeles County	93067	62045	31022	10237	0
Lynwood	8460	5640	2820	931	0
Maywood	1839	1226	613	202	0
Monrovia	14006	9337	4669	1541	0
Montebello	15111	10074	5037	1662	0
Monterey Park	11670	7780	3890	1284	0
Paramount	8236	5490	2745	906	0
Pasadena	33599	22400	11200	3696	0
Pico Rivera	4186	2791	1395	460	0
Rosemead	8192	5461	2731	901	0
San Fernando	4184	2789	1395	460	0
San Gabriel	6103	4069	2034	671	0
San Marino	4317	2878	1439	475	0
Santa Clarita	270	180	90	30	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.

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Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016³ (0%)
Sierra Madre	3483	2322	1161	383	0
Signal Hill	2830	1887	943	311	0
Simi Valley	41	27	14	5	0
South El Monte	4800	3200	1600	528	0
South Gate	13171	8781	4390	1449	0
South Pasadena	4472	2981	1491	492	0
Temple City	5272	3514	1757	580	0
Vernon	14161	9441	4720	1558	0

**Los Angeles River Watershed Trash Effluent Limitations⁴ per Storm Year⁵
(pounds of drip-dry trash)**

Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016⁶ (0%)
Alhambra	20628	13752	6876	2269	0
Arcadia	27911	18607	9304	3070	0
Bell	7601	5067	2534	836	0
Bell Gardens	7011	4674	2337	771	0
Bradbury	3648	2432	1216	401	0
Burbank	51117	34078	17039	5623	0
Calabasas	15669	10446	5223	1724	0
Carson	3062	2042	1021	337	0
Commerce	25644	17096	8548	2821	0
Compton	25907	17271	8636	2850	0
Cudahy	3018	2012	1006	332	0
Downey	20552	13701	6851	2261	0
Duarte	7106	4737	2369	782	0
El Monte	20480	13653	6827	2253	0
Glendale	88049	58700	29350	9685	0
Hidden Hills	3246	2164	1082	357	0
Huntington Park	9279	6186	3093	1021	0
Irwindale	5373	3582	1791	591	0
La Cañada Flintridge	22124	14749	7375	2434	0
Los Angeles	771750	514500	257250	84893	0
Los Angeles County	195542	130361	65181	21510	0
Lynwood	13940	9293	4647	1533	0
Maywood	3165	2110	1055	348	0
Monrovia	30296	20198	10099	3333	0
Montebello	25112	16741	8371	2762	0
Monterey Park	21137	14091	7046	2325	0
Paramount	13347	8898	4449	1468	0
Pasadena	62254	41503	20751	6848	0
Pico Rivera	6765	4510	2255	744	0
Rosemead	14213	9476	4738	1563	0
San Fernando	6923	4615	2308	762	0
San Gabriel	10931	7287	3644	1202	0
San Marino	8744	5829	2915	962	0
Santa Clarita	698	465	233	77	0
Sierra Madre	7558	5038	2519	831	0
Signal Hill	4266	2844	1422	469	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.

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Permittees	2012 (30%)	2013 (20%)	2014 (10%)	2015 (3.3%)	2016 ⁶ (0%)
Simi Valley	103	69	34	11	0
South El Monte	7296	4864	2432	803	0
South Gate	21700	14467	7233	2387	0
South Pasadena	8507	5671	2836	936	0
Temple City	9546	6364	3182	1050	0
Vernon	20044	13363	6681	2205	0

d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].

2. Los Angeles River Nitrogen Compounds and Related Effects TMDL

- a) Permittees subject to the provisions below are identified in Table D.
- b) 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

3. Los Angeles River and Tributaries Metals TMDL

- a) Permittees subject to the provisions below are identified in Table D.
- b) Final Water Quality-Based Effluent Limitations
 - (1) 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.

Waterbody	Effluent Limitations Daily Maximum (kg/day)		
	Copper	Lead	Zinc
LA River Reach 6	0.53	0.33	---
LA River Reach 5	0.05	0.03	---
LA River Reach 4	0.32	0.12	---
LA River Reach 3	0.06	0.03	---
LA River Reach 2	0.13	0.07	---
LA River Reach 1	0.14	0.07	---

⁷ The dry weather water quality-based effluent limitations are grouped-based and shared by the MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittee and Caltrans.

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.

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Bell Creek	0.06	0.04	---
Tujunga Wash	0.001	0.0002	---
Burbank Channel	0.15	0.07	---
Verdugo Wash	0.18	0.10	---
Arroyo Seco	0.01	0.01	---
Rio Hondo Reach 1	0.01	0.006	0.16
Compton Creek	0.04	0.02	---

- (2) 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	30	19	---
LA River Reach 4	26	10	---
LA River Reach 3 above LA-Glendale WRP and Verdugo Wash	23	12	---
LA River Reach 3 below LA-Glendale WRP	26	12	---
Burbank Western Channel (above WRP)	26	14	---
Burbank Western Channel (below WRP)	19	9.1	---
LA River Reach 2 and Arroyo Seco	22	11	---
LA River Reach 1	23	12	---
Compton Creek	19	8.9	---
Rio Hondo Reach 1	13	5.0	131

- (3) Permittees shall comply with the following grouped⁹ wet weather¹⁰ 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)

⁹ The wet weather water quality-based effluent limitations are grouped-based and shared by the MS4 Permittees, which includes LA MS4 Permittees, and Long Beach MS4 Permittee.

¹⁰ Wet weather is defined as any day when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cfs measured at the Wardlow gage station.

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Cadmium	2.8×10^{-9} x daily volume (L) – 1.8
Copper	1.5×10^{-8} x daily volume (L) – 9.5
Lead	5.6×10^{-8} x daily volume (L) – 3.85
Zinc	1.4×10^{-7} x daily volume (L) – 83

- c) 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

4. Los Angeles River Watershed Bacteria TMDL

- a) Permittees subject to the provisions below are identified in Table D.
- b) 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 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

- c) Permittees shall comply with the following grouped¹¹ 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 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

¹¹ The interim dry weather water quality-based effluent limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittees, and Caltrans.

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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

d) Receiving Water Limitations

- (1) Permittees shall comply with the following grouped¹² 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 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 ¹³ Waterbodies Wet Weather	15	2
HFS Waterbodies Wet Weather	10 (not including HSF days)	2 (not including HSF days)

- (2) Permittees shall comply with the following geometric mean receiving water limitation for discharges to the Los Angeles River and its tributaries

¹² The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4, Long Beach MS4, and Caltrans.

¹³ HFS stands for high flow suspension as defined in Chapter 2 of the Basin Plan.

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during dry weather according to the schedule in Table 1, and during wet weather no later than March 23, 2037:

Constituent	Geometric Mean (MPN or cfu)
<i>E. coli</i>	126/100 mL

Table 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
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

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Implementation Action	Responsible Parties	Deadline
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
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

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Implementation Action	Responsible Parties	Deadline
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
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 (or submit an alternative compliance plan)	MS4 Permittees discharging to Segment E	September 23, 2017

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Implementation Action	Responsible Parties	Deadline
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
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

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Implementation Action	Responsible Parties	Deadline
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 (<i>or submit an alternative compliance plan</i>)	MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries	March 23, 2023
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

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e) Compliance Determination

- (1) 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.
- (2) 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.
- (3) 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 Executive Officer.
- (4) By March 23, 2022, Permittees shall submit an implementation plan for wet weather with interim milestones.

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- 5. Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL
 - a) Permittees subject to the provisions below are identified in Table D.
 - b) Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles River Estuary as of the effective date of this Order:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- c) Receiving Water Limitations
 - (1) Permittees shall comply with the following grouped¹⁴ final single sample bacteria receiving water limitations for the Los Angeles River Estuary as of the effective date of this Order:

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 ¹⁵	17	3

- (2) Permittees shall comply with the following geometric mean receiving water limitations for all monitoring stations in the Los Angeles River Estuary as of the effective date of this Order:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- d) Compliance Determination
 - (1) Permittees may demonstrate compliance with the final dry or weather limitations by demonstrating that final receiving water limitations are met

¹⁴ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittees, and Caltrans.

¹⁵ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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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 water quality-based effluent limitations in part 5.b. above, based on a weighted-average using flow rates from all measured outfalls; or
 - (ii) Zero discharge during dry weather.
- (2) 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 water quality-based effluent limitations in part 5.b. 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.

6. Los Angeles Area Lakes TMDLs

a) Lake Calabastas Nutrient TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Permittee	Total Phosphorus (lb-P/yr) ^{16,17}	Total Nitrogen (lb-N/yr) ^{16,17}
City of Calabastas	48.5	220

- (3) The following concentration based water quality-based receiving water limitations apply during both wet and dry weather if:

¹⁶ Measured as a summer average (May – September) and annual average.

¹⁷ Measured at the point of discharge.

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- The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met.
- The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average.
- U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice.
- The concentration-based receiving water limits must be met in the lake. However, if the applicable water quality criteria for ammonia, dissolved oxygen, pH, and the chlorophyll *a* targets are met, then the total phosphorus and total nitrogen limits are considered attained.

Permittee	Total Phosphorus Monthly Average (mg-P/L) ^{18,19}	Total Nitrogen Monthly Average (mg-N/L) ^{18,19}
City of Calabasas	0.1	1.0

b) Echo Park Lake Nutrient TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr) ^{19,20}	Total Nitrogen (lb-N/yr) ^{19,20}
Northern	City of Los Angeles	24.7	156
Southern	City of Los Angeles	7.129	49.69

¹⁸ Measured as an in-lake concentration.

¹⁹ Measured as a summer average (May – September) and annual average.

²⁰ Measured at the point of discharge.

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- (3) In assessing compliance with wasteload allocations, responsible jurisdictions assigned both northern and southern subwatershed allocations may have their allocations combined.
- c) Echo Park Lake PCBs TMDL
- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{21,22}	Total PCBs in the Water Column (ng/L) ^{21,22}
Northern	City of Los Angeles	1.77	0.17
Southern	City of Los Angeles	1.77	0.17

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{22,23}	Total PCBs in the Water Column (ng/L) ^{21,22}
Northern	City of Los Angeles	59.8	0.17
Southern	City of Los Angeles	59.8	0.17

- d) Echo Park Lake Chlordane TMDL
- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

²¹ Applied as an annual average.

²² Measured at the point of discharge.

²³ Applied as a 3-year average.

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Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{24,25}	Total Chlordane in the Water Column (ng/L) ^{24,25}
Northern	City of Los Angeles	2.10	0.59
Southern	City of Los Angeles	2.10	0.59

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{24,26}	Total Chlordane in the Water Column (ng/L) ^{24,25}
Northern	City of Los Angeles	3.24	0.59
Southern	City of Los Angeles	3.24	0.59

e) Echo Park Lake Dieldrin TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
(2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{24,25}	Dieldrin in the Water Column (ng/L) ^{24,25}
Northern	City of Los Angeles	0.80	0.14
Southern	City of Los Angeles	0.80	0.14

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the

²⁴ Measured at the point of discharge.

²⁵ Applied as an annual average.

²⁶ Applied as a 3-year average.

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Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{27,28}	Dieldrin in the Water Column (ng/L) ^{27,29}
Northern	City of Los Angeles	1.90	0.14
Southern	City of Los Angeles	1.90	0.14

f) Echo Park Lake Trash TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitation as of the effective date of this Order:

Permittee	Trash (Gal/year)
City of Los Angeles	0

g) Peck Road Park Lake Nutrient TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather 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. The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr) ^{27,29}	Total Nitrogen (lb-N/yr) ^{27,29}
Eastern	Arcadia	383	2,320
Eastern	Bradbury	497	3,223
Eastern	Duarte	1,540	9,616

²⁷ Measured at the point of discharge.

²⁸ Applied as a 3-year average.

²⁹ Applied as an annual average.

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Eastern	Irwindale	496	3,487
Eastern	County of Los Angeles	924	5,532
Eastern	Monrovia	6,243	38,736
Near Lake	Arcadia	158	1,115
Near Lake	El Monte	96.2	602
Near Lake	Irwindale	28.2	207
Near Lake	County of Los Angeles	129	773
Near Lake	Monrovia	60.4	415
Western	Arcadia	2,840	16,334
Western	County of Los Angeles	467	2,818
Western	Monrovia	425	2,678
Western	Sierra Madre	695	4,254

h) Peck Road Park Lake PCBs TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{30,31}	Total PCBs in the Water Column (ng/L) ^{30,31}
Eastern	Arcadia	1.29	0.17
Eastern	Bradbury	1.29	0.17
Eastern	Duarte	1.29	0.17
Eastern	Irwindale	1.29	0.17
Eastern	County of Los Angeles	1.29	0.17
Eastern	Monrovia	1.29	0.17
Near Lake	Arcadia	1.29	0.17
Near Lake	El Monte	1.29	0.17
Near Lake	Irwindale	1.29	0.17
Near Lake	County of Los Angeles	1.29	0.17
Near Lake	Monrovia	1.29	0.17
Western	Arcadia	1.29	0.17
Western	County of Los Angeles	1.29	0.17
Western	Monrovia	1.29	0.17
Western	Sierra Madre	1.29	0.17

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing that the fish tissue target of 3.6

³⁰ Measured at the point of discharge.

³¹ Applied as an annual average.

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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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{32,33}	Total PCBs in the Water Column (ng/L) ^{32,34}
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

i) Peck Road Park Lake Chlordane TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{32,34}	Total Chlordane in the Water Column (ng/L) ^{32,34}
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

³² Measured at the point of discharge.

³³ Applied as a 3-year average.

³⁴ Applied as an annual average.

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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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{35,36}	Total Chlordane in the Water Column (ng/L) ^{35,37}
Eastern	Arcadia	3.24	0.59
Eastern	Bradbury	3.24	0.59
Eastern	Duarte	3.24	0.59
Eastern	Irwindale	3.24	0.59
Eastern	County of Los Angeles	3.24	0.59
Eastern	Monrovia	3.24	0.59
Near Lake	Arcadia	3.24	0.59
Near Lake	El Monte	3.24	0.59
Near Lake	Irwindale	3.24	0.59
Near Lake	County of Los Angeles	3.24	0.59
Near Lake	Monrovia	3.24	0.59
Western	Arcadia	3.24	0.59
Western	County of Los Angeles	3.24	0.59
Western	Monrovia	3.24	0.59
Western	Sierra Madre	3.24	0.59

³⁵ Measured at the point of discharge.

³⁶ Applied as a 3-year average.

³⁷ Applied as an annual average.

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j) Peck Road Park DDT TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{38,39}	4-4' DDT in the Water Column (ng/L) ^{38,39}
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

k) Peck Road Park Lake Dieldrin TMDL

- (1) Permittees subject to the provisions below are identified in Table D.
- (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{38,39}	Dieldrin in the Water Column (ng/L) ^{38,39}
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

³⁸ Measured at the point of discharge.

³⁹ Applied as an annual average.

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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

- (3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing 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 and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{40,41}	Dieldrin in the Water Column (ng/L) ^{40,42}
Eastern	Arcadia	1.90	0.14
Eastern	Bradbury	1.90	0.14
Eastern	Duarte	1.90	0.14
Eastern	Irwindale	1.90	0.14
Eastern	County of Los Angeles	1.90	0.14
Eastern	Monrovia	1.90	0.14
Near Lake	Arcadia	1.90	0.14
Near Lake	El Monte	1.90	0.14
Near Lake	Irwindale	1.90	0.14
Near Lake	County of Los Angeles	1.90	0.14
Near Lake	Monrovia	1.90	0.14
Western	Arcadia	1.90	0.14
Western	County of Los Angeles	1.90	0.14
Western	Monrovia	1.90	0.14
Western	Sierra Madre	1.90	0.14

l) Peck Road Park Lake Trash TMDL

- (1) Permittees subject to the provisions below are identified in Table D.

⁴⁰ Measured at the point of discharge.

⁴¹ Applied as a 3-year average.

⁴² Applied as an annual average.

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- (2) Permittees shall comply with the following water quality-based effluent limitation as of the effective date of this Order:

Permittee	Trash (gal/year)
Arcadia	0
Bradbury	0
Duarte	0
El Monte	0
Irwindale	0
County of Los Angeles	0
Monrovia	0
Sierra Madre	0

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C. TMDLs in Dominguez Channel and Greater Harbor Waters Watershed Management Area

1. Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)
 - a) Permittees subject to the provisions below are identified in Table C.
 - b) Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach as of the effective date of this Order:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- c) Receiving Water Limitations
 - (1) Permittees shall comply with the following final single sample bacteria receiving water limitations for the Los Angeles Harbor Main Ship Channel and Inner Cabrillo Beach:

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	3	1
Wet Weather ¹	Inner Cabrillo Beach	CB1 & CB2	0	0
	Main Ship Channel	HW07	15	3

- (2) Permittees shall comply with the following geometric mean receiving water limitations for the Los Angeles Harbor Main Ship Channel, Los Angeles and Long Beach Inner Harbor, and Inner Cabrillo Beach at all times:

¹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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Constituent	Geometric Mean
Total coliform	1,000 MPN/100 mL
Fecal coliform	200 MPN/100 mL
Enterococcus	35 MPN/100 mL

2. Machado Lake Trash TMDL

- a) Permittees subject to the provisions below are identified in Table C.
- b) 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.
- c) 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 ²	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ³ (0%)
		Annual Trash Discharge (gallons/yr)				
Carson	8141.47	6513.18	4884.88	3256.59	1628.29	0
Lomita	9392.99	7514.39	5635.79	3757.20	1878.60	0
City of Los Angeles	12331.17	9864.94	7398.70	4932.47	2466.23	0
Los Angeles County	8304.02	6643.22	4982.41	3321.61	1660.80	0
Los Angeles County Flood Control District	16.41	13.13	9.85	6.56	3.28	0
Palos Verdes Estates	1976.33	1581.06	1185.80	790.53	395.27	0
Rancho Palos Verdes	5226.71	4181.37	3136.03	2090.68	1045.34	0
Redondo Beach	18.16	14.53	10.90	7.26	3.63	0
Rolling Hills	3001.09	2400.87	1800.65	1200.44	600.22	0
Rolling Hills Estates	6498.83	5199.06	3899.30	2599.53	1299.77	0
Torrance	34808.97	27847.18	20885.38	13923.59	6961.79	0

- d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 2(b) and 2(c) above per the provisions in Part 7.X [*Permit Provisions to Implement Trash TMDLs*].
- e) 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).

² The Regional Water Board has determined the following 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.

³ Permittees shall achieve their final effluent limitation of zero trash discharge for the 2015-2016 storm year and every year thereafter.

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3. Machado Lake Nutrient TMDL

- a) Permittees subject to the provisions below are identified in Table C.
- b) 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

c) Compliance Determination

- (1) 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

- (2) 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. The annual mass-based allocation shall be equal to a monthly average concentrations of 0.1 mg/L total phosphorous and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees must demonstrate total nitrogen and total phosphorous load reductions to be achieved in accordance with a special study work plan approved by the Executive Officer.

- (i) The County of Los Angeles submitted a special study work plan, which was approved by the Executive Officer, and established the following annual mass-based water quality based effluent limitations:

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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 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

4. Machado Lake Pesticides and PCBs TMDL

- a) Permittees subject to the provisions below are identified in Table C.
- b) 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. Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

- a) Permittees subject to the provisions below are identified in Table C.
- b) Permittees shall comply with the following interim water quality-based effluent limitations for discharges to Dominguez Channel and Torrance Lateral listed below as of the effective date of this Order:
 - (1) Dominguez Channel Freshwater – Wet Weather

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- (i) Freshwater Toxicity Interim Effluent Limitation shall not exceed the monthly median of 2 TUc.
- (ii) Permittees shall comply with the following interim metals water quality-based effluent limitations for discharges to the Dominguez Channel and Torrance Lateral:

Metals	Interim Effluent Limitation Daily Maximum (µg/L)
Total Copper	207.51
Total Lead	122.88
Total Zinc	898.87

- (2) Permittees shall comply with the following interim concentration-based water quality-based effluent limitations for pollutant concentrations in the sediment discharged to the Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Interim Effluent Limitations Daily Maximum (mg/kg sediment)					
	Copper	Lead	Zinc	DDT	PAHs	PCBs
Dominguez Channel Estuary	220.0	510.0	789.0	1.727	31.60	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

- c) Permittees shall comply with the final water quality-based effluent limitations as listed below no later than March 23, 2032, and every year thereafter:

- (1) 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
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	Daily Maximum (g/day)
Total Copper	1,300.3
Total Lead	5,733.7
Total Zinc	9,355.5

(2) 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 (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

(3) 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 discharged 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

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LA River Estuary	35.3	65.7	242.0	2.31
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- (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

- (4) 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 discharged to Dominguez Channel Estuary, Los Angeles River Estuary, and the Greater Los Angeles and Long Beach Harbor Waters:

Water Body	Final Effluent Limitations Annual (g/yr)	
	DDT total	PCBs total
Dominguez Channel Estuary	0.250	0.207
Consolidated Slip	0.009	0.004
Inner Harbor	0.051	0.059
Outer Harbor	0.005	0.020
Fish Harbor	0.0003	0.0019
Cabrillo Marina	0.000028	0.000025
Inner Cabrillo Beach	0.0001	0.0003
San Pedro Bay	0.049	0.44
LA River Estuary	0.100	0.324

d) Compliance Determination

- (1) 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 5.b)(2) 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 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

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- (iii) Meet the interim water quality-based effluent limitations in the discharge over a three-year averaging period.
- (2) 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 5.c)(1)(ii) and 5.c)(2)(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.
- (3) Permittees shall be deemed in compliance with the final water quality-based effluent limitations for pollutants in the sediment as listed above in parts 5.c)(3)(i) and (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.
- (4) 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 5.c)(4) by meeting any one of the following methods:
 - (i) Fish tissue targets are met in species resident to the specified water bodies⁴; or
 - (ii) Final water quality-based effluent limitations for pollutants in the sediment are met; or
 - (iii) Sediment numeric targets to protect fish tissue are met in bed sediments over a three-year averaging period; or
 - (iv) Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan.

⁴ A site-specific study to determine resident species shall be submitted to the Executive Officer for approval.

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B. TMDLs in the Santa Monica Bay Watershed Management Area

1. Santa Monica Bay Beaches Bacteria TMDL

- a) Permittees subject to the provisions below are identified in Table B-1.
- b) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Santa Monica Bay beaches during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2013¹:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

c) Receiving Water Limitations

- (1) If an approved Integrated Water Resources Approach is implemented, each defined jurisdictional group shall comply with the interim single sample bacteria receiving water limitations for shoreline monitoring stations within their jurisdictional area during wet weather, per the schedule below:

Deadline	Cumulative percentage reduction from the total exceedance day reductions required for each jurisdictional group as identified in Table 1
July 15, 2013	25%
July 15, 2018	50%

¹ 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 during wet weather no later than July 15, 2021.

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Table 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 (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
1	County of Los Angeles	Malibu City of Los Angeles (Topanga only) Calabasas (Topanga only)	Arroyo Sequit	SMB 1-1	221	212	197
			Carbon Canyon	SMB 1-13			
			Corral Canyon	SMB 1-11, SMB 1-12			
			Encinal Canyon	SMB 1-3			
			Escondido Canyon	SMB 1-8			
			Las Flores Canyon	SMB 1-14			
			Latigo Canyon	SMB 1-9			
			Los Alisos Canyon	SMB 1-2			
			Pena Canyon	SMB 1-16			
			Piedra Gorda Canyon	SMB 1-15			
			Ramirez Canyon	SMB 1-6, SMB 1-7			
			Solstice Canyon	SMB 1-10			
			Topanga Canyon	SMB 1-18			
			Trancas Canyon	SMB 1-4			
Tuna Canyon	SMB 1-17						
Zuma Canyon	SMB 1-5						
2	City of Los Angeles	County of Los Angeles El Segundo (DW only) Manhattan Beach (DW only) Culver City (MDR only) Santa Monica	Castlerock	SMB 2-1	342	324	294
			Dockweiler	SMB 2-10, SMB 2-11, SMB 2-12, SMB 2-13, SMB 2-14, SMB 2-15			
			Marina del Rey	SMB 2-8, SMB 2-9			
			Pulga Canyon	SMB 2-4, SMB 2-5			
			Santa Monica Canyon	SMB 2-7			
			Santa Ynez Canyon	SMB 2-2, SMB 2-3, SMB 2-6			

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies*	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
3	Santa Monica	City of Los Angeles County of Los Angeles	Santa Monica	SMB 3-1, SMB 3-2, SMB 3-3, SMB 3-4, SMB 3-5, SMB 3-6 SMB 3-7, SMB 3-8 [#] SMB 3-9	257	237	203
4	Malibu	County of Los Angeles	Nicholas Canyon	SMB 4-1 [#]	14	14	14
5	Manhattan Beach	El Segundo Hermosa Beach Redondo Beach	Hermosa	SMB 5-1 [#] , SMB 5-2, SMB 5-3 [#] , SMB 5-4 [#] , SMB 5-5 [#]	29	29	29
6	Redondo Beach	Hermosa Beach Manhattan Beach Torrance County of Los Angeles	Redondo	SMB 6-1, SMB 6-2 [#] , SMB 6-3, SMB 6-4, SMB 6-5 [#] , SMB 6-6 [#]	58	57	56

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Jurisdiction Group	Primary Jurisdiction	Additional Responsible Jurisdictions & Agencies*	Subwatershed(s)	Monitoring Site(s)	Interim Single Sample Bacteria Receiving Water Limitations as Maximum Allowable Exceedance Days during Wet Weather (days)		
					10% Reduction Milestone	25% Reduction Milestone	50% Reduction Milestone
7	Rancho Palos Verdes	City of Los Angeles Palos Verdes Estates Redondo Beach Rolling Hills Rolling Hills Estates Torrance County of Los Angeles	Palos Verdes Peninsula	SMB 7-1 [#] , SMB 7-2 [#] , SMB 7-3 [#] , SMB 7-4 [#] , SMB 7-5 [#] , SMB 7-6 [#] , SMB 7-7, SMB 7-8 [#] , SMB 7-9 [#]	36	36	36

For those beach monitoring locations subject to the antidegradation provision, there shall be no increase in exceedance days during the implementation period above that estimated for the beach monitoring location in the critical year as identified below in Section B.1.c)(4).

* The California Department of Transportation (Caltrans) is a responsible agency in each Jurisdiction Group. Caltrans will be required under the Statewide Storm Water Permit for State of California Department of Transportation to jointly complying with the allowable number of exceedance days.

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- (2) Permittees shall comply with the following grouped² final single sample bacteria receiving water limitations for all shoreline monitoring stations along Santa Monica Bay beaches, except for those monitoring stations subject to antidegradation provision, during dry weather as of the effective date of this Order and during wet weather no later than July 15, 2013³:

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 ⁴	17	3

- (3) Permittees shall comply with the following grouped² final single sample bacteria receiving water limitations for shoreline monitoring stations along Santa Monica Bay beaches subject to the antidegradation provision as of the effective date of this Order:

Station ID	Beach Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)			
		Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 1-4	Trancas Creek at Broad Beach	0	0	17	3
SMB 1-5	Zuma Creek at Zuma Beach	0	0	17	3
SMB 2-13	Imperial Highway storm drain	2	1	17	3
SMB 3-8	Windward Ave. storm drain at Venice Pavilion	2	1	13	2
SMB 4-1	San Nicholas Canyon Creek at Nicholas Beach	0	0	14	2
SMB 5-1	Manhattan Beach at 40th Street	1	1	4	1
SMB 5-2	28th Street storm drain at Manhattan Beach	0	0	17	3
SMB 5-3	Manhattan Beach Pier	1	1	5	1
SMB 5-4	Hermosa City Beach at 26th St.	3	1	12	2
SMB 5-5	Hermosa Beach Pier, southern drain	2	1	8	2
SMB 6-2	Redondo Municipal Pier- 100 yards south	3	1	14	2
SMB 6-5	Avenue I storm drain at Redondo Beach	3	1	6	1
SMB 6-6	Malaga Cove, Palos Verdes Estates	1	1	3	1

² The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 permittees and Caltrans.

³ 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 during wet weather no later than July 15, 2021.

⁴ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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		Annual Allowable Exceedance Days of the Single Sample Objective (days)			
Station ID	Beach Monitoring Location	Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
SMB 7-1	Malaga Cove, Palos Verdes Estates	1	1	14	2
SMB 7-2	Bluff Cove, Palos Verdes Estates	1	1	0	0
SMB 7-3	Long Point, Rancho Palos Verdes	1	1	5	1
SMB 7-4	Abalone Cove, Rancho Palos Verdes	0	0	1	1
SMB 7-5	Portuguese Bend Cove, Rancho Palos Verdes	1	1	2	1
SMB 7-6	White’s Point, Royal Palms County Beach	1	1	6	1
SMB 7-8	Point Fermin/Wilder Annex, San Pedro	1	1	2	1
SMB 7-9	Outer Cabrillo Beach	1	1	3	1

- (4) 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, 2013⁵:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

2. Santa Monica Bay Nearshore and Offshore Debris TMDL

- a) Permittees subject to the provisions below are identified in Table B-1.
- b) 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, 2020, and every year thereafter.
- c) Permittees shall comply with interim and final water quality-based effluent limitations for trash discharged into Santa Monica Bay or on the shoreline of Santa Monica Bay, per the schedule below:

Permittees	Baseline	Mar 20, 2016 (80%)	Mar 20, 2017 (60%)	Mar 20, 2018 (40%)	Mar 20, 2019 (20%)	Mar 20, 2020 (0%)
		Annual Trash Discharge (gals/yr)				

⁵ 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 during wet weather no later than July 15, 2021.

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Agoura Hills ⁶	1,044	835	626	418	209	0
Calabasas ⁷	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 ⁷	3,131	2,505	1,879	1,252	626	0

- d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [*Permit Provisions to Implement Trash TMDLs*].

3. Santa Monica Bay TMDL for DDTs and PCBS (U.S. EPA established)

- a) Permittees subject to the provisions below are identified in Table B-1.
b) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order, expressed as an annual loading of pollutants from the sediment discharged to Santa Monica Bay:

Constituent	Annual Mass-Based Effluent Limitations (g/yr)
DDT	27.08
PCBs	140.25

- c) Compliance shall be determined based on a three-year averaging period.

4. TMDLs in the Malibu Creek Subwatershed

- a) Malibu Creek and Lagoon Bacteria TMDL

- (1) Permittees subject to the provisions below are identified in Table B-1.

⁶ Permittees shall be deemed in compliance with the water quality-based effluent limitation for trash established by the Santa Monica Bay Nearshore and Offshore Debris TMDL, if the Permittee is in compliance with the water quality-based effluent limitations established by the Malibu Creek Watershed Trash TMDL.

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(2) 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 January 24, 2016:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- (ii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped⁷ 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 January 24, 2016⁸:

Time Period	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
	Daily Sampling	Weekly Sampling
Summer Dry-Weather (April 1 to October 31)	0	0
Winter Dry-Weather (November 1 to March 31)	3	1
Wet Weather ⁹	17	3

- (ii) Permittees shall comply with the following geometric mean receiving water limitations for discharges to Malibu Lagoon during dry weather

⁷ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 permittees, Ventura MS4 permittees and Caltrans.

⁸ The Regional Water Board may extend the wet weather compliance date up to July 15, 2021, at the Regional Water Board's discretion.

⁹ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

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as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- (iii) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Malibu Creek and its tributaries during dry weather as of the effective date of this Order, and during wet weather no later than January 24, 2016:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

b) Malibu Creek Watershed Trash TMDL

- (1) Permittees subject to the provisions below are identified in Table B-1.
- (2) 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.
- (3) 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

- (4) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [*Permit Provisions to Implement Trash TMDLs*].

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- c) Malibu Creek Watershed Nutrients TMDL (USEPA established)
 - (1) Permittees subject to the provisions below are identified in Table B-1.
 - (2) Permittees shall comply with the following grouped¹⁰ water quality-based effluent limitations as of the effective date of this Order for discharges to Westlake Lake, Lake Lindero, Lindero Creek, Las Virgenes Creek, Medea Creek, Malibou 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	Effluent Limitations	
	Nitrate as Nitrogen plus Nitrite as Nitrogen	Total Phosphorus
	Daily Maximum	Daily Maximum
Summer (April 15 to November 15)	3 lbs/day	0.3 lbs/day
Winter (November 16 to April 14)	8 mg/L	n/a

5. TMDLs in the Ballona Creek Subwatershed

- a) Ballona Creek Trash TMDL
 - (1) Permittees subject to the provisions below are identified in Table B-2.
 - (2) 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.
 - (3) 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 Year¹¹ (pounds of drip-dry trash)

Permittees	Baseline	Sept 30, 2012	Sept 30, 2013	Sept 30, 2014	Sept 30, 2015 ¹²
		(20%)	(10%)	(3.3%)	(0%)
Annual Trash Discharge (pounds of trash)					
Beverly Hills	79,914	15,983	7,991	2,637	0
Culver City	36,509	7,302	3,651	1,205	0
Inglewood	21,564	4,313	2,156	712	0
Los Angeles, City of	950,238	190,048	95,024	31,358	0

¹⁰ 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.

¹¹ Storm year is defined as October 1 to September 30 herein.

¹² Permittees shall achieve their final effluent limitation of zero trash discharge for the 2014-2015 storm year and every year thereafter.

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Los Angeles, County of	57,920	11,584	5,792	1,911	0
Santa Monica	2,299	460	230	76	0
West Hollywood	13,018	2,604	1,302	430	0

Ballona Creek Subwatershed Trash Effluent Limitations per Storm Year (gallons of uncompressed trash)

Permittees	Baseline	Sept 30, 2012 (20%)	Sept 30, 2013 (10%)	Sept 30, 2014 (3.3%)	Sept 30, 2015 (0%)
		Annual Trash Discharge (pounds of trash)			
Beverly Hills	79,914	15,983	7,991	2,637	0
Culver City	36,509	7,302	3,651	1,205	0
Inglewood	21,564	4,313	2,156	712	0
Los Angeles, City of	950,238	190,048	95,024	31,358	0
Los Angeles, County of	57,920	11,584	5,792	1,911	0
Santa Monica	2,299	460	230	76	0
West Hollywood	13,018	2,604	1,302	430	0

- (4) Seventy-two (72) hours after each rain event, Permittees shall clean out and measure trash retained.
- (5) Every 3 months during dry weather, Permittees shall clean out and measure trash retained.
- (6) 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 7.X [*Permit Provisions to Implement Trash TMDLs*].

b) Ballona Creek Estuary Toxic Pollutants TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
- (2) Permittees shall comply with the following final water quality-based effluent limitations no later than January 11, 2021, expressed as an annual loading of pollutants from the sediment discharged 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

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DDTs	10.56	g/yr
Total PCBs	152	g/yr
Total PAHs	26,900	g/yr

- (3) Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads from sediments discharged 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

c) Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
 (2) Water Quality-Based Effluent Limitations

- (i) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

- (ii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Sepulveda Channel during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	235/100 mL	126/100 mL

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- (iii) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; and Benedict Canyon Channel at the confluence with Ballona Creek Reach 2 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
E. coli	576/100 mL	126/100 mL

- (iv) Permittees shall comply with the following final water quality-based effluent limitations for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Effluent Limitation (MPN or cfu)	
	Daily Maximum	Geometric Mean
Fecal coliform	4000/100 mL	2000/100 mL

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped¹³ 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 ¹⁴	17*	3	April 27, 2017 ¹⁵

* In Ballona Creek Reach 2 and at the confluence with Reach 2, the greater of the allowable exceedance days under the reference system approach or high flow suspension shall apply.

- (ii) Permittees shall not exceed the single sample bacteria objective of 4000/100 ml in more than 10% of the samples collected from

¹³ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

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 Regional Water Board may extend the wet weather compliance date up to July 15, 2021, at the Regional Water Board's discretion.

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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 April 27, 2017.

- (iii) Permittees shall comply with the following geometric mean receiving water limitations for discharges to Ballona Creek Estuary; Ballona Creek Reach 2 at the confluence with Ballona Creek Estuary; and Centinela Creek at the confluence with Ballona Creek Estuary during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

- (iv) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 2; Ballona Creek Reach 1 at the confluence with Ballona Creek Reach 2; Benedict Canyon Channel at the 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 April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
E. coli	126/100 mL

- (v) Permittees shall comply with the following geometric mean receiving water limitation for discharges to Ballona Creek Reach 1 during dry weather no later than April 27, 2013, and during wet weather no later than April 27, 2017:

Constituent	Geometric Mean (MPN or cfu)
Fecal coliform	2000/100 mL

d) Ballona Creek Metals TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
 (2) Final Water Quality-Based Effluent Limitations
- (i) Permittees shall comply with the following dry weather¹⁶ water quality-based effluent limitations no later than January 11, 2016, expressed as total recoverable metals discharged to Ballona Creek and Sepulveda Channel:

¹⁶ 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.

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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 weather¹⁷ 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 weather¹⁸ 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)

¹⁷ *Ibid.*

¹⁸ Wet weather is defined as any day when the maximum daily flow in Ballona Creek is equal to or greater than 40 cubic feet per second (cfs) measured at Sawtelle Avenue.

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- (3) 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

- e) Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)
- (1) Permittees subject to the provisions below are identified in Table B-2.
 - (2) Permittees shall comply with the following grouped¹⁹ water quality-based effluent limitations as of the effective date of this Order for discharges of sediment into Ballona Creek Wetlands:

Constituent	Annual Effluent Limitation (m ³ /yr)
Total Sediment (suspended sediment plus sediment bed load)	44,615

6. TMDLs in Marina del Rey Subwatershed

- a) Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
- (1) Permittees subject to the provisions below are identified in Table B-2.
 - (2) 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 March 18, 2014²⁰:

¹⁹ The water quality-based effluent limitation is group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

²⁰ 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 during wet weather no later than July 15, 2021.

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Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
Enterococcus	104/100 mL	35/100 mL

* Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

(3) Receiving Water Limitations

- (i) Permittees shall comply with the following grouped²¹ final single sample bacteria receiving water limitations for all monitoring stations at Marina Beach and Basins D, E, and F, except for those monitoring stations subject to the antidegradation provisions, during dry weather as of the effective date of this Order and during wet weather no later than March 18, 2014²².

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 ²³	17	3

- (ii) Permittees shall comply with the following grouped²⁴ final single sample bacteria receiving water limitations for monitoring stations in Marina del Rey subject to the antidegradation provision as of the effective date of this Order:

Station ID	Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)			
		Winter Dry Weather (November 1 – March 31)		Wet Weather (November 1 – October 31)	
		Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
MdRH-9	Basin F, center of basin	3	1	8	1

²¹ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

²² 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 during wet weather no later than July 15, 2021.

²³ Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

²⁴ The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees and Caltrans.

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- (iii) Permittees shall comply with the following geometric mean receiving water limitations for monitoring stations at Marina Beach and Basins D, E, and F during dry weather as of the effective date of this Order, and during wet weather no later than March 18, 2014²⁵:

Constituent	Geometric Mean (MPN or cfu)
Total coliform	1,000/100 mL
Fecal coliform	200/100 mL
Enterococcus	35/100 mL

b) Marina del Rey Harbor Toxic Pollutants TMDL

- (1) Permittees subject to the provisions below are identified in Table B-2.
- (2) Permittees shall comply with the following final water quality-based effluent limitations no later than March 22, 2016²⁶, expressed as an annual loading of pollutants from the sediment discharged to Marina del Rey Harbor Back Basins D, E, and F:

Constituent	Effluent Limitations	
	Annual	Units
Copper	2.01	kg/yr
Lead	2.75	kg/yr
Zinc	8.85	kg/yr
Chlordane	0.0295	g/yr
Total PCBs	1.34	g/yr

- (3) Permittees shall comply with interim and final water quality-based effluent limitations for pollutant loads from sediments 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

- (4) If an approved Integrated Water Resources Approach is implemented, Permittees shall comply with interim and final water quality-based effluent

²⁵ 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 during wet weather no later than July 15, 2021.

²⁶ If an Integrated Water Resources Approach is approved by the Regional Water Board and implemented then the Permittees shall comply with the final water quality-based effluent limitations no later than March 22, 2021.

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limitations for pollutant loads from sediments 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

LA County MS4 Permit – TMDL Provisions for the Santa Clara River WMA

A. TMDLs in the Santa Clara River Watershed Management Area (WMA)

1. Santa Clara River Nitrogen Compounds TMDL

- a) Permittees subject to the provisions below are identified in Table A.
- b) 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

2. Upper Santa Clara River Chloride TMDL

- a) Permittees subject to the provisions below are identified in Table A.
- b) 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

3. Lake Elizabeth Trash TMDL

- a) Permittees subject to the provisions below are identified in Table A.
- b) 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.
- c) 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

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.

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- d) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].

4. Santa Clara River Indicator Bacteria TMDL

- a) Permittees subject to the provisions below are identified in Table A.
- b) 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

c) Receiving Water Limitations

- (1) Permittees shall comply with the following grouped interim bacteria receiving water limitations 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

- (2) Permittees shall comply with the following grouped final bacteria receiving water limitations 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

- (3) 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

² Wet weather is defined as days with 0.1 inch of rain or more and the three days following the rain event.

LA County MS4 Permit – Watershed Management Program

VI. PROVISIONS

C. Special Provisions: Watershed Management Programs

1. General

- a. The purpose of this Part is to allow Permittees 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 allows a Permittee to customize the requirements in Part VI.D [Special Provisions: Minimum Control Measures] to address the highest watershed priorities, including achieving compliance with the requirements of Part VI.E and Attachments X through X [Special Provisions: TMDL Provisions].
- 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 the Watershed Management Program.
- d. The goal of the Watershed Management Programs is to ensure that discharges from the Los Angeles County MS4 (i) achieve applicable water quality based effluent limitations in Part VI.E and Attachments X through X [TMDL Provisions], (ii) do not cause or contribute to exceedances of receiving water limitations in Parts V.A and VI.E and Attachments X through X [Receiving Water Limitations and TMDL Provisions], and do not cause exceedances of non-storm water action levels in Part [TBD – MRP].
- e. Watershed Management Programs shall be developed using the Regional Water Board's Watershed Management Areas. Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and implementation efforts by receiving water.
- f. Each Watershed Management Program shall:
 - i. Prioritize water quality issues resulting from storm water and non-storm water discharges from the MS4 to receiving waters within each Watershed Management Area,

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- ii. Identify and implement strategies, control measures, and BMPs to achieve applicable water quality based effluent limitations, receiving water limitations, and/or non-storm water action levels consistent with corresponding compliance schedules in this Order,
- iii. Execute a monitoring and assessment program to determine progress towards achieving applicable limitations and/or action levels in Part VI.C.1.f. ii, and
- iv. Revise strategies, control measures, and BMPs as necessary to maintain progress towards achieving applicable limitations and/or action levels in Part VI.C.1.f.ii.

2. Process

a. Timelines for Implementation

- i. Each Permittee shall ensure implementation of the following requirements per the schedule specified in Table [TBD] below:

Table [TBD]

Part	Provision	Due Date
VI.C.2.b	Notify Regional Water Board of intent to develop Watershed Management Program	6 months after Order adoption
VI.C.2.b	Submit draft plan to Executive Officer	1 year after Order adoption
VI.C.2.c	Submit final plan to Executive Officer	3 months after receipt of Regional Water Board comments on draft plan
VI.C.4	Begin implementation of Watershed Management Program	Upon submittal of final plan
VI.C.6.a.ii	First evaluation of Watershed Management Program and submittal of revisions to plan	1½ years after submittal of final plan
VI.C.6.a.ii	Second evaluation of Watershed	180 days prior to expiration

LA County MS4 Permit – Watershed Management Program

Management Program and submittal of revisions to plan	date of Order
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- b. Permittees that elect to develop a Watershed Management Program must notify the Regional Water Board no later than six months after the adoption of this Order.
- c. Permittees that elect to develop a Watershed Management Program shall submit a draft plan to the Executive Officer no later than one year after the adoption of this Order.
- d. Permittees that do not elect to develop a Watershed Management Program shall be subject to the baseline requirements in Part VI.D [MCMs] and shall demonstrate compliance with applicable water quality based effluent limitations in Part VI.E [TMDL] pursuant to subparts VI.E.4 or VI.E.5.

3. Program Development

a. Identification of Water Quality Priorities

Permittees shall identify the water quality priorities within each Watershed Management Area 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 [TBD] through [TBD] 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. **Waterbody-Pollutant Classification.** On the basis of the evaluation of existing water quality conditions, waterbody-pollutant combinations shall be classified into one of the following four categories:
 - (1) **Category 1 (Highest Priority):** Waterbody-pollutant combinations for which water quality based effluent limitations and/or receiving water limitations are

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established in Part VI.E and Attachments [TBD] to [TBD] 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 Listing Policy.
 - (3) Category 3 (Medium Priority): Pollutants for which there are insufficient data to indicate water quality impairment in the receiving water according to the State's Listing Policy, but which exceed applicable water quality standards.
 - (4) Category 4 (Low Priority): Pollutants for which data do not indicate any exceedances of applicable water quality standards.
- iii. Source Assessment. Utilizing existing information, potential sources within the watershed for the pollutants in Categories 1 and 2 shall be identified.
- (1) Permittees shall identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the highest water quality priorities (Categories 1 and 2). The identification of known and suspected sources of the highest water quality priorities shall consider the following:
 - (a) Review of available data, including but not limited to:
 - (i) Findings from the Permittees' illicit discharge detection and elimination programs;
 - (ii) Findings from the Permittees' commercial/industrial facilities pollutant control programs;
 - (iii) Findings from the Permittees' development construction programs;
 - (iv) Findings from the Permittees' public agency activities;
 - (v) TMDL source assessments;

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- (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 Watershed Management Area.
- 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 September 6, 2017.
 - (2) Other Receiving Water Considerations
 - (a) Controlling pollutants for which data indicate impairment in the receiving water and the findings from the source assessment implicates discharges

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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 and/or receiving water limitations in Part VI.E and Attachments X through X;
 - (2) Retrofitting areas of existing development known or suspected to contribute to the highest water quality priorities with regional or site-specific controls or management measures; and
 - (3) Stream and/or habitat rehabilitation or restoration projects where stream and/or habitat rehabilitation or restoration are necessary for, or will contribute to demonstrable improvements in the physical, chemical, and biological receiving water conditions and restoration and/or protection of water quality standards in receiving waters.

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iv. The following provisions of this Order shall be incorporated as part of the Watershed Management Program:

(1) Minimum Control Measures

(a) Permittees shall assess the minimum control measures (MCMs) as defined in Part VI.D.4 to Part VI.D.9 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) New Development/ Redevelopment Program
- (ii) Development Construction Program
- (iii) Industrial/Commercial Program
- (iv) Illicit Connection/Illicit Discharge Detection and Elimination Program
- (v) Public Agency Activities Program
- (vi) 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 Part VI.D.4 to Part VI.D.9, the Permittee(s) shall provide a justification for its elimination.

(d) Such customized actions, once approved as part of the Watershed Management Program, shall replace in part or in whole the requirements in Part VI.D.4 to Part VI.D.9 for participating Permittees.

(2) Non-Storm Water Discharge Measures. Where Permittees identify non-storm water discharges from the MS4 as a source of pollutants in the source assessment, the Watershed Control Measures shall include strategies, control measures, and/or BMPs that must be implemented to effectively eliminate the source of

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pollutants consistent with Parts III.A [Discharge Prohibitions – Non-Storm Water Discharges] and VI.D.9 [Special Provisions: Minimum Control Measures – Illicit Connection and Illicit Discharge Elimination Program]. 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. If not sufficiently identified in previous documents, or if implementation plans have not yet been developed (e.g., EPA 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 plan 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

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- water quality-based effluent limitations and receiving water limitations contained in this Part and Attachments X through X 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) At a minimum, structural controls shall be sized to treat the volume of stormwater runoff from the 85th percentile, 24-hour storm specific to the watershed in question;
 - (d) For any pollution prevention measures, the nature, scope, and timing of implementation;
 - (e) 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;
 - (f) The plan shall clearly identify the responsibilities of each participating Permittee for implementation of watershed control measures.
- (5) Permittees shall conduct a Reasonable Assurance Analysis for each TMDL as follows:
- (a) Permittees shall conduct an assessment (through a quantitative analysis / modeling effort) to demonstrate 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 with compliance deadlines during the permit term.
 - (b) Where the TMDL Provisions in Part VI.E and Attachments X through X 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.

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- (6) Permittees shall provide documentation that it has the necessary legal authority to implement or compel implementation of the Watershed Control Measures identified in the plan.

c. Compliance Schedules

Permittees shall incorporate compliance schedules in Attachments [TBD] to [TBD] 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 twice during the permit term.
- 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 X through X 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 X through X, 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,

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- (b) A schedule with dates for achieving the milestones as soon as possible, and
- (c) A final date for achieving the receiving water limitations within the permit term.
- (d) The milestones and implementation schedule in (a)-(c) fulfill the requirements in Part V.A.3.a to prepare a Receiving Water Limitations Compliance Report.

4. Watershed Management Program Implementation

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

5. Integrated Watershed Monitoring and Assessment

Permittees in each Watershed Management Area shall develop an integrated program to assess progress toward achieving the water quality based effluent limitations and/or receiving water limitations per the compliance schedules, and progress toward addressing the highest water quality priorities for each Watershed Management Area. The integrated watershed monitoring and assessment program shall be consistent with the general monitoring and assessment requirements of Part [TBD – MRP].

6. Adaptive Management Process

- a. Watershed Management Program Adaptive Management Process
 - i. Permittees in each Watershed Management Area shall 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 interim and/or final water quality based effluent limitations and/or receiving water limitations in Part VI.E and Attachments X through X, according to established compliance schedules;
 - (2) Progress toward achieving improved water quality in MS4 discharges and achieving receiving waters limitations through implementation of the watershed control measures

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based on an evaluation of outfall-based monitoring data and receiving water monitoring data;

- (3) Achievement of interim milestones;
 - (4) Re-evaluation of the highest water quality priorities identified for the 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;
 - (5) 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;
 - (6) Regional Water Board recommendations; and
 - (7) Recommendations for modifications to the Watershed Management Program solicited through a public participation process.
- ii. Based on the results of the adaptive management process, Permittees shall report any modifications, including where appropriate new compliance deadlines and interim milestones, necessary to improve the effectiveness of the Watershed Management Program in the Annual Report required pursuant to Part [TBD], or as part of the Report of Waste Discharge (ROWD) required pursuant to Part [TBD].
- (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 upon acceptance by the Regional Water Board Executive Officer.
- b. Jurisdictional Storm Water Management Program Adaptive Management Process
- i. Permittees in the Watershed Management Area shall implement the adaptive management process at least annually with regard to its jurisdictional storm water management program to improve its effectiveness, based on, but not limited to the following:

LA County MS4 Permit – Watershed Management Program

- (1) Measurable or demonstrable reductions of illicit discharges to the MS4 based on an evaluation of outfall-based monitoring data;
 - (2) Measurable or demonstrable reductions of pollutants in storm water discharges from the Permittee's MS4 through implementation of the storm water management program based on an evaluation of outfall-based monitoring data;
 - (3) Efficiency in implementing the Watershed Management Program; and
 - (4) Progress toward achieving interim and/or final water quality based effluent limitations and/or receiving water limitations in Part VI.E and Attachments X through X, according to established compliance schedules;
 - (5) Progress toward achieving receiving waters limitations through implementation of the storm water management program based on an evaluation of outfall-based monitoring data and receiving water monitoring data;
 - (6) Regional Water Board recommendations during program and/or site inspections.
- ii. Based on the results of the adaptive management process, the Permittee shall report any modifications, including where appropriate new compliance deadlines or interim milestones, necessary to improve the effectiveness its jurisdictional storm water management program in the Annual Report required pursuant to Provision [TBD], or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision [TBD].
- (1) The adaptive management process fulfills the requirements in Part V.A.4 to address continuing exceedances of receiving water limitations.
- iii. The Permittee shall implement any modifications to its jurisdictional storm water management program upon acceptance by the Regional Water Board Executive Officer.



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Vivian Castro	CITY OF COVINA	VCASPRO@COVINA.CA.GOV	
Neal Shapiro	114 Santa Monica	Neal.Shapiro@Smgov.net	
Karen Olan	Urgy Walker Assoc.	Karanc@lwa.com	
Tiffany Sheddick	City of Santa Fe Springs	TSheddick tiffanysheddick@ santafesprings.org	YES
Sarima Morales Choate	City of Santa Fe Springs		
Marcia Fungson	W/Hands Defense Fund	wethandsat@earthlink.net	YES
Saira Gandhi	LA Resident	Saira.g@ucla.edu	—
Amanda Griesbach	LA LA Resident	mandy-griebach@ hotmail.com	—



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Jaime Sayre	Brown and Caldwell 801 S. Figueroa St. Suite 950, LA, CA 90017	jsayre@brwn.cald.com 213-271-2230	yes
DANIEL PANKALU	CITY OF CALABASKS 100 CIVIC CENTER WAY CALABASKS CA 91302	DPANKALU@CITYOFCALABASKS.COM (818) - 224-1600	YES
Mike Shay	City of Redondo Beach 415 DIZMONA ST REDONDO BEACH CA	Mike.shay@redondo.org (310) 313-0661	yes
Latabya Cyrus	City of San Dimas	909 894 0244	yes.
Kevin Sales	City of San Marino	(562) 944-4766	Yes
Matthew Maloney	City of Monrovia	626 932 5577	yes.
Holly Schneider	Building Industry Association	612 57 5091	Y
Robert "Roy" van de Hoek	Wetlands Defense Fund 322 Civen Blvd #317 Los Angeles 90243	roy@wdfund.org 310 877-2435 Robert.vandehoek@ychoo.com	yes

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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Gillian Bark	John C. Hunter Assoc.	JBRICKEY@SLHA.NET	
Oliver Cramer	City of Santa Clarita	OCramer@ Santa-Clarita.com	
Bernardo Iniguez	City of Bellflower 16000 Cite Center Dr, Bellflower, CA 90706	biniguez@bellflower.org	
Adam Hox	2411 Delaware Ave. Santa Monica, CA 90404 ALLAN CO.	ahox@allancompany.com	
Chase Via	City of Bell Gardens	cvia@bellgardens.org	
Jason Weiner	Wishitoyo Foundation/ Ventura Coastkeeper	jweiner.ventura.coastkeeper @wishitoyo.org	
Katherine Rubin	LADWP 111 N. Hope St., Rm 1213, Los Angeles, Ca. 90012	krubin@ladwp.com	
Michael Hanson	LADWP 111 N Hope St Rm 1213 LA, CA 90012	michael.hanson @ladwp.com	



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
AMBER MARON	244 20th Ave Venice, CA 90291	amber.maron@gmail.com	
JASON WEN	City of Downey City of LA	JWEN@DOWNEYCA.ORG	
Shahram Khoraeghan	City of LA	shahram.kharaeghan@cityofla.org	
Candy Lin	USEPA	lin.candy@epa.gov	
FERRER KIM		kferr@downeycity.edu	Y.
Cameron McCullough	JLHA	cmccullough@jlha.net	X



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
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W. WERNER		(310) 456 5965 WERNERDESIGN@ VERIZON.NET	
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Nancy Fair		wfchyo@sarecycling.com	
Frank Wu	LACPPW	fwu@dpw.lacounty.gov	
Gary Hildebrand		ghilde@dpw.lacounty.gov	
Araely Casso		alasso@dpw.lacounty.gov	

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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Arlene Thomas	LACDPW	athomas@dpu.lacounty.gov	<input type="checkbox"/>
John Hunter	JLHA	JHunter@JLHA.net	<input type="checkbox"/>
Bob Howard	5451 Sepulveda Bl. Sh. Oaks 91411	brobhoward@aol.com	<input type="checkbox"/>
Claudia Arellano	City of Kern 4305 Santa Fe, Kern, Ca 90058	Carrellano@ci.kern.ca.us	<input type="checkbox"/>
VAIKO ALLEN	CONTECH	vallen@conteches.com	<input type="checkbox"/>
KADEN YOUNG	CITY OF CULVER CITY	KADEN.YOUNG@CULVERCITY.ORG	<input type="checkbox"/>
Allysm Clark	Cal Water Service Co 2632 W 23 rd St Torrance 90505	aclark@calwater.com	<input checked="" type="checkbox"/>
Evelyn Mulheisen	County of Ventura	evelyn.mulheisen@ventura.org	<input checked="" type="checkbox"/>



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
CHRISTOPHER GABRIELICH	MWDSC	cgabrielich@mwdh2o.com	<input checked="" type="checkbox"/>
Stephen Mejia		smejia.ca@live.com	<input checked="" type="checkbox"/>
Math Arms	Port of Long Beach		
BARRINGSTON PAT	CITY OF INGLEWOOD		
Shannon Bishop	LAFCD	sbishop@lafcd.org	<input checked="" type="checkbox"/>
Joe Geever	Surfrider Foundation	jgeever@surfrider.org	<input checked="" type="checkbox"/>
Fredy Bonilla	City of Cerritos	fbonilla@cerritos.us	<input checked="" type="checkbox"/>
Mike O'brady	City of Cerritos	MObrady@cerritos.us	<input checked="" type="checkbox"/>



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Julie Carver	City of Pomona	Julie.Carver@ci.pomona.ca.us	
Meg McWade	City of Pomona	meg-mcwade@ci.pomona.ca.us	✓
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Grace Chan	LACSD	gchan@lacsd.org	
Phil Fries	II	pfries@lacsd.org	
RICK VALTE	CITY OF SANTA MONICA	rick.valte@smgov.net	
Mad Walker	Larry Walker Asse.	MadWalker@lwa.com	
Bob Suttler		BOB.SUTTLER@yaho.com	



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Richard Watson	21922 VISO Lane, Mission Viejo, CA 92684	rwatson@envsolutions.com	
Eveline Bravo	1807 S. Mansfield Ave LA 90019	grayskies2727@yahoo.com	NO
Olga Ayala	" " " " " "	ayala3978@yahoo.com	NO
Rachel McPherson	Port of Los Angeles	310 732 0314 rmperson@portla.org	yes
Barbara Cisneros	Malibu	on record	
Jennifer Brown	City of Malibu	jbrown@malibucity.org	
Rob DuBow	"	rduboux@malibucity.org	
STUART BERGEE	PORT OF LONG BEACH	bergee@portlb.com	yes



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RE: AR2382

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
John Dettie	Torrance	jdettie@ torrance.ca.gov	No is
Patricia Elkins	701 E. Carson St. Carson CA 90745	pellins@carson.ca.us	yes
MATT CARPENTER	NEWTOWN LAND	mcarpenter@newhall.com	y
Anne Bergman	Heal the Bay	abergman@healthebay.org	yes
Heather Weisbach	City of San Francisco	hweisbach@sf.gov	yes
Marga Matz	Santa Monica	masoma960@aol.com	yes
ROXANNE SPEAR		rspear@aol.com	yes
SCOTT UHLES	1738 BERKELEY STREET, SANTA MONICA 90404	scuhles@delanogroup.com	y



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RB-AR2383

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Susie Sordilena	Heal the Bay	ssandilena@healthebay.org	
Ana Luisa Ahern	2408 Cloy Ave, Venice CA	ana.ahern@gmail.com	✓
Rick Blocker	Black Surfing Association / Malibu Surfing Assoc 90025	rblock12@aol.com	yes
MERRILL BARR	1561 S. BARRINGTON, LA CA	mcbarrin@yahoo.com	YES
Joe Bellomo	City of Westlake Village	jbellomo@willdow.com	yes
Kimberly Colbert	City of Hidden Hills	kimberlycolbert@ca4professionals.com	✓
Robert Vega	City of Los Angeles	Robert.Vega@lacity.org	✓



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RB-AR2384

Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Dulce Stein	Hawthorne	dulcestein@yahoo.com	<input checked="" type="checkbox"/>
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Susan Reyes	Senator Ed Hernandez, P.D.	susan.reyes@sen.ca.gov	<input checked="" type="checkbox"/>
Stefanie Mathews	371 Maino Ave, Long Beach (A 90814)	mathews.stefanie@gmail.com	<input checked="" type="checkbox"/>
Vanessa Haver	city of Arcadia	vhaver@ci.arcadia.ca.us	<input type="checkbox"/>
Kosta Kaporis	City of Los Angeles	kosta.kaporis@lacity.org	<input type="checkbox"/>
Thanhloan Nguyen	RWQCB	tnyugen@waterboards.ca.gov	<input type="checkbox"/>
David Dolphin	CITY OF ALHAMBRA 111 S. FIRST ST, ALHAMBRA, CA 91804	ddolphin@cityofalhabra.org	<input checked="" type="checkbox"/>



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Name	Mail Address Company Name/Organization	E-Mail Address or Telephone Number	Add Name to Mail List
Elaine Jeng	Redondo Beach 415 Diamond St Redondo Beach, CA 90277	elaine.jeng@redondo.org	<input checked="" type="checkbox"/>
Michelle Gish	Campbell	mkc@mscwpofbedmusc.org	<input checked="" type="checkbox"/>
Jesse Trujillo	15153 Nelson Ave, La Puente, CA 91744	jtruj116530@gmail.com	<input checked="" type="checkbox"/>
Connie Events	170 Broadway #105 Santa Monica CA 90401	connie@westnet	<input checked="" type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

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RB-AR2386

SPEAKER REQUEST CARD

Date: 5-3-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
 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: LA city - Sanitation

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

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SPEAKER REQUEST CARD

Date: 5/3

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
 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: MEREDITH McCARTHY
 Representing Self
 Representing: _____

* SUPPORT STRONG
Pollution limits

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

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SPEAKER REQUEST CARD

Date: 5/3/12

I wish to speak during Public Forum on a non-agenda item.

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 19

In support In Opposition

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: Stepha Mejia

Representing Self
 Representing: _____

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SPEAKER REQUEST CARD

Date: 5-3-2012

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 19
 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: WENDI WERNER

Representing Self
 Representing: _____

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

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SPEAKER REQUEST CARD

Date: 5/3/

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 19

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: MATT HEW KING

Representing Self

Representing: _____

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

Water Resources Control Board
Los Angeles Regional Water Quality Control Board

SPEAKER REQUEST CARD

Date: 5-3-12

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 19

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: Brek Blocker

Representing Self

Representing: Black Surfing Assoc / Malibu Surfing Assoc

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: 5-3-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: Ana Luisa Ahern

- 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

SPEAKER REQUEST CARD

Date: 5/3/2012

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- I wish to speak on Agenda Item No. 19
- 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: Tatiana Bauer

- 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

SPEAKER REQUEST CARD

Date: 5/3/2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: MERRILL BARR

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

SPEAKER REQUEST CARD

Date: 5-3-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: Surfrider 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: 5/3/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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. 19 - w/ strong pollution limits (TMDL)
- I oppose Agenda Item No. _____ * LRD

Name: Sara Gandhi

- 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

SPEAKER REQUEST CARD

Date: 5/3/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19 For TMDLs required limits in the stormwater 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. 19 For TMDLs required limits in the stormwater permits
- I oppose Agenda Item No. _____

Name: Eveline Bravo

- 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

SPEAKER REQUEST CARD

Date: 5/3/2012

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. 19 For TMDL required limits in the stormwater permit
- I oppose Agenda Item No. _____

Name: Olga L. Ayala

- 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

SPEAKER REQUEST CARD

Date: 5/3

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19 (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: Marcia S Matz

- 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

SPEAKER REQUEST CARD

Date: May 3

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: Anne Bergman

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

SPEAKER REQUEST CARD

Date: 5/3/12

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. 19 - *To include TMDLs in all stormwater permits.*
- I oppose Agenda Item No. _____

Name: Amanda Griesbach

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

SPEAKER REQUEST CARD

Date: 5/3/12

I wish to speak during Public Forum on a non-agenda item.

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 19

MSY permit

In Support In Opposition

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 Wen and John Hunter

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: 5.3.2012

I wish to speak during the Board Meeting:

I wish to speak on Agenda Item No. 19

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: WENDI WERNER

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

SPEAKER REQUEST CARD

Date: 5-3-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: STEVEN DUNN

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

SPEAKER REQUEST CARD

Date: 5.3.2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: STEVEN DUNN

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

SPEAKER REQUEST CARD

Date: 5-3-2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- I wish to speak during Public Forum on a non-agenda item.

I already put this request earlier this morning

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: Robert "Roy" Van de Hoek
 Representing Self _____
 Representing: Wetland Defense Fund

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: 5.3.12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: Marcia Hanson
 Representing Self _____
 Representing: Ballona Institute/Wetlands Defense Fund

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

Defense Fund

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

SPEAKER REQUEST CARD

Date: 5/3/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: Ventura Coastkeeper ^{and} Wishoyo 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

6 Minutes

SPEAKER REQUEST CARD

Date: 03 May 2012

- I wish to speak during Public Forum on a non-agenda item.

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19

In Support In Opposition with

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: Cities of Cerritos & Signal Hill

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

15 min

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

SPEAKER REQUEST CARD

Date: 5-3-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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: Gary Hildebrand

- Representing Self
- Representing: Los Angeles County

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: 05-04-12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
- 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

RB-AR2399

SPEAKER REQUEST CARD

* 40 minutes granted

Date: 5/3/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19 (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: Heal the Bay (Kirsten James) Baykeeper (Liz Crossen)
 Representing Self
 Representing: NRDC (Noah Garrison)

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

55 min

SPEAKER REQUEST CARD

Date: 5/3/12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 19
 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: LA Permit Group (Heather Maloney; Heather Merenda)
 Representing Self
 Representing: LA Permit Group

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

40 min

SPEAKER REQUEST CARD

Date: 5.3.12

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 15
- 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. _____
- } both

Name: Ron TADWIN

- Representing Self
- Representing: 20 C.A. Co. City

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: 03 May 2012

I wish to speak during the Board Meeting:

- I wish to speak on Agenda Item No. 21
- 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: CASQA

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: 5/3/12

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. 19 *Comments on back*
- I oppose Agenda Item No. _____

Name: Amber Maron

Representing Self

Representing: _____

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

As a beach goer, surfer and diver, strong water quality regulations are extremely important to me.

Please put numeric pollution limits into the permit with strict compliance deadlines!

*Thank You,
Amber*

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

SPEAKER REQUEST CARD

Date: 5-3-2012

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:

OVER →
COMMENTS ON BACK

I support Agenda Item No. 19

I oppose Agenda Item No. _____

Name: Dulce N. Stein

Representing Self

Representing: _____

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

Clean water is VITAL for all living things, pollution limits are COMPLETELY necessary with strict compliance deadlines. No FREE PASS for deadlines over 5 years. Thank you very much. Dulce N. Stein.

MS4

Key Provisions and Issues

- Discharge Prohibitions
- Receiving Water Limitations
- Special Provisions
- Definitions
- Attachments – Monitoring Program

March 2012 Workshop

- Discharge Prohibitions
- Receiving Water Limitations
- Special Provisions (Minimum Control Measures)
- Definitions
- Attachments – Monitoring Program

April 2012 Workshop

- Discharge Prohibitions
- Receiving Water Limitations
- Special Provisions (Minimum Control Measures)
- Definitions (WQBELs)
- Attachments – Monitoring Program

May 2012 Workshop

- Discharge Prohibitions
- Receiving Water Limitations
- Special Provisions (Minimum Control Measures)
- Definitions (WQBELs)
- TMDL Provisions
- Watershed Management Provisions
- Attachments – Monitoring Program

LA COUNTY MS4 PERMIT: 3RD BOARD WORKSHOP

California Science Center
May 3, 2012

LA County MS4 Permit Outline

Section III. Discharge Prohibitions

Existing **Part 1**

- **Non-Storm Water Discharge Prohibition**✓

Section IV. Effluent Limitations

Existing **Part 7**

- **TMDL Water Quality Based Effluent Limitations (see “TMDL Provisions” below)**✓

Section V. Receiving Water Limitations

Existing **Part 2**

- **Applicable Water Quality Standards for the receiving water**✓

Section VI. Special Provisions

Existing **Part 4**

- **Watershed Management Programs**✓
- **Minimum Control Measures**✓
- **TMDL Provisions**✓

Section VI. Standard Provisions

Existing **Part 6**

Attachment: Monitoring and Reporting Provisions

Existing **Attachment**

Workshop Outline

- Watershed Management Program Provisions
 - Purpose and Scope
 - Development Process
 - Elements
 - Implementation
 - Monitoring, Assessment and Adaptive Management
- Total Maximum Daily Load (TMDL) Provisions
 - Water Quality Based Effluent Limitations and Receiving Water Limitations
 - Compliance Determination
- Receiving Water Limitations Provisions

Terminology

Water Quality Based Effluent Limitation

A restriction on the quantity or concentration of a pollutant that may be discharged necessary to achieve a water quality standard

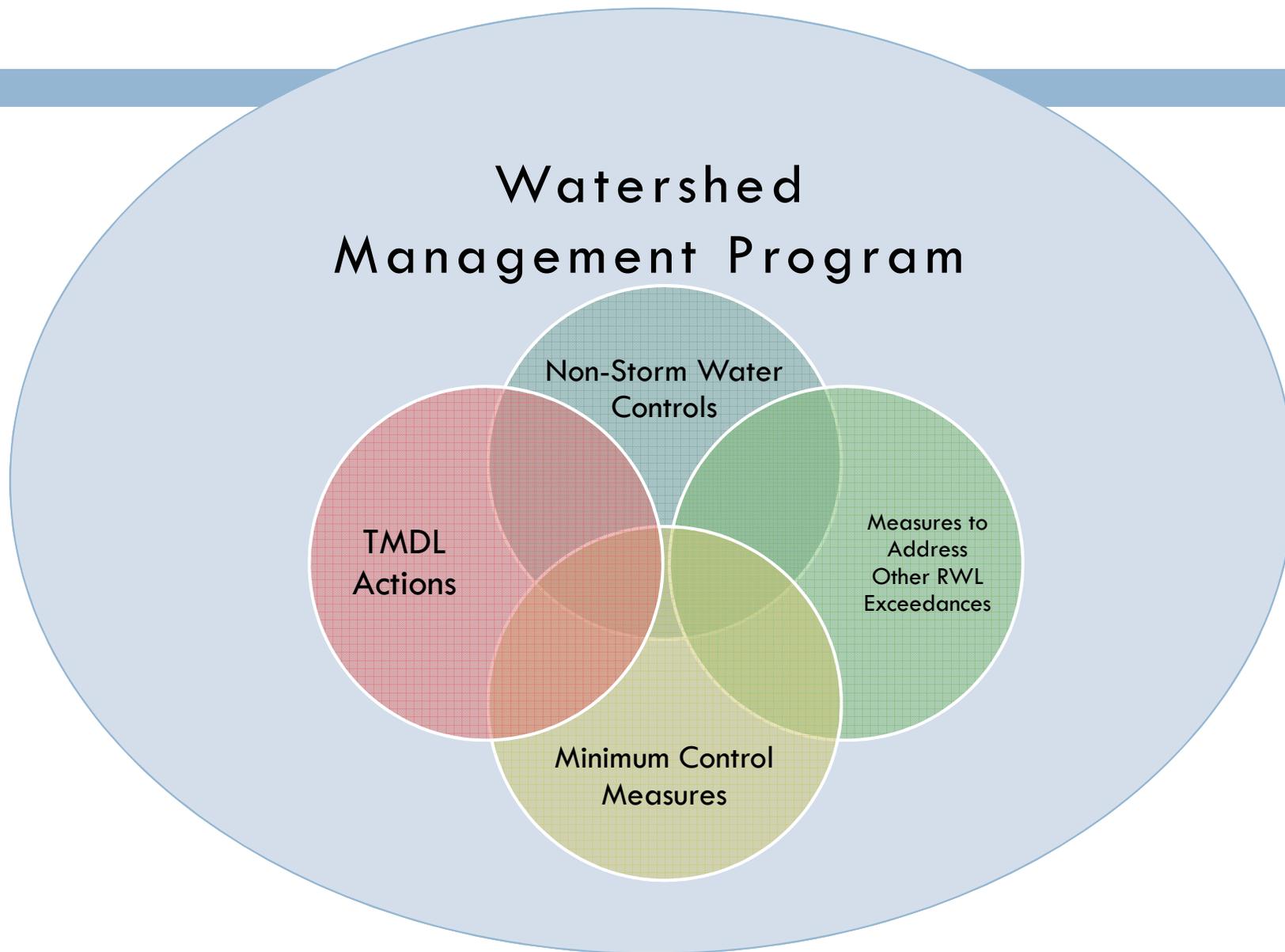
Receiving Water Limitation

Any applicable numeric or narrative water quality standard, or limitation to implement the applicable WQS, for the receiving water

Watershed Management Programs (WMPs)

- Organizing framework for permit provisions and storm water management programs
- Water quality priorities, particularly TMDL requirements, are driver for selecting and implementing pollutant controls
 - ▣ Allows flexibility to customize some core permit requirements/sequence implementation actions to achieve equal or greater pollutant control and meet TMDL compliance deadlines

PERMIT STRUCTURE



Scope of WMPs

- Seven Watershed Management Areas
 - ▣ Further subdivision based on subwatersheds, e.g. WQFI subwatersheds
- Individual vs. Group programs
 - ▣ Encourage cooperative programs among all Permittees within WMA
 - ▣ Permittees may participate in more than one WMP
 - Individual requirements from each WMP compiled in Permittee's jurisdictional storm water management program
 - ▣ An individual Permittee may develop its own WMP for each WMA within its jurisdiction
 - Not preferred - Ramifications for plan development, monitoring, collaboration on regional controls

Watershed Management Areas

Watershed Management Areas in Los Angeles County



Watershed Management Program Implementation Cycle



Watershed Management Program Process Timeline

Part	Provision	Due Date
VI.C.2.b	Notify Regional Water Board of intent to develop Watershed Management Program	6 months after Order adoption
VI.C.2.b	Submit draft plan to Executive Officer	1 year after Order adoption
VI.C.2.c	Submit final plan to Executive Officer	3 months after receipt of Regional Water Board comments on draft plan
VI.C.4	Begin implementation of Watershed Management Program	Upon submittal of final plan
VI.C.6.a.ii	First evaluation of Watershed Management Program and submittal of revisions to plan	1 ½ years after submittal of final plan
VI.C.6.a.ii	Second evaluation of Watershed Management Program and submittal of revisions to plan	180 days prior to expiration date of Order

Watershed Management Program Plan Development

Identify Watershed Priorities

- Water quality characterization
- Waterbody-pollutant classification
- Source assessment
- Prioritization

Select Watershed Control Measures

- Customize Minimum Control Measures
- Target non-storm water discharge controls
- Compile TMDL implementation actions from Implementation Plans
- Identify individual Permittee responsibilities

Conduct Reasonable Assurance Analysis

- Quantitative analysis/modeling of control measures
- Focus on deadlines within permit term and progress toward achieving final WQBELs
- Documentation of legal authority to implement selected control measures

Identification of Water Quality Priorities

- Highest priority (*Category 1*) – Waterbody/pollutant combinations subject to TMDLs
- High priority (*Category 2*) – Waterbody/pollutant combinations identified on Section 303(d) List as impaired, but no TMDL yet
- Medium – Waterbody/pollutant combinations with exceedances of WQS, but not listed as impaired
- Low priority – Waterbody/pollutant combinations for which data do not indicate exceedances of WQS

Source Assessment

- Focus on Category 1 and 2
- Review available data from
 - Storm water management programs:
 - Illicit discharge detection and elimination programs
 - Commercial / industrial facilities control programs
 - Development construction programs
 - Public agency activities
 - TMDL source analysis
 - Watershed modeling
 - Monitoring programs
- Identify MS4 outfalls discharging to waterbodies in Categories 1 and 2

MS4 Prioritization

- Based on water quality priorities and MS4 source assessment
- TMDLs
 - ▣ First priority: Address WQBELs and receiving water limitations with interim or final compliance dates within the permit term; past deadlines
 - ▣ Second priority: Begin addressing WQBELs and receiving water limitations with compliance deadlines between 2012-2017
- Other Receiving Water Considerations
 - ▣ Address MS4 discharges that may have caused or contributed to exceedances of water quality standards (not otherwise covered by a TMDL)

Selection of Watershed Control Measures

- Objectives
 - ▣ Create efficient and effective program to focus individual and collective resources on watershed priorities
 - ▣ Focus on Categories 1 and 2
 - ▣ Prevent or eliminate non-storm water discharges through the MS4 that are a source of pollutants
 - ▣ Implement controls to achieve interim and final WQBELs and receiving water limitations – focus on deadlines during permit term
 - ▣ Ensure that MS4 discharges do not cause or contribute to exceedances of other WQS not yet addressed by TMDLs

Permit Provisions Addressed in WMP

- SWMP Minimum Control Measures
 - ▣ Identify opportunities to focus resources on Categories 1 and 2
 - ▣ Management programs consistent with 40 CFR § 122.26(d)(2)(iv)(A)-(D)
 - ▣ Justification for modifications
 - ▣ Customized actions replace, in relevant part, the baseline permit requirements in Section VI.D
- Non-Storm Water Discharge Measures
 - ▣ Effectively prohibit non-storm water discharges
 - ▣ Implement additional BMPs
 - ▣ Divert to sanitary sewer

Permit Provisions Addressed in WMP

- TMDL Control Measures
 - Actions identified in Basin Plan amendment and/or TMDL Implementation Plans submitted by Permittees
 - Controls to address storm water and non-storm water discharges, where necessary
 - At a minimum, actions to be taken during permit term to achieve interim and/or final WQBELs and receiving water limitations
 - May include baseline or customized activities under MCMs
 - May include controls under non-storm water discharge provisions

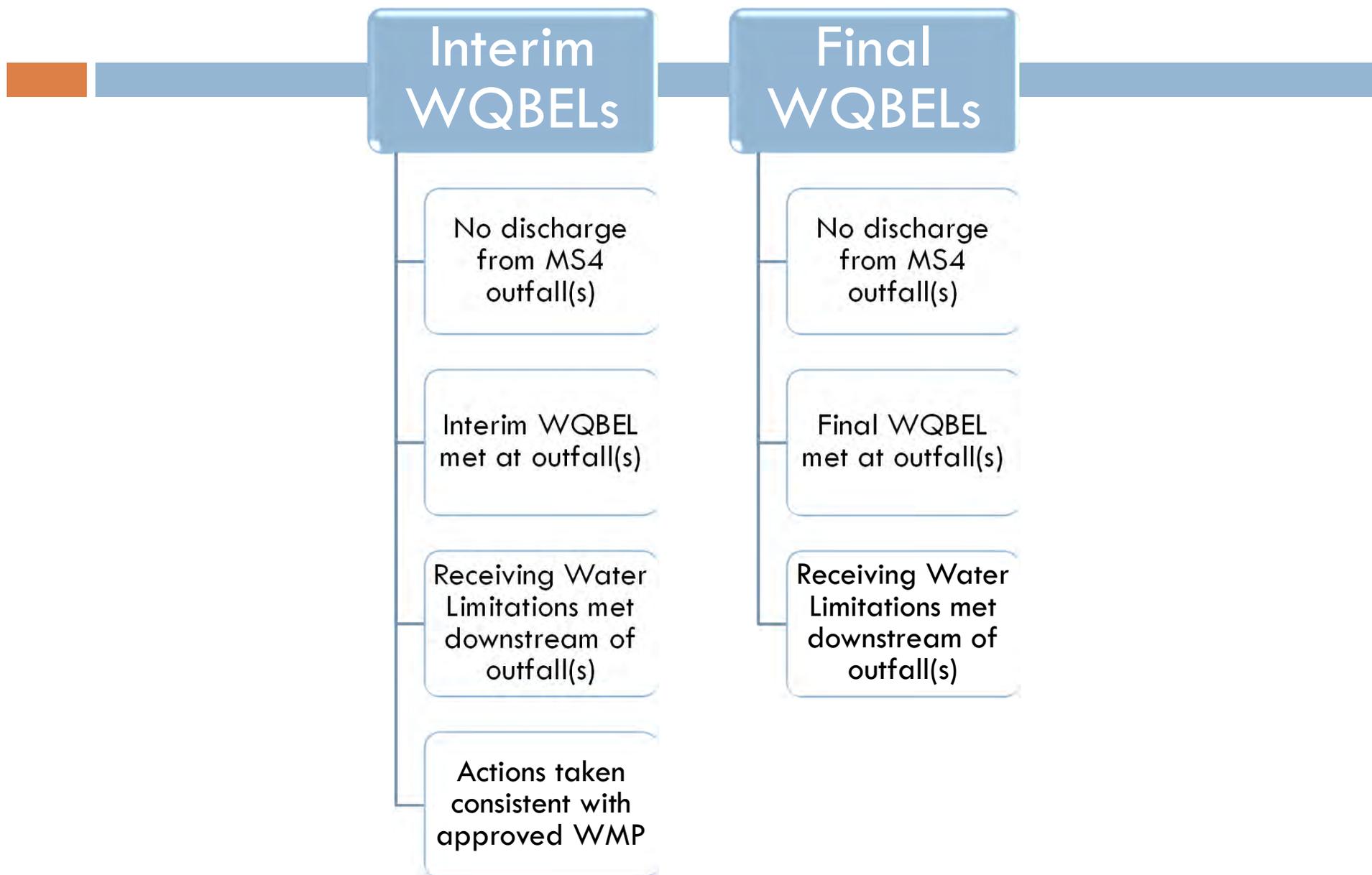
Reasonable Assurance Analysis

- WMP must include quantitative analysis demonstrating that watershed control measures are likely to achieve applicable WQBELs with deadlines during permit term
- If deadlines fall outside of permit term, must include interim milestones and dates for achievement
- Must include documentation of legal authority to implement, or compel implementation of, the control measures relied upon

TMDL Provisions

- Requirements to implement 33 TMDLs
- Matrices identifying individual Permittees subject to each TMDL
- Attachment for each Watershed Management Area
 - ▣ Numeric Water Quality Based Effluent Limitations established to implement each TMDL WLA
 - ▣ Specific Receiving Water Limitations included, where consistent with WLAs (e.g. exceedance days for bacteria TMDLs)
- Trash TMDL provisions based on existing LA River Trash TMDL requirements

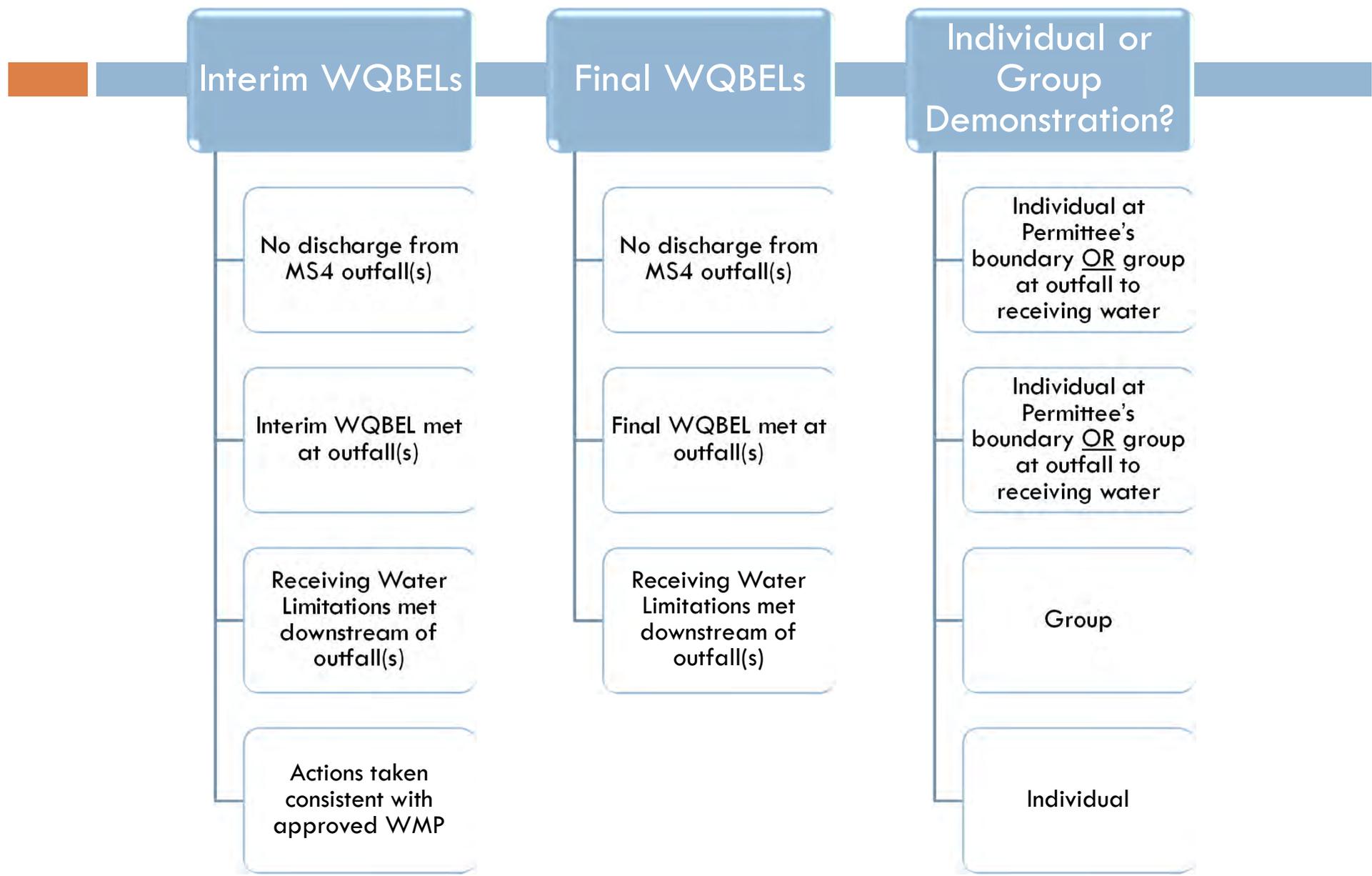
Compliance Demonstration Alternatives



Compliance Determination for Commingled Discharges

- Each permittee is only responsible for discharges from the MS4 for which it is owner/operator
- However, many TMDL WLAs are assigned jointly to a group of permittees because discharges commingle in MS4 prior to discharge to receiving water
- Where permittees have commingled discharges, compliance is determined for the group as a whole unless an individual permittee demonstrates compliance for its discharge individually

Compliance Demonstration Alternatives



TMDL Provisions (cont.)



- Compliance schedules
 - Equal to state-adopted TMDL implementation schedules
 - Approach to final compliance deadlines that have passed
 - Approach to EPA established TMDL without an implementation plan

Time Schedule Orders to Comply

EPA TMDLs

- Time schedule of actions
- Demonstration that schedule is as short as possible
- Interim requirements and dates for achievement

State-adopted TMDLs

- Chronology of actions taken since effective date of TMDL
- Justification of need for additional time
- Time schedule of proposed actions
- Demonstration that schedule is as short as possible
- Interim requirements and dates for achievement

Receiving Water Limitations (RWLs)

- RWL = Applicable Water Quality Standards
- Ensure that discharges from the MS4 do not cause or contribute to exceedances of applicable WQS; protect beneficial uses
- Language based on State Water Board precedential order, Order WQ 99-05; same as 2001 Permit and 2010 Ventura MS4 Permit
- Relationship between Receiving Water Limitations and “iterative [BMP implementation] process”
- Relationship to TMDL provisions - Achieve compliance with RWLs for specific waterbody-pollutant combinations as outlined in TMDL provisions, pursuant to applicable compliance schedules

Comments on the Development of the Greater LA County MS4 NPDES Permit

May 3, 2012
LARWQCB Workshop

LA PERMIT GROUP

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

History

- * Los Angeles Stormwater Quality Partnership (LASQP)
 - * Members from throughout the County
- * LA Permit Group
 - * began January 2011
 - * 62 municipalities



LA PERMIT GROUP

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

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

LA Permit Group Structure

LA Permit Group
*(Heather Maloney, Chair
City of Monrovia)*

Negotiating Committee
*Heather Maloney, LA River • Heather Merenda, Santa Clara River
John Dettle, Santa Monica Bay • John Hunter, LA River
Joe Bellomo, Malibu Creek/Rural Watersheds •
Patricia Elkins, Dominguez Channel • Ray Tahir, San Gabriel River*

Technical Sub-Groups

Development Programs
(Kosta Kaporis, City of Los Angeles)

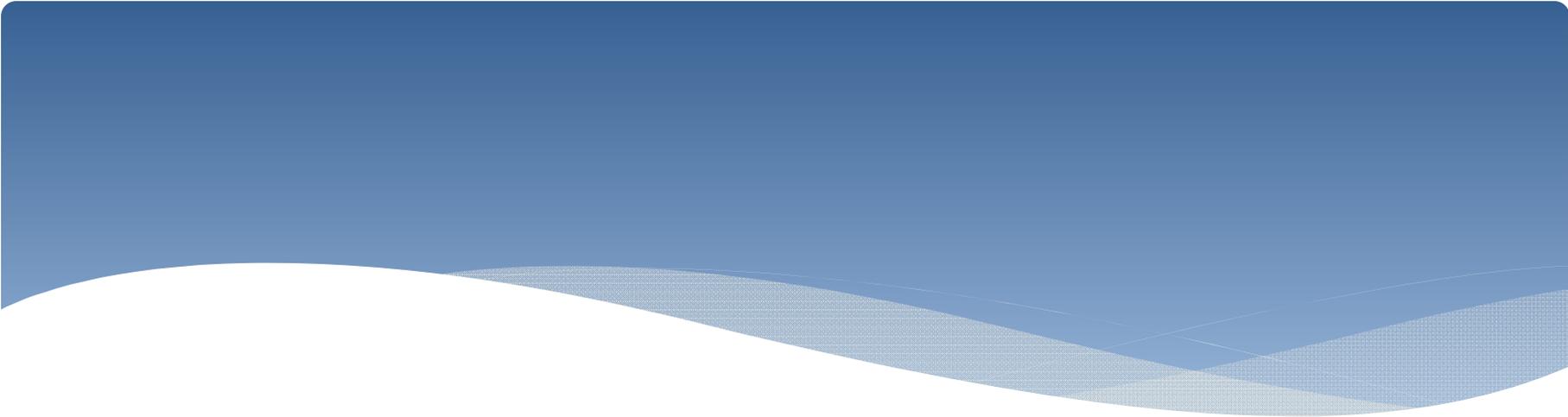
Monitoring
(John Dettle, City of Torrance)

Reporting & CORE Programs
(Joe Bellomo, Westlake Village & Agoura Hills)

TMDLs
(Heather Merenda, City of Santa Clarita)

Overall Themes

- * What is the best way of achieving progress towards the water quality goals?
 - * Integrated, regional planning
 - * Integrated, regional monitoring
 - * Prioritization
 - * Sustainability



“A policy’s value must be measured not only in terms of it’s appeal, but also in light of its implementability”

- Jeffrey L. Pressman and Aaron Wildavsky

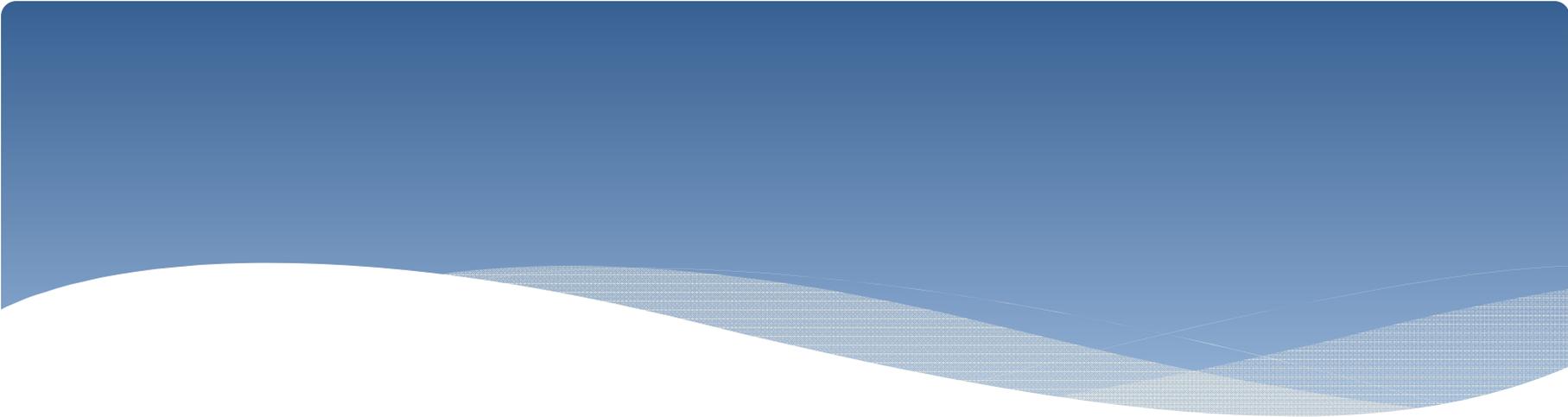
Fiscal Resources

- * Limited control to increase stormwater fees (Prop 218)
- * MCMs + TMDLs goes beyond resources municipalities currently have available
- * Health, Safety, Quality of Life, other regulatory requirements and clean water all need to be developed in balance of each other



Permit Development Timeline

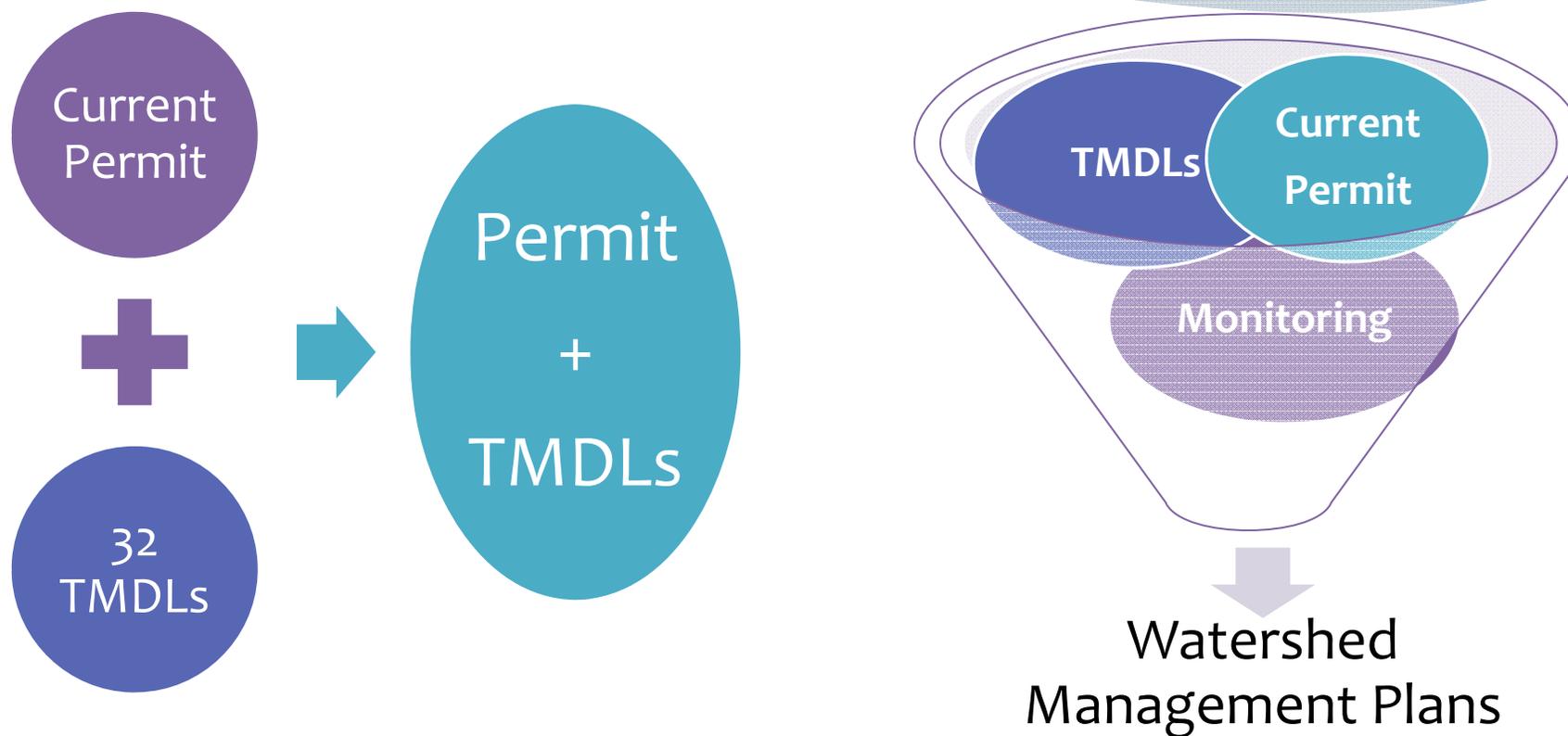
- * Review time limited
- * Administrative Draft requested prior to Tentative Permit
 - * Need to see the whole permit together
 - * Remaining Permit Sections – Monitoring Program and Reporting
 - * Significant comments provided in past Workshops
- * Workshop on Administrative Draft in order to discuss whole permit



“Implementation must not be conceived as a process that takes place after, independent of , the design of policy... programs must be design by gearing programs more directly to the demands of executing them”

- Jeffry L. Pressman and Aaron Wildavsky

Paradigm Shift



Receiving Water Limitations

Receiving Water Limitations

- * RWL should support the adaptive management approach discussed in the Watershed Management Plans
 - * Currently RWL conflicts with Watershed Planning
 - * Proposed language exposes the municipalities to enforcement action (and third party law suits) **even when** the municipality is engaged in an adaptive management approach to address the exceedance.

Adaptive Management

- * The Adaptive Management Approach should be used to provide a consistent standard throughout Permit
- * We recommend that the Regional Board work with the State Board on this very important issue

Watershed Management Program

Watershed Management Program

- * Overall the LA Permit Group supports the Regional Board's proposed approach to address high priority water quality issues by the development and implementation of a watershed management plan
- * The working proposal supports flexibility by providing sufficient detail to guide the development of the watershed plan without being overly prescriptive and constraining

Watershed Management Program

- * The monitoring program should be directly integrated into the Watershed Management Program



- * The Watershed Management Program should include options for streambed restoration, enhanced biological range and more rigorous ecosystem health

Watershed Management Program

- * Adequate Timeline is needed for the development of the Watershed Management Program
- * Plan should be based on monitoring data to provide reasonable assurance

Provision	Due Date
Notice of Intent	6 month after Order adoption
Draft Plan	1-year after Order adoption
Final Plan	3-months after RB comments
Implement Final Plan	Upon submittal of Final Plan
First Evaluation & submittal of revised Plan	1 ½ years after Final Plan submittal
Second Evaluation	180 prior to Order expiration

Watershed Management Program

- * Clarify compliance during the interim period while developing Watershed Management Program
 - * Continue current Stormwater Quality Management Plan
 - * Continue existing TMDL implementation plans

- * Streamlined Reporting and Assessments

Watershed Management Program

- * Technical and financial feasibility of complying with water quality standards should be included in the Watershed Management Program criteria
- * Clarification should be added to acknowledge some pollutant sources are outside the permittees' authority or control
 - * Examples - aerial deposition, natural sources, permitted sources, upstream contributions, etc.

Total Maximum Daily Loads

TMDL Section - Complexity

- * **Complexity:** This NPDES permit proposes to incorporate more TMDLs than any other permit in California issued to date
 - * This effort should be done right considering the magnitude
 - * Rushing through will only cause more problems down the road for an already complex and difficult permit
- * There are fundamental policy decisions that will affect the stormwater programs and legal landscape for years to come that should not be rushed
- * Provide flexibility to achieve water quality improvements that are more efficient and effective

TMDL Section – Uncertainty

- * **Uncertainty:** The sophistication of the TMDLs vary widely and not all TMDLs are created equal
 - * uncertainty in science regarding knowledge of the pollutant sources,
 - * confidence in the technical analysis is low based on the lack of source data,
 - * uncertain source problem results in uncertain selection of control measures to address the pollutant
 - * Reopeners were placed into the TMDLs to address this uncertainty

TMDL Section – Flexibility and Time

- * **Flexibility**: Uncertainty in TMDLs can be reduced by selecting a flexible approach
- * Regulations and EPA guidance provide discretion to the Regional Board to address TMDL WLAs. Compliance with the TMDLs should be through implementing BMPs defined in the watershed management plan for both interim limits and final limits
 - * WLA compliance can be determined through implementing BMPs or through meeting the numeric effluent limits
 - * Strict numeric final limits are not required, but the working proposal requires strict compliance with numeric final limits
 - * Working proposal allows compliance with numeric interim limits through the implementation of BMPs specified in the watershed management plan

Fundamental Policy Decisions EPA Developed TMDLs

- * Fundamental policy decision by the Regional Board
 - * No implementation plan/compliance schedule identified in the USEPA TMDLs
- * Time Schedule Orders should be the last resort. Rather, the State's compliance policy should be used to establish the framework for moving forward
- * TMDL compliance schedule alignment with Watershed Management Program would allow an integrated approach

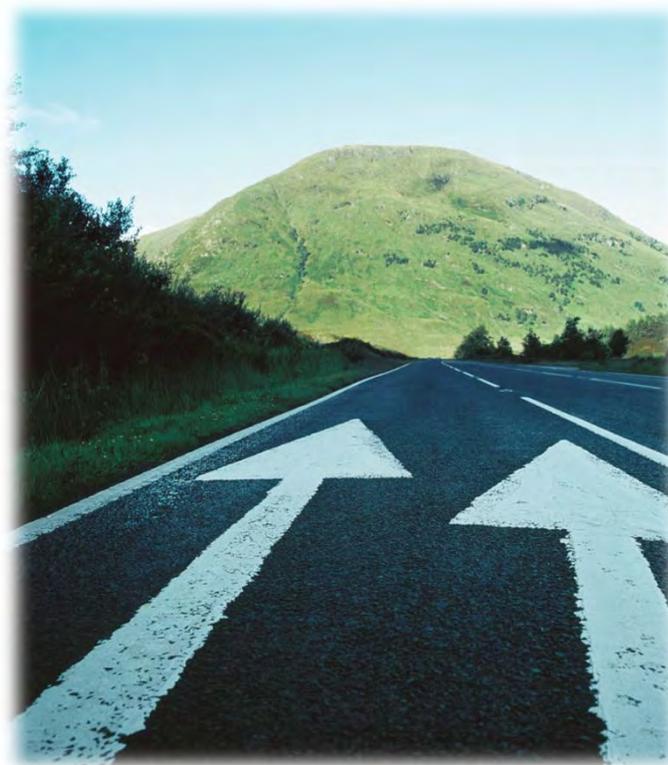
Fundamental Policy Decision TMDL Compliance Dates Passed

- * Past due TMDLs should be reopened to incorporate implementation schedules in the watershed management program
 - * Reopeners in the TMDLs have not occurred or are being rushed
 - * These TMDLs have reopeners to reflect the uncertainty during their development

Cities Working Hard for Clean Water

Sufficient time is needed to travel the road ahead so that we accomplish clean water and reach the finish line together

In this scenario, everyone wins with clean water



Receiving Water Limitation Language
Watershed Management Plans
Total Maximum Daily Loads
in Next Round of Los Angeles County
MS4 Permits

*Cities of Azusa, Baldwin Park, Carson, Claremont, Compton, Duarte,
El Monte, Gardena, Glendora, Irwindale, Lawndale, Lomita, Pico
Rivera, San Fernando, San Dimas, San Gabriel, South El Monte, and
West Covina*

RWLs

- Receiving Water Limitation Language is Required in all MS4 Permits
 - Has remained the same since 2001
 - Most RWL in California permits are pretty much the same
 - Staff's versions does not fully comply with State Board Order WQ-99-05 adopted by the State Water Board on June 17, 1999 which applies to all Permittees
 - Proposed RWLs are different, unnecessary, and confusing
 - Staff said that the L.A. permit was to be modeled on Ventura Permit
 - This is not the case with RWL language (the proposed permit is totally different)

RWLs

➤ Standard RWL Language

- RWL provides compliance instructions for water quality standards/TMDL WLAs
 - Stormwater discharges shall not cause or contribute to an exceedance above a water quality standard (includes TMDLs) from the MS4 to a receiving water (**applies only to stormwater discharges**)
 - Permittees shall only be responsible for discharges over which they have control
 - Discharges from the MS4 of storm water, or non-storm water shall not cause or contribute to a condition of **nuisance** (this is California Water Code language not CWA – non-stormwater discharges from the MS4 only relate to nuisance)

RWLs

➤ RWL Nuisance

- Not an issue because a nuisance issue rarely arises -- only when three nuisance criteria must be met (specified in the California Water Code)
- But staff has added a new provision based on an “interpretation” of a fed. regulation (40 CFR §122.26(a)(3)(vi)
 - “A permittee is only responsible for discharges of stormwater and non-storm from the MS4 for which it is an owner/operator”

RWLS

Staff Interpretation of CFR 40 §122.26(a)(3)(vi.)	What the Reg. Actually Says
<ul style="list-style-type: none"> A permittee is only responsible for discharges of stormwater and non-storm from the MS4 for which it is an owner/operator 	<ul style="list-style-type: none"> Co-permittees need only comply with permit conditions relating to discharges from the municipal separate storm sewers (MS4) for which they are operators.
<p>Difference Between Interpretation and Actual Regulation</p>	
<ul style="list-style-type: none"> Makes a permittee or co-permittee) both an operator and owner Makes a permittee responsible for all discharges from and to the MS4 (a more expansive and broad requirement because it would make permittees responsible for all discharges over including those it has no control (e.g., school districts) 	<ul style="list-style-type: none"> Permittee is only an operator (you can be an operator of MS4 component but not always an owner) Permittee need only comply with permit conditions (limits it to discharges over which it has control) Permit need only comply with discharges from the MS4 (means stormwater not non-stormwater discharges)

RWLs

➤ Nuisance Language

- Recommendation: Delete reference to staff's interpretation of CFR 40 §122.26(a)(3)(vi)
 - Will eliminate “regulatory creep” and make it unnecessary to challenge it later

RWLs

- Staff Proposed RWL Language Change
 - Existing Language: *Discharges from the MS4 that cause or contribute to the violation of **Water Quality Standards or water quality objectives** (includes TMDL/WLAs) are prohibited.*
 - Proposed Language: *Discharges from the MS4 that cause or contribute to the violation **of a receiving water limitation** are prohibited.*
 - Defines RWL (as a footnote) *any applicable numeric or narrative water quality standard, or limitation to **implement** the applicable water quality standard, for the receiving water as contained in the water quality control plan for the Los Angeles Region (Basin Plan), water quality **control plans, or policies approved by the State Water Resources Control Board**, or federal regulations, including but not limited 40 CFR 131.38.*

RWLs

- Staff Proposed RWL Language Change
 - What's the big deal?
 - All NPDES permits are about complying with water quality standards that are necessary to protect a beneficial use of a receiving water
 - Water quality standards (including TMDLs) are part of the L.A. basin plan (if you comply with standards you comply with the plan)
 - Referencing State Board plans and policies are not necessary because the L.A. Board is only obligated to comply with L.A. Basin Plan requirements that are approved by the State Board
 - For example: State policies such as the anti-degradation is *a key element of California's water quality standards* are already in the L.A. Basin plan

RWLs

- Staff Proposed RWL Language Change
 - What's the big deal? -- continued
 - Including federal regulations including 40 CFR §131.38 (the California Toxics Rule) is also superfluous because the TMDLs that were developed in response to the rule are incorporated in the basin plan
 - Staff is trying to fix something that is not broken
 - The fix would require permittees to revamp their stormwater ordinances unnecessarily
 - And the fix would only create confusion and make it difficult for permittees to enforce water quality standards against those dischargers over which they have control (e.g., because the new compliance standard is over-broad)

RWLs

- Staff Proposed RWL Language Change
 - Recommendation:
 - Don't fix it
 - Use the RWL language developed by the San Diego Regional Board

RWLs

➤ Maximum Extent Practicable Missing

- MEP must be in all MS4 permits
- *Pursuant to CWA section 402(a)(2), NPDES permits must prescribe conditions to assure compliance with CWA section 402(p)(3)(B) and 40 CFR 122.26(d)(2)(iv)(B). This Order prescribes conditions to assure compliance with the CWA requirements for owners and operators of MS4s to effectively prohibit non-storm water discharges **in to the MS4s** and require controls to reduce the discharge of pollutants in storm water from the MS4s to **MEP***

RWLS

➤ Maximum Extent Practicable Missing (continued)

- Use Phase II USEPA Permit Definition of MEP

*The MEP standard is an ever-evolving, flexible, and advancing concept, which considers technical and **economic feasibility**. BMP development is a dynamic process and may require changes over time as the Permittees gain experience and/or the state of the science and art progresses.*

*MEP is the cumulative result of implementing, evaluating, and creating corresponding changes to a variety of technically appropriate and economically feasible BMPs, ensuring that the most appropriate BMPs are implemented in the most effective manner. This process of implementing, evaluating, revising, or adding new BMPs is commonly referred to as the **“iterative approach.”***

RWLs

- Iterative Process is also missing
 - State Water Resources Control Board requires inclusion of iterative Process in MS4 permits (State Board Order 2001-15):
 - *we will generally not require ‘strict compliance’ with water quality standards through numeric effluent limitations,” and instead “we will continue to follow an iterative approach, which seeks compliance over time” with water quality standards*

RWLS

➤ Recommendations

- Use existing RWLS in current permit and
- Add MEP (preferably from the Phase II MS4 permit)
- Add iterative process using South Orange County MS4 permit as a model

Watershed Management Program

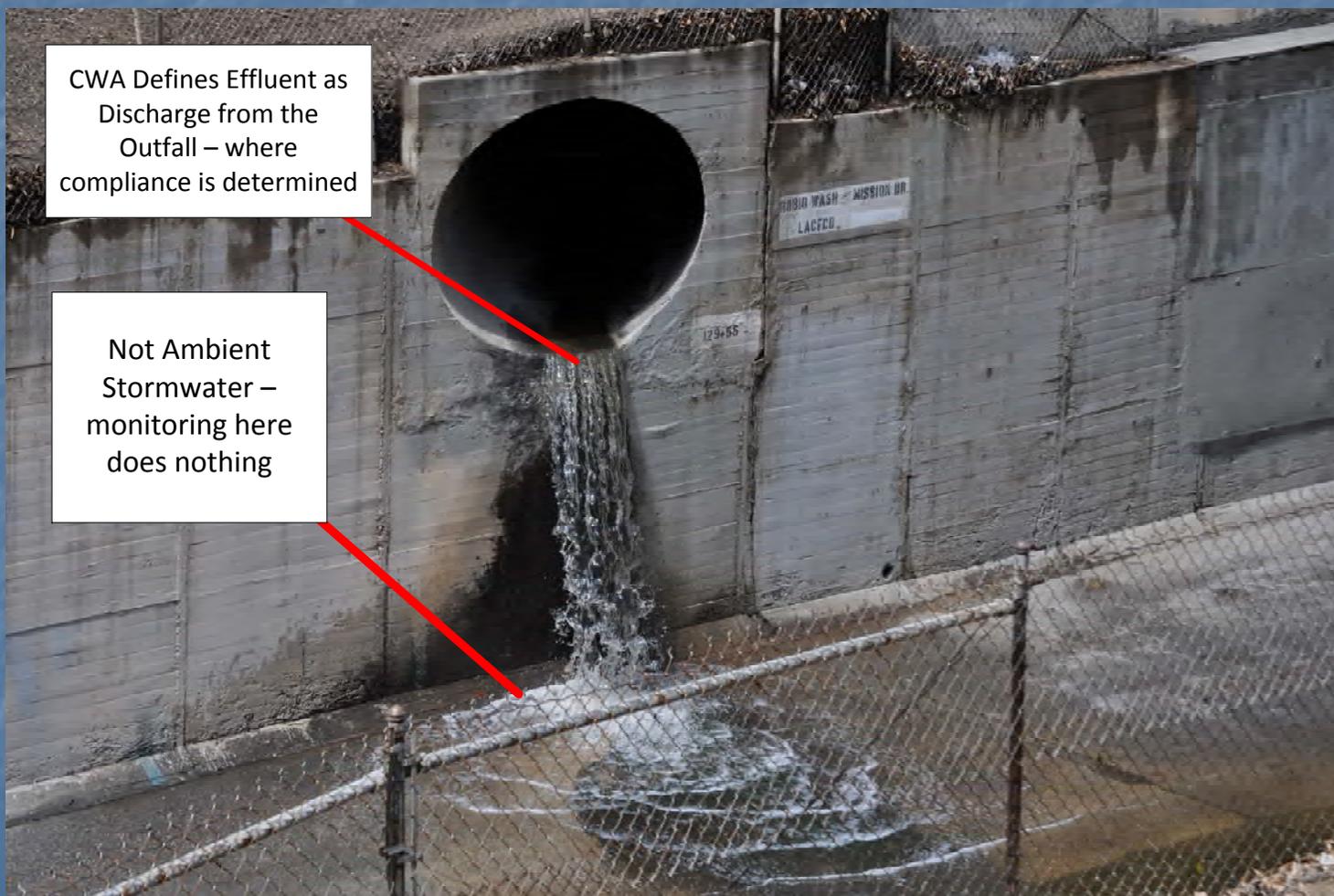
Watershed Management Plan

➤ WMP Is Unjustifiably Stringent

- Staff proposes a watershed management plan that permittees must implement or, in the alternative, implement minimum control measures (discussed at the last workshop)
- This becomes a matter of picking your poison because both require compliance with numeric limitations on pollutants – which if not met could place the permittee into a state of non-compliance
- But federal regulations do not authorize the use of strict numeric limitations as proposed by staff
- State Board is not in favor of numeric limitations – just mentioned
- We know of no other permit adopted by other Regional Boards in the State that require such stringent permit conditions
- Even if federal regulations sanctioned their use it would be premature to impose them because (1) there has been **no effluent monitoring** at the outfall or (2) **true ambient monitoring** in the receiving water before or after a storm event

Watershed Management Plan

➤ WMP Is Unjustifiably Stringent - continued



Watershed Management Plan

- Issues - continued
 - You can't develop a watershed management plan (which is due six months after the permit's adoption) without outfall and ambient data
 - WMP also requires prioritizing water quality issues – how do you do this, what criteria do you use to set high, medium and low priorities (this will require guidance documents)?
 - WMP requires developing interim milestones towards addressing priorities – what criteria do you use to determine milestones relative to priorities?

Watershed Management Plan



Ambient Receiving
Water Condition
(RB bases ambient on
48 hours after a storm)
This is when ambient
monitoring is supposed
to be done

Watershed Management Plan

➤ Issues - continued

- WMP provides for an **adaptive management** procedure that is not explained (is this supposed to be a replacement for the **iterative process** that is required by the State Water Resources Control Board?)
- WMP for measurable and demonstrable reductions of illicit discharges to the MS4 (federal regulations only require prohibiting illicit discharges from the MS4 or requiring discharges to obtain coverage under a separate NPDES permit)
- Not enough time to find the *devil in the details*

TMDL Compliance

TMDL Compliance

- TMDL Issues
 - Staff interprets TMDLs to be the same as WLAs (e.g., the WLA for copper is the WQBEL permittees must be comply with: 17 micrograms per liter)
 - A WQBEL is a type of WLA but when applied to effluent discharged from the outfall it must be adjusted
 - In other words a WQBEL and WLA can't be the same

TMDL Compliance

➤ Issues

- Federal regulations and USEPA guidance -- WQBELs express WLAs either as BMPs or **numeric effluent limitations**
- The **BMP WQBEL** type achieves compliance with the WLA if it is implemented fully and in a timely manner – even if the WLA is exceeded at the outfall
- Why? – Because other sources besides municipal permittees discharge from an outfall (public education facilities, state and federal facilities, permitted construction sites, and permitted and un-permitted industrial facilities, various general NPDES permits)

TMDL Compliance

➤ Issues – continued

- A numeric limitation WQBEL may be used but federal regulations require a procedure for determining if it is needed which involves asking: (1) has the discharge caused or contributed to an excursion above a water quality standard (need outfall and ambient monitoring data) been done?; and (2) has modeling been done to take into account the affect of dilution on the effluent discharges to the receiving water? (from NPDES Writers Manual)
- The answer is NO because stormwater (unlike sewage discharges) is more complicated and a reasonable potential analysis is labor intensive; this is why USEPA has said repeatedly *that only rarely will numeric limitation WQBELs will be used*

TMDL Compliance

*EPA's policy recognizes that because storm water discharges are due to storm events that are **highly variable in frequency and duration and are not easily characterized**, only in rare cases will it be feasible or appropriate to establish numeric limits for municipal and small construction storm water discharges. The variability in the system and minimal data generally available make it difficult to determine with precision or certainty actual and projected loadings for individual dischargers or groups of dischargers. **Therefore, EPA believes that in these situations, permit limitations typically can be expressed as BMPs**, and that numeric limits will be used only in rare instances. (From 2002 USEPA Guidance Memo on TMDLs)*

TSOs and TMDL Compliance

- Staff proposes to Comply with USEPA and State adopted TMDLs through a time schedule order (TSO)
 - Several TMDLs contain compliance schedules which if placed into the MS4 Permit would put permittees into an instant state of non-compliance (e.g., permittees subject to the LA River metals TMDL would be out of compliance based on recent metals monitoring data)
 - USEPA TMDLs adopted in March could also place permittees in non-compliance with their WLA requirements
 - Staff proposes to prevent permittees from being in violation with the TMDLs by using TSO to provide additional time for compliance

TSOs and TMDL Compliance

- Problem: A Time Schedule Order is an enforcement action under Porter-Cologne (the State's water code)

CHAPTER 5. ENFORCEMENT AND IMPLEMENTATION

ARTICLE 1. ADMINISTRATIVE ENFORCEMENT AND REMEDIES BY REGIONAL BOARDS

§ 13300. Time schedules

Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.

TSOs and TMDL Compliance

- TSO is Not Warranted and Unnecessary
 - It is essentially an enforcement action
 - Not justified because a TMDL WLA violation must first occur
 - A violation can only occur if (1) the TMDL is placed into the permit; (2) an exceedance at the outfall (not the receiving water) is detected; and (3) the numeric WQBEL to determine compliance has been set (has not because a reasonable potential analysis has not been done to validate if the permittee's effluent discharge at the outfall has caused an exceedance of an ambient WQS in the receiving water)
 - Compliance therefore need only be achieved by the implementation of appropriate WQBELs that translate the WLAs into BMPs
 - BMPs can be proposed in the stormwater quality management plan for implementation after the permit's adoption

WQBELS and TMDLs

- Stormwater NPDES Permit Requires Compliance with WQS and TMDLs
 - Achieved through BMP or Numeric WQBELS
 - Compliance with MS4 WQS/TMDL WLAs THROUGH WQBELS must be at the outfall and only the outfall – NOT IN THE RECEIVING WATER
 - Federal regulations compel expressing a TMDL WLA (and any other WQS) as a **water quality based effluent limitation (WQBEL)**
 - According to federal regulations "effluent limitation" *means any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from **point sources** into navigable waters (waters of the U.S. which also means receiving waters) (CWA, Section 502)*
 - And, 40 CFR 122.26 specifies the **outfall** as a **point source** for municipal discharges – but again there's been no outfall monitoring

WQBELs and TMDL Compliance

- Even sewage treatment plants have WQBELs (actually they were the first type of NPDES discharger to be subject to WQBELs
 - The NPDES permit for the Hyperion sewage treatment plant has effluent limitations that are monitored for compliance upstream of its outfall (actually from a sampling point within the Hyperion Plant)
 - No compliance monitoring is required in the receiving water
 - The RB's sewage NPDES folks can validate this

USEPA TMDL Compliance

- Staff proposes to include USEPA adopted TMDLs into permit
 - Problem: there has been no discussion of the TMDLs before or after USEPA adopted them
 - There has been no opportunity for review and comment by permittees
 - Permittees have not provided input on how USEPA TMDL WLAs are to be translated into WQBELs
 - Another workshop to explain this and USEPA adopted TMDLs

USEPA and RB TMDL Compliance

➤ Solution:

- Do not incorporate these TMDLs into the permit; instead append them to the permit
- The permit can translate all of the TMDLs into WQBELs that would be met by a continuation of the permittees Storm Water Quality Management Plan's
- This would provide time to figure-out how best to comply with the last minute TMDLs – specifically how to structure specific WQBELs
- Discussion could take place within one year after the permit's adoption and new WQBELs could be placed into the permit through the iterative process – there would be no need to re-open the permit

Trash TMDL Compliance

- Staff proposes Minimum Frequency of Assessment and Collection Approach to Comply with Other Adopted Trash TMDLs
 - Problem: This is a new TMDL compliance approach for trash that has not been explained
 - This is the first time permittees have seen it
 - Why is it needed?
 - How does it differ with other trash TMDLs?
 - Seems to require trash clean-up outside of the MS4 (this is not authorized under federal regulations)
 - Will it also require trash debris excluders?
 - Do not contemplate inclusion into permit until it has been presented by staff for review and comment

Trash TMDL Compliance

- Los Angeles River trash TMDL has not been expressed as a WQBEL
 - Was adopted in 2001, prior to USEPA's TMDL guidance memoranda on WQBELs
 - Needs to go undergo a bona fide WQBEL setting process (because it would be impossible to install screens in all county and city catch basins unless the stormwater quality fee initiative succeeds)
 - Seems to require trash clean-up outside of the MS4 (this is not authorized under federal regulations)
 - Will it also require trash debris excluders?
 - Staff needs another workshop(s) to explain this and USEPA adopted TMDLs

TMDL Compliance

- Proposed placement of Middle Santa River Regional Board Bacteria into Next MS4 Permit
 - Adopted by the Santa Ana Regional Board
 - TMDL affects the cities of Claremont and Pomona
 - Staff did not discuss this with affected cities
 - Legality is in question -- can the RB impose a TMDL adopted by another RB jurisdiction?
 - Has staff proposed to the Santa Ana Regional Board that it comply with the Coyote Creek metals TMDL for the San Gabriel River?

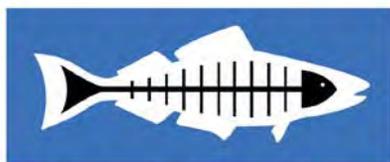
END OF PRESENTATION

Thanks

One Last Thing

- Cities of El Monte and South El Monte would like the Regional Board to convene a workshop at the City of South El Monte on the 3rd or 4th Friday in June
- Included is a tour of segments of Reach 2 of the Rio Hondo
 - See what an outfall is
 - See a soft and hard bottomed segment of the river
 - See the Rio Hondo spreading ground (used for groundwater recharge)
 - Good for the next board members get a sense of “context” of what we have been talking about relative to the development of the new MS4 permit and TMDLs
- Enviro-NGOs should also attend to see that these cities – as many others – are not for “dirty water” or for a permit that is going to moon-walk on water quality

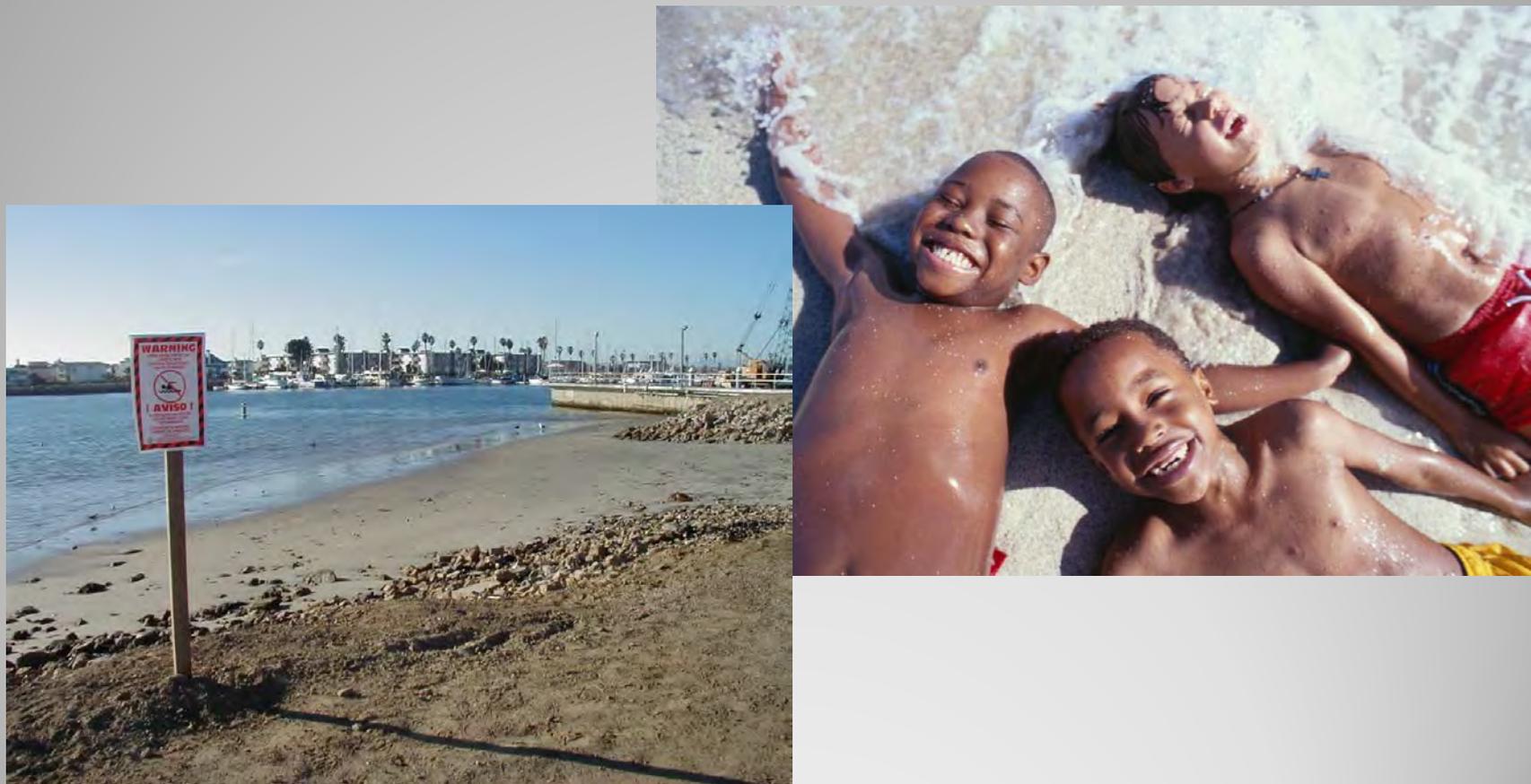
Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit Renewal



Heal the Bay



Goal: Protect Human Health



Beneficial Use: Water Contact Recreation

Santa Monica Bay Epi Study

- First epidemiological study on swimmers in urban- runoff contaminated waters
- Designed to answer two questions:
 - Is distance of swimming from storm drain associated with risk of adverse health outcomes?
 - Do bacteria indicators predict risk of adverse health outcomes?

Major Findings of the Epi Study

- Correlation between incidence of adverse health effects (gastroenteritis and upper respiratory infections) and swimming in water with high indicator densities
- Those who swam in front of flowing drain are twice as likely to get sick than those 400 yards away

Demographic Breakdown

Of the people surveyed:

At the drain (polluted)

60% Latino

33% Caucasian

Within 50 yards of the drain (??)

47% Latino

41% Caucasian

400 yards away (clean)

39% Latino

49% Caucasian

Goal: Protect Aquatic Life



Photo: Whale Rescue Team

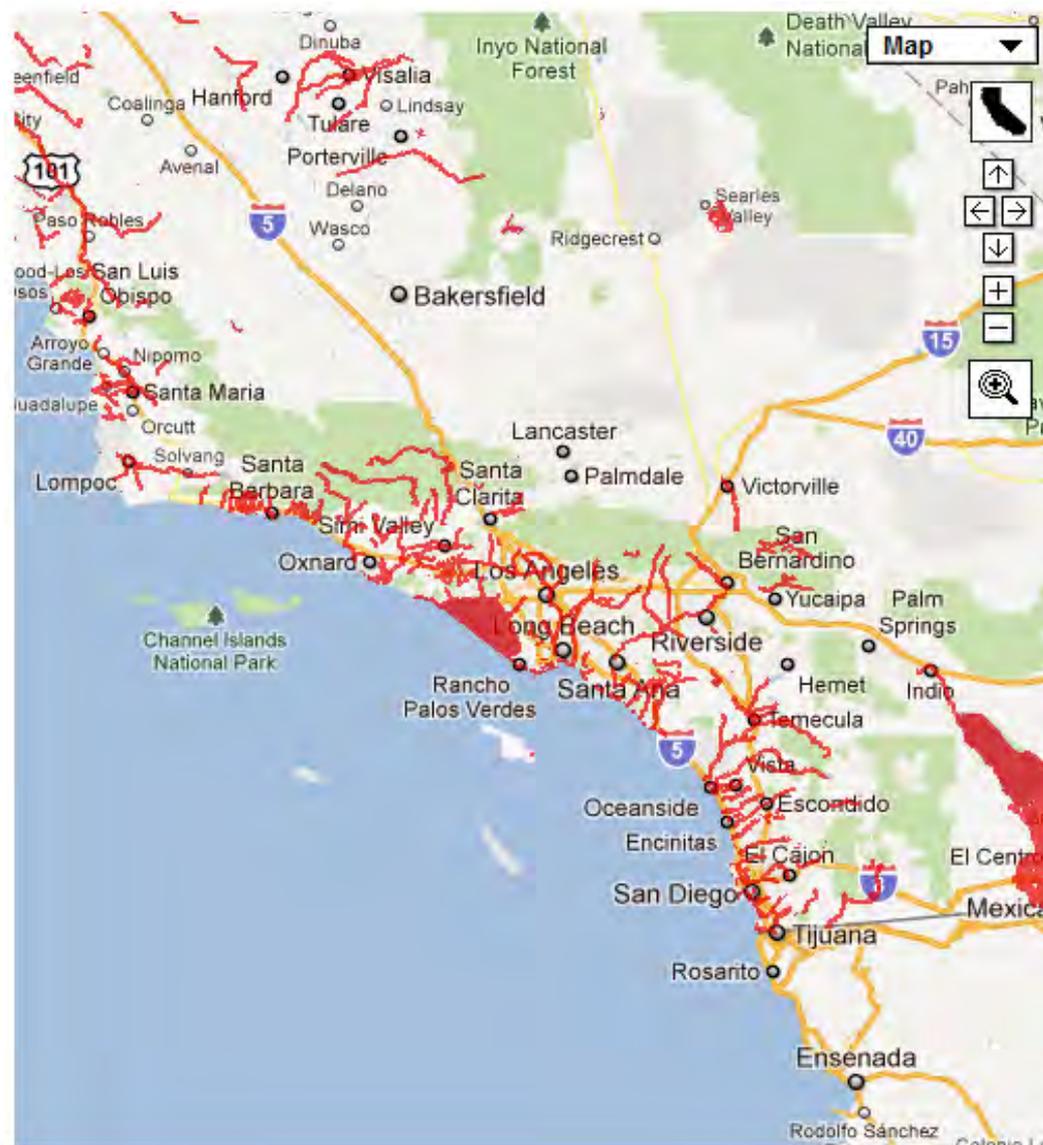
Beneficial Uses: Marine Habitat and Wildlife Habitat

Goal: Protect Public Health



Beneficial Use: Commercial and Sport Fishing

2010 303(d) List (Impaired Uses)



EPA and LA Water Board Set Strict New Pollution Reduction Plans for 175 Waterways in Los Angeles Area

Action Culminates 13 Year Effort, Eliminating Beach Closures, Reducing Trash and Toxic Chemicals in Waters

LOS ANGELES – The U.S. Environmental Protection Agency and the Los Angeles Regional Water Quality Control Board today announced the latest in a series of pollution reduction plans designed to restore 175 water bodies in Los Angeles and Ventura Counties. The pollution targets set by these plans will improve water quality, restore ecosystems, and protect the public by eliminating beach closures due to bacteria and improving the health of fish used for consumption....

Types of TMDLs Adopted

- Ballona Creek (Metals, Bacteria, Toxics, Trash, Bacteria)
- Colorado Lagoon (Pesticides, PAHs, PCBs, Metals, etc.)
- Machado Lake (Toxics, Nutrients, Trash)
- Lakes Legg, Elizabeth, Munz, Hughes (Trash)
- Los Angeles Harbor (Bacteria, Toxics)
- Los Angeles River (Metals, Trash, Nitrogen, Bacteria)
- Malibu Creek (Trash)
- Marina del Rey (Bacteria, Toxics)
- Santa Clara River (Bacteria, Nitrogen)
- Santa Monica Bay (Bacteria, Debris)

Types of TMDLs Adopted

- Ballona Creek (Metals, Bacteria, Toxics, Trash, Bacteria)
- Colorado Lagoon (Pesticides, PAHs, PCBs, Metals, etc.)
- Machado Lake (Toxics, Nutrients, Trash)
- Lakes Legg, Elizabeth, Munz, Hughes (Trash)
- Los Angeles Harbor (Bacteria, Toxics)
- Los Angeles River (Metals, Trash, Nitrogen, Bacteria)
- Malibu Creek (Trash)
- Marina del Rey (Bacteria, Toxics)
- Santa Clara River (Bacteria, Nitrogen)
- Santa Monica Bay Bacteria

Beach Bacteria TMDL Timeline

2001

- Current Los Angeles County MS4 Permit Adopted

2003

- Jul 15- Santa Monica Bay Beaches TMDLs take effect: The first bacteria TMDLs in California

2006

- Jul 15- LA beaches mandated to meet Summer dry-weather TMDL
- Sep 14- language of SM Bay Bacteria TMDL incorporated into LA MS4 Permit
- County petitioned to hold permit in abeyance
- 5-year permit term is up
- 181 TMDL Violations

2007

- Aug 9- LA MS4 Permit Reopened to include Marina Del Rey summer dry weather TMDL
- 533 TMDL Violations

Beach Bacteria TMDL Timeline

2008

- 663 TMDL Violations
- LA Regional Board sends NOV's to 20 cities
- County took revised MS4 permit out of abeyance for State Board review

2009

- 587 TMDL Violations
- By July 15, LA Beaches must meet 3 max allowable violations during winter dry period
- Aug 4- state Board upheld Regional Board's order and denied the County's Petition
- Regional Board sends second round NOV letters to 20 cities

2010

- 526 TMDL Violations
- Adopted Ventura MS4 Permit includes all applicable TMDL limits and requirements, along with year-round monitoring at 10 beaches
- CA Superior Court set aside MS4 incorporating TMDLs due to attorney error

2011

- 879 TMDL Violations
- Mar 14- Bacteria TMDLs removed from municipal stormwater permit
- Regional Board agrees to put TMDLs back into permit by next beach season

2012

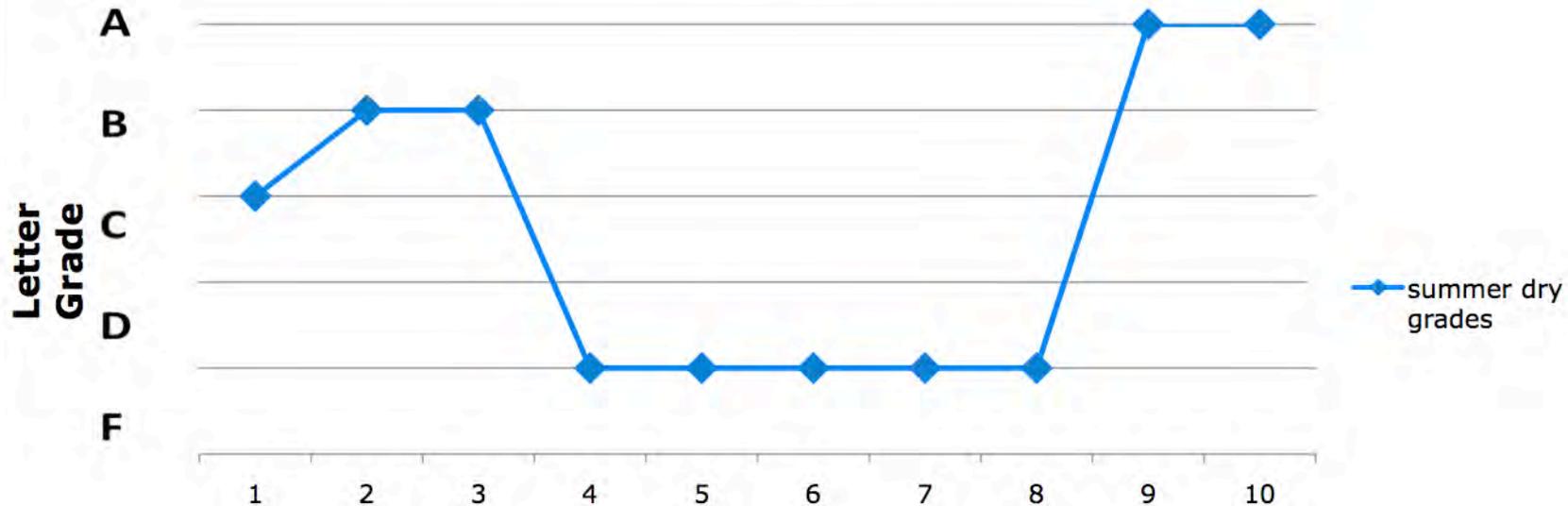
- June- Bacteria TMDL Reopener
- Sept- LA MS4 Permit Renewal

Efforts



Efforts

**Santa Monica Pier- Annual Grades
2003-2012**



Bacteria TMDL exceedances (Santa Monica Bay and Marina del Rey)

2006*	2007**	2008	2009	2010	2011	Total
181	533	663	587	526	879	3369

* Santa Monica Bay Bacteria TMDL effective date (9-14-06)

** Marina del Rey Bacteria TMDL effective date (8-9-07)

Regional Board TMDLs – Past Due

TMDLs	Effective Date	Compliance Deadlines	Beneficial Uses
LA Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)	March 10, 2005	March 10, 2010 (wet, winter and summer dry weather)	REC1
LA River Nutrient TMDL	March 23, 2004	March 23, 2004	REC1, REC 2 and aquatic habitat (warm, freshwater and wildlife) among others
Malibu Creek Bacteria TMDL	January 24, 2006	January 24, 2009 (summer dry weather) January 24, 2012 (winter dry weather)	REC1
Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL	March 18, 2004	March 18, 2007 (summer dry and winter dry weather)	REC1
Santa Clara River Nutrients TMDL	March 23, 2004	March 23, 2004	REC1, REC 2 and aquatic habitat (warm, freshwater and wildlife) among others
Santa Monica Bay Beaches Bacteria TMDL	July 15, 2003	July 15, 2006 (summer dry weather) July 15, 2009 (winter dry weather)	REC1

Regional Board TMDLs – Past Due

TMDLs	Effective Date	Compliance Deadlines	Beneficial Uses
Santa Monica Bay Beaches Bacteria TMDL	July 15, 2003	July 15, 2006 (summer dry weather) July 15, 2009 (winter dry weather)	REC1

Public Health Cannot Wait Another Decade



EPA TMDLs – Past Due

TMDLs	Effective Date	Beneficial Uses
Santa Clara River, Reach 3 <i>Chloride</i>	June 18, 2003	Agricultural Supply and Groundwater Recharge; Municipal Supply and Aquatic Habitat
Malibu Creek <i>Nutrient</i> TMDL	March 21, 2003	REC1; REC2; aquatic habitat
San Gabriel River <i>Metals and Selenium</i>	March 26, 2007	Aquatic life; and water supply

VENTURA COUNTY MS4

“This Order incorporates applicable WLAs that have been adopted by the Regional Water Board and have been approved by the OAL and the U.S.EPA.”

“Part 5 of this Order incorporates provisions to assure that Ventura County MS4 Permittees comply with WLAs and other requirements of TMDLs....”

“Each Permittee shall attain the stormwater WLAs incorporated into this Order...”

-Order No. R4-2010-0108, pages 14 & 88

TMDL Provisions Must Comply with State & Federal Regulations

- Consistent with the assumptions and requirements of any available waste load allocation (40 C.F.R. 122.44(d)(1)(vii)(B))
- Compliance schedule requirements (40 C.F.R. 122.47(a))
- California Toxics Rule deadlines
- Consistent with state policies and regulations

Receiving Water Limitations

- Discharge Prohibitions/Receiving Water Limitations – Leave As Is
 - Successful provisions legally upheld over time
 - State Court
 - Federal Court
 - Required by CWA § § 1313, 1342(p); 40 C.F.R. § 122.44(d)(1)
 - Consistent with Regional Board's longstanding position

Watershed Management Programs

33 U.S.C. 1342(p)(3)(B)(iii)

“[Municipal Permits] shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants”

Watershed Management Programs

Environmental Defense Center Inc. v. U.S. E.P.A.

“[S]tormwater management programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity . . . Congress identified public participation rights as a critical means of advancing the goals of the Clean Water act”

344 F.3d 832, 854-56 (9th Cir. 2003)

MS4 Permits - LID Standards

~~North Orange County~~ Permitt

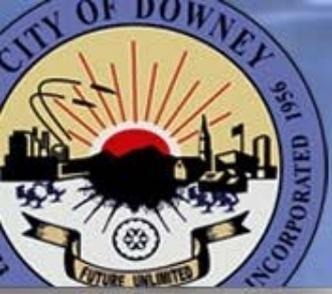
The permittees shall reflect in the WQMP and otherwise require that each LID BMPs shall be sized and designed to ensure onsite retention without runoff, of the volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the County of Orange's 85th Percentile Precipitation Map¹⁴ ("design capture volume");
percent or less of the total project area.

City of Downey



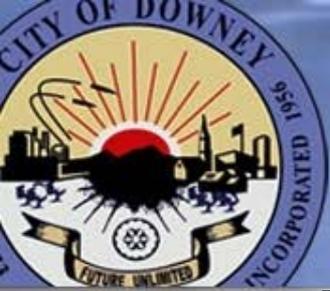
Comments on General TMDL Provisions

May 3, 2012



Background

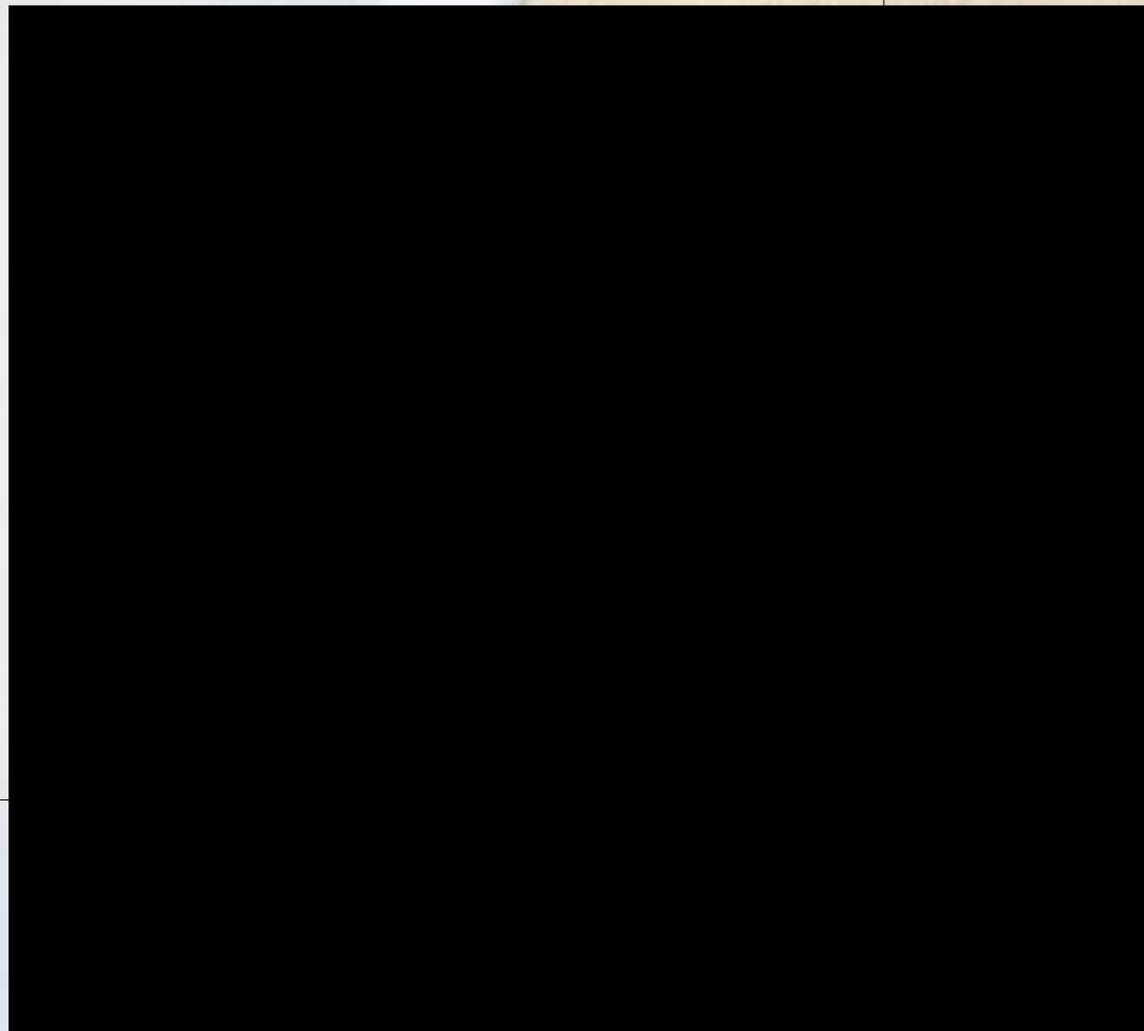
The City of Downey has over 1,000 parcels with Low Impact Development (LID) systems implemented.

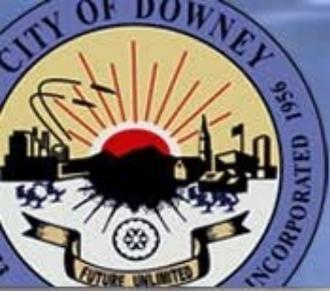


N/W Quadrant of the City

- **Green dot = LID**

Each green dot represents one LID system.

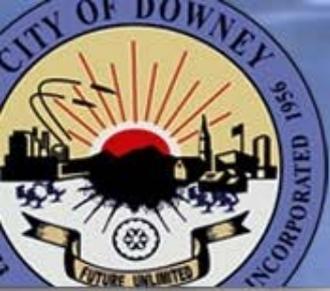




What do these LID devices look like?



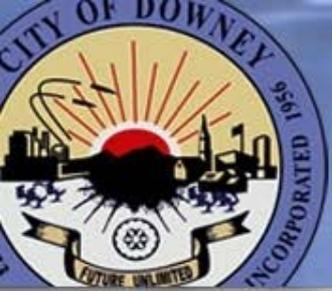
Treats 60 Acres



What do these LID devices look like?

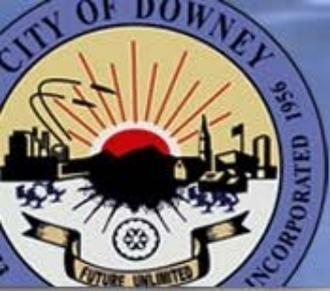


Steve Horn Way



Our Comments

1. Generally, we support the Board's staff efforts for a (sub) watershed plan. This allows efforts to be tailored to individual situations.



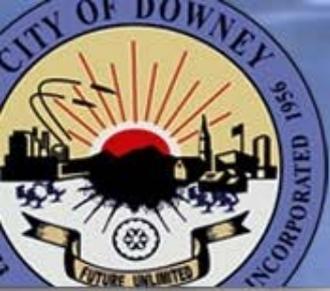
Our Comments

2. Grouped effluent limitations¹

Downey can support grouped implementation efforts, but cannot support non-voluntary grouped compliance.

(Please do not force unwillingly permittees to work together)

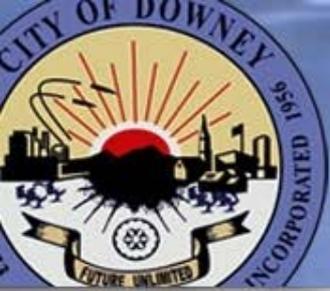
¹ Example: San Gabriel River Watershed Management Area (E1.C)



Our Comments

- 3a. Water quality based effluent limitations should be based on BMPs.
- 3b. Load based allocations (grams/day) should be available to permittees, not just concentrations (grams/day/liter).

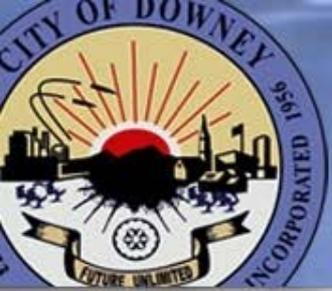
Example: SGR Reach 1 for copper.



Our Comments

4a. A need for a realistic compliance target.

Downey installed nearly 400 full capture catch basin inserts (89%). The remaining 11% could not be retrofitted due to physical limitations.



Our Comments

4b. Even after 1,000 parcels with LID and 89% of the City's catch basins with full capture catch basin inserts installed we still have "zero" as the effluent limit.

What else can we do?

May 3 MS4workshop

0001

1 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
2 LOS ANGELES REGION
3 CHARLES M. STRINGER, VICE CHAIRPERSON
4
5

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

8

9

10

11

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14

15 TRANSCRIPT OF PROCEEDINGS
16 Los Angeles, California
17 Thursday, May 3, 2012
18
19

20 Reported by:
21 DANA D. FORBES,
22 CSR No. 8095
-and-
23 KATRINA WOYJECK,
24 CSR No. 13603

Job No.:
B8234WQLA

0002

1 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
2 LOS ANGELES REGION
3 CHARLES M. STRINGER, VICE CHAIRPERSON
4
5

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

8

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11

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15 TRANSCRIPT OF PROCEEDINGS, taken at
16 700 Exposition Park Drive, Los Angeles,
17 California, commencing at 9:00 a.m.
18 on Thursday, May 8, 2012, heard before the
19 LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD,
20 reported by DANA D. FORBES, CSR No. 8095,
21 and KATRINA WOYJECK, CSR No. 13603,
22 Certified Shorthand Reporters in and for
23 the State of California.
24
25

0003

1 APPEARANCES:

2

3

VICE CHAIR: Charles M. Stringer
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4 BOARD MEMBERS: May 3 MS4workshop
 Madelyn Glickfield
 5 Maria Camacho
 Francine Diamond
 6 Irma Munoz
 Mary Ann Lutz
 Maria Camacho
 7 Larry Yee
 8 EXECUTIVE OFFICER: Samuel Unger
 BOARD STAFF: Jennifer Fordyce
 9 Frances McChesney
 Deborah Smith
 10 Ronji Moffett
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0007

1 Los Angeles, California, Thursday, May 3, 2012
2 9:00 a.m.
3
4
5 MR. STRINGER: Good morning everybody. Welcome to
6 the Los Angeles Water Quality Regional Control Board.
Page 3

May 3 MS4workshop

7 We're going to get started now. We have one board
8 member that's running a little late. He's taking public
9 transportation. I think we'll get going now. We have a
10 full agenda, and we'd like to have enough time for
11 comprehensive discussion during our workshop today.

12 We typically start with the pledge of allegiance.
13 But given that there's no flag here, I think we'll skip
14 past that one. I don't want anyone to get the wrong
15 idea. This is my first time chairing a Board and
16 probably the first time we haven't done the pledge.
17 There's no correlation. We'll start with the role call.
18 Ronji?

19 MS. MOFFETT: Ms. Camacho?

20 MS. CAMACHO: Present.

21 MS. MOFFETT: Ms. Diamond?

22 MS. DIAMOND: Present.

23 MS. MOFFETT: Ms. Glickfield?

24 MS. GLICKFIELD: Present.

25 MS. MOFFETT: Ms. Lutz?

0008

1 MS. LUTZ: Present.

2 MS. MOFFETT: Ms. Mehranian? Ms. Munoz?

3 MS. MUNOZ: Present.

4 MS. MOFFETT: Mr. Stringer?

5 MR. STRINGER: Here.

6 MS. MOFFETT: Mr. Yee?

7 MR. STRINGER: Sam?

8 MR. UNGER: The agenda is as posted. I would just
9 like to make some clarifications that we will do the
10 full item four, both ex-parte and other board member
11 reporting in order. That is this morning. We'll also
12 do the executive officer report this morning, and public
13 forum will also be this morning. And so that is the
14 order we'll be going now without the previously noted
15 changes to that agenda.

16 MR. STRINGER: Great. Thank you. The next item on
17 the agenda is the approval of minutes from our last
18 meeting. Do we have a motion?

19 MS. CAMACHO: Yes.

20 MR. STRINGER: And I will be abstaining. All those
21 in favor?

22 MS. LUTZ: Aye.

23 MS. MUNOZ: Aye.

24 MS. GLICKFIELD: Aye.

25 MS. DIAMOND: Aye.

0009

1 MR. STRINGER: And one abstention, for the record.
2 Board member communications. We'll start with you,
3 Maria.

4 MS. CAMACHO: I have none.

5 MS. DIAMOND: I just wanted to report that a couple
6 of weeks ago I had the privilege of meeting the U.S.
7 Administrative for the U.S. EPA, Lisa Jackson, and had a
8 few moments to speak with her. And she told me that
9 she's encouraging about the upcoming stormwater permit,
10 and she talked a lot about the Clean Water Act. It was
11 very inspirational.

12 I just encourage everybody who has a chance to ever
13 listen to her speak. She kind of reminds you why we all
14 are involved with water quality and how important it is.
15 So I just wanted to report that because I was, even
16 after all these years, inspired once again.

17 MR. STRINGER: Thank you.

May 3 MS4workshop

18 MS. GLICKFIELD: I have nothing to report.

19 MS. MUNOZ: I took a tour of the Santa Susanna
20 plant with representatives last week. It was quite
21 amazing tour and very promising.

22 MS. LUTZ: Hi. Good morning. In my other hat as
23 the mayor of the City of Monrovia, I attended the
24 mayor's water council which is a committee of the U.S.
25 conference of mayors in Indianapolis last month and it

0010

1 was a fascinating conversation about water quality and
2 storm water, and we had several representatives from
3 U.S. EPA.

4 We also had a representative from the Office of the
5 President with us, and I'm going to pass out a directive
6 to my colleagues and I have some for our city staff as
7 well from the Office of the President regarding
8 regulatory water, air quality and the issue of the
9 emphasis and looking at the prospectives regarding the
10 economic basis of the regulations. So it was a very
11 informative document, and I thought it would be
12 something that everybody here could use; so I have many
13 copies. This is for our staff. Thank you.

14 MS. CAMACHO: I apologize. I did too attend -- I
15 don't think I've had enough coffee this morning. I did
16 attend, along with my colleague Irma Munoz, the Santa
17 Susanna tour. I did kind of a separate tour because I
18 literally was there for 30 minutes; so I quickly zipped
19 around. It was quite interesting to see the work being
20 done there. So I did attend that as well.

21 MR. STRINGER: And nothing for me. That's it?
22 Thank you. So, Sam, EO report.

23 MR. UNGER: Good morning, Vice Chair Stringer,
24 members of the Regional Board. I want to provide a
25 brief EO report on some matters that I usually report

0011

1 out on and a couple other items as well; so I'll start
2 with our two largest clean up sites.

3 First, the Kast site at the Carousel neighborhood
4 in Carson. And as I reported to you last month, field
5 work at the Kast site has started up again. We are
6 focused really on two areas of investigation. One is to
7 continue the work on the indoor air assessment. I
8 reported that the low percentage of homes have been
9 tested for indoor air, and the other is to evaluate
10 remediation technologies that could be used at the site.

11 On the indoor air testing, Shell's contractors are
12 testing four homes per week now through September, and
13 the initial results from these tests is that the air
14 quality is equivalent to outdoor air quality and so at
15 this point the results show that the indoor air quality
16 is -- there's no measurable vapor intrusion from the
17 subsurface.

18 On the remediation front there have been several
19 lab scale tests and field tests for both technologies
20 and different excavation techniques. We are working
21 closely with the City of Carson on excavation permits
22 and siting and mitigation of equipment that will be
23 sited in the neighborhood to mitigate noise impacts and
24 other impacts that may disturb the residents. We are
25 hoping to have this work evaluated later this year, and

0012

1 then we'll be formulating plans for the full scale
2 cleanup.

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3 On the former Athens tank farm otherwise known as
4 the Ujima site, as you know, the investigation is
5 ongoing and we are focussing our attention on several
6 areas. First, the off site investigation as I reported
7 -- well, first, the off site investigation and we're
8 also looking at the SV pilot test and relocation of the
9 day care center.

10 Regarding the off site investigation, as I reported
11 last month, the data showed that the vapor plume has
12 migrated to the east of the regional park and beneath
13 the residential neighborhood with depths of hydrocarbon
14 at about 35 feet below grade at highest concentrations.
15 Consequently, we have ordered the human health screening
16 analysis and work plan which was approved by us last
17 month.

18 We're hoping to get access agreements so that Exxon
19 and the contractor can go into either the homes or the
20 crawl spaces beneath the homes -- these homes are not
21 built on slabs as they are in the Carousel neighborhood
22 -- to conduct specific testing at those homes.

23 In terms of the day care relocation, I'm actually
24 pleased to report to you that there's been an exchange
25 of letters between the county and Exxon-Mobil in general

0013

1 agreement to day care relocation. At this point, in
2 fact, the Exxon letter was just sent earlier this week,
3 and the next step is for the county and Exxon to meet
4 and develop a schedule and any other formalized plans.
5 So I'm hoping next month I'll be able to report back to
6 you on further developments there. We intend to stay in
7 a facilitation role, and both parties have recognized
8 the role of the Board is finally bringing the two
9 parties together to work on the relocation of the day
10 care center.

11 Finally, staff is preparing for a community meeting
12 on May 16 at Enterprise Park. It will be held in the
13 evening between 6:00 and 8:00. We are working with
14 State Board, Cal EPA, and the county to have
15 presentations and a presence there. We're looking for
16 facilitation assistance from Cal EPA, and we are now
17 developing fact sheets for that which will be translated
18 into Spanish as well.

19 And, finally, before I leave this, just to remind
20 you that board member Glickfield requested last month
21 that we initiate an investigation to try to identify old
22 tank farms that might be in the region that we haven't
23 yet found.

24 I want to report to you that that effort is under
25 way. Paula has taken the lead on that. RT and YR are

0014

1 supporting her, and we hope to have a report to you in
2 the next several months of findings of historical
3 (inaudible) of other areas that may be in the same
4 situation that the Kast and Ujima sites are.

5 I want to report out some further developments on
6 fracking. As follow up to our report last month, we're
7 working several issues there. Basically specifically
8 focussed on the Baldwin Hills areas, we're working on
9 two fronts.

10 One is to review and revise two permits that the
11 board has issued to the oil field operator there
12 regarding land farm operations and storm water runoff.
13 Our second front is to meet with various groups and

May 3 MS4workshop

14 agencies on oil field operations in general and to gain
15 more information about the potential impacts to ground
16 water quality.

17 Regarding the permits, staff has initiated
18 discussions with PSP, the current owner and operator,
19 and is planning to conduct site visits later this month.
20 We hope to bring you these reissued permits for your
21 consideration later this year.

22 Regarding the stakeholders, we met with Tim Custik,
23 who is the executive director of the state's division of
24 oil, gas, geothermal resources at their office in
25 Cypress. That's DOGGR. And we've also met with

0015

1 community members from NRDC and have attended the
2 multiple agency coordinating committee which will be a
3 standard practice for us from this point forward.

4 And I can provide more details on that. But in the
5 interest of time, I'll go a little short except to
6 inform you that Tim Custik, the director of DOGGR has
7 offered to speak to the Board either on an information
8 item or in any other forum if you have questions about
9 their agency. And if you think you'd like to extend
10 that invitation to him, I'd be happy to relay it and get
11 him here. He's quite clearly very knowledgeable about
12 oil field operations and fracking in general.

13 So in the meantime we're planning on continuing our
14 meetings with DOGGR staff. We found our first meeting
15 with them was very helpful in terms of understanding the
16 technologies in the oil field, that is, using the
17 fracking techniques and their permitting process as well
18 and how it can jive with ours or interact with ours. So
19 we're going to be continuing monthly meetings with DOGGR
20 staff on a staff to staff basis alternating between
21 their office in Cypress and our office in downtown. Are
22 there any questions?

23 MS. DIAMOND: I was going to ask questions when you
24 had finished your report.

25 MR. UNGER: Sure. There was a question last month

0016

1 about the former (inaudible) site in the Los Angeles
2 harbor. And just to provide some brief information on
3 that, that site is a former tank farm that contained
4 four above ground fuel storage tanks. It's been under
5 our jurisdiction for a number of years. Three tanks
6 have been removed, and one tank was left in place and
7 remains in operation. Also one new tank has been
8 installed.

9 There was a fuel release way back in 1994 which
10 contaminated soil and ground water at the site. A
11 cleanup and abatement order was issued in 1998, and
12 remedial actions have included extraction, excavation of
13 petroleum packet soils and soil ground water
14 investigations.

15 At this point there's no (inaudible) and the ground
16 water plume appears to be stable. The cleanup and
17 abatement order is still in place and quarterly ground
18 water and surface water sampling is conducted.

19 Although we have not found detectable
20 concentrations of TPH associated waste, there have been
21 detections in surface water of other volatile organic
22 compounds. The origin of these detected VOC's in
23 subsurface water is uncertain at this time and there are
24 multiple potential sources in the site vicinity, and

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25 staff now is developing appropriate investigative

0017

1 workers and possibly cleanup orders to address those off
2 site areas.

3 And finally, two things. Well, one is I wanted to
4 just report out to you on water recycling initiatives.
5 There have been a number of legislative, regulatory, and
6 policy discussions occurring on the issue of recycled
7 water at the present time.

8 California Department of Public Health is working
9 on revised regulations, and the state board's recycled
10 water policy promotes water recycling also requires
11 certain actions that the regional board is taking under
12 the salt management planning efforts.

13 We held a meeting with the stakeholders earlier
14 this month to become apprised of their progress in
15 developing these salt management plans.

16 There's also some legislative activity underway
17 that has studied the issue in very broad ways that could
18 affect our board's authorities, and we are tracking all
19 of these efforts and hope to see the right balance in
20 promoting recycled water and protection of our local
21 water resources.

22 I would say Deb has been very involved in these
23 discussions, and she's taking the lead on integrating
24 these various facets and we hope to be reporting back to
25 you in the near future.

0018

1 And finally on staffing, I've been reporting to
2 you. Since the beginning of the year we've been able to
3 add about 15 staff across many of our programs. It's
4 been very successful in terms of back filling some
5 positions, number one, and increasing our administrative
6 support. Nearly every program has had staff, and the
7 staff are making contributions to the board as well. So
8 we've been able to really augment our staff position.

9 The bad side of it is basically those days are over
10 now. We have the three offers that are still in the
11 works that we hope to bring on board, and then after
12 that our hiring is essentially finished for rest of the
13 fiscal year. So with that, that's my report.

14 MR. STRINGER: Thank you.

15 MS. DIAMOND: Sam, I had just a couple of questions
16 about the Ujima site just to clarify a couple things
17 that you said I wasn't sure I totally understood. You
18 mentioned there was an exchange of letters on the issue
19 of the day care relocation between the county and Exxon.

20 MR. UNGER: Yes.

21 MS. DIAMOND: And I was just wondering if there
22 was -- if you had privy to the letters if they were
23 public and if, in fact, those letters showed some common
24 interest and a way that --

25 MR. UNGER: I will -- yes. I have the letters. I

0019

1 will distribute them to you. I apologize for not having
2 done that. Yes. The letters do indicate a very strong
3 common interest in having the day care center relocated
4 to the parcel that the county had identified several
5 months ago on 117th and Holmes Avenue in South Central
6 Los Angeles.

7 MS. DIAMOND: Was Exxon interested in -- what was
8 Exxon's interest in that property?

9 MR. UNGER: Exxon's interest in the property where

May 3 MS4workshop

10 the day care sits right now is to essentially stage
11 their remediation equipment. Exxon has a good
12 understanding that the size of this plume is still yet
13 to be fully delineated and it's going to require
14 substantial remediation effort. They're going to be out
15 there several years at a minimum doing this remediation.

16 The site where the day care is now located has
17 utilities, power, and they think this would be a great
18 place for them to stage their equipment and work on the
19 site for the remediation.

20 MS. DIAMOND: What about the day care center?
21 Where would that go?

22 MR. UNGER: The day care center would be moved to
23 the property that has been identified by the county on
24 117th and Holmes. It's nearby the vicinity. It's
25 slightly north of there. It's in the general vicinity

0020

1 of the Drew Medical Center but not quite there, and it's
2 county owned land right now. And the details of the
3 land transaction are still being worked out at this
4 point. But it was a very good -- it's the first
5 positive step, I think, in a long time that we've seen
6 it. There is common interest in making this relocation
7 reality.

8 MS. DIAMOND: If this were to become a reality,
9 could it be sometime this year, do you think?

10 MR. UNGER: I don't have a schedule yet. I've
11 asked for a schedule. I think at this point that is the
12 next step. Both parties have indicated to me that they
13 need to meet to determine the schedule.

14 Apparently the legal considerations are somewhat
15 complicated in working this whole arrangement, and I
16 think that's the biggest issue at the present time in
17 this whole relocation.

18 Rough plans have already been drawn up for the day
19 care center at the relocation. Of course, permitting
20 has to happen. Construction itself will be relatively
21 quick. So we have ideas about the duration of each of
22 the key steps along this relocation activity will take.
23 I think what's unknown now is the finalization of the
24 agreements for the financial considerations and for
25 Exxon and for the county to transfer the land to the day

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1 care owner.

2 MS. DIAMOND: I had one other --

3 MR. UNGER: I hope it is within this year.

4 MS. DIAMOND: So do we.

5 MR. UNGER: Yes.

6 MS. DIAMOND: You mentioned a community meeting,
7 and I wasn't clear where that was and what the issue in
8 that particular community is.

9 MR. UNGER: Well, there are several issues in the
10 community.

11 MS. DIAMOND: Which community are we talking about?

12 MR. UNGER: We're talking about the community where
13 -- essentially right in the vicinity of the former Ujima
14 apartment complex; so basically it's going to be held at
15 Enterprise Park, which is just across El Segundo
16 Boulevard. We've held other community meetings over the
17 years there.

18 It's been a while since we've posted a meeting,
19 nearly a year. Although as I've reported out to you
20 previously, we've attended county meetings. We've met

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21 with the day care parents. We've met with other more
22 limited stakeholder groups, things like that. So we're
23 planning that meeting now.

24 We're going to have support both in translation
25 services from state board and Cal EPA. There's going to

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1 be facilitation brought from Cal EPA, and we're actually
2 having a community outreach expert from DTSC also help
3 us.

4 We expect that DTSC and the board will be taking
5 the major lead in this outreach effort. I don't expect
6 that we're going to get a whole lot of participation
7 from contractors, people like that because there's
8 litigation that's ongoing.

9 MS. DIAMOND: Thank you.

10 MS. CAMACHO: When is that meeting?

11 MR. UNGER: May 16, 6:00 P.M. in the evening. We
12 hope very early, next week at the very latest, if not
13 tomorrow that we have notices posted on our website.
14 We've already sent out a mailing to about 2,000 homes
15 within a one-mile radius of the (inaudible) park. We'll
16 take further steps to notify the public of the meeting.

17 MR. STRINGER: Thank you. Any more questions.

18 MS. GLICKFIELD: Yeah. I have a couple questions
19 on unrelated matters. I forgot to report ex parte I
20 did -- I actually did communicate with the new council
21 member in the City of Malibu and Sam and Mr. Corson, who
22 is the city manager and asked him to -- asked Sam to
23 meet with the new city council people on this sewer
24 plan. I think that's essential for us to continue to
25 move forward.

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1 And I'm hoping -- it's my request that, since it's
2 been -- in June it will be a year since we passed the
3 MRU, that you bring back the reports. They're doing a
4 meeting there on the milestones.

5 MR. UNGER: Certainly. I can ask Mr. Corson to
6 come in. Just to let you know that to date all the
7 milestones have been met by the county.

8 MS. GLICKFIELD: City.

9 MR. UNGER: Thank you. The City of Malibu. They
10 have done some test wells actually as well and the
11 reports are looking promising in terms of in the areas
12 of excess water that's produced by the centralized
13 system. And the meeting is -- I just can't remember
14 which day it is but sometime next week.

15 MS. GLICKFIELD: I believe their deadline date is
16 the 25th; so we have three years to go.

17 MR. UNGER: Yes.

18 MS. GLICKFIELD: I want to figure out how to get
19 from your test wells to an actual system.

20 MR. UNGER: I'll report out on that then.

21 MS. GLICKFIELD: The other thing is that -- this is
22 for my colleagues as well. All of us were invited to
23 the Southern California Water Replenishment District
24 workshop, and it was very, very interesting. And I
25 think their work and the issues that they're having with

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1 their water purveyors in the cities in terms of how
2 cities can get storm water into ground water and have it
3 right to benefit from getting it back out again is
4 really critical. So I've asked Sam to invite the
5 general manager of the district here to talk about these

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6 issues, and I think that they are certainly a key
7 stakeholder as they have all the water rights, most of
8 the water rights in the central and the west basin.
9 They're a key player in trying to help us succeed in
10 getting storm water infiltrated.

11 MR. STRINGER: Irma?

12 MS. MUNOZ: Thank you for your report. For the May
13 meeting I put on my calendar when you first mentioned
14 so I will be attending. I want to ask you about the
15 letter that was sent out to notify the local residents
16 who sat in the English into Spanish or just English.

17 MR. UNGER: I think at this point that was only in
18 English. At this point we're having it translated right
19 now, and we'll have it out next week. State board is
20 working on the translation for us.

21 MS. MUNOZ: I think it's important that we know
22 that there is other languages spoken or people are
23 bilingual that we make sure the notifications are sent
24 out in their language so it encourages participation
25 from the community.

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1 Let's see. Regarding the oil field, I would like
2 to request that the DOGGR representative come to our
3 June or July meeting depending on what our agenda looks
4 like presentation from them. I also would like to be
5 invited to the (inaudible) PXP if that is possible. I'm
6 not sure if it would be strategically good for me to
7 attend, but I'd like to, if possible.

8 MR. UNGER: I'll check with Frances and Jennifer.
9 Basically our direct meetings with PXP are specifically
10 focused on the permits. I'll have to get some
11 clearance.

12 MS. MUNOZ: Then I'll excuse myself in the permits
13 process. Thank you so much for your efforts on taking
14 the lead on fracking issues because it is a big concern
15 for us and I'm hoping that this regional water board
16 does take the lead to provide champion fracking because
17 it's (inaudible).

18 MR. UNGER: I can't express essentially how much
19 our staff has learned in the last month since we've
20 started this effort really. Oil exploration is a big
21 part of the industrial activities in this region and
22 it's going to continue to be for quite a while. So it's
23 appropriate that we take some closer look at it.

24 So staff is well prepared. The meetings that we've
25 had with DOGGR have been really productive, very

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1 productive, good interchange. DOGGR staff used to work
2 at the water board; so there's been a lot of information
3 and our staff is getting up to speed very quickly.

4 MS. MUNOZ: This reminds me of other ex parte
5 communication that I overlooked.

6 MS. GLICKFIELD: I'm glad I'm not the only one.

7 MS. MUNOZ: I almost have to calendar this stuff.
8 I did meet with a representative from Congressman
9 (inaudible) where we did discuss the fracking issues,
10 and I did on behalf of my neighbor ask for a hearing on
11 behalf of fracking; so that will be pending. I did tell
12 her the engagement that the water board was having with
13 the plume. You may be getting communications from them
14 as well.

15 MS. LUTZ: I'm sorry. Just like everybody else,
16 your report reminded me of another event that I had

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17 attended. I was really proud and privileged to attend
18 the West Covina Upper San Gabriel Water District's
19 presentation for their recycled water program that they
20 have been working many years to put together.
21 West Covina has a field of dreams project over the
22 BKK landfill site; so this is a very important site that
23 has been -- it's being used now for good. And when they
24 built the field of dreams, the City of West Covina
25 included the purple pipes for recycling water, and upper

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1 San Gabriel water district is now turned on and working.
2 And this is all done through a grant to the state water
3 board as well and a low interest loan at the same time.
4 So it really does relate to what we do, and it's quite a
5 remarkable project.

6 MR. STRINGER: Thank you. Mr. Yee, do you have
7 anything?

8 MR. YEE: No.

9 MR. STRINGER: Thank you. Let the record reflect
10 that Larry is here.

11 MS. DIAMOND: I was just going to say I also met
12 with Jarod Bloomenfeld, Region 9, U.S. EPA director, and
13 he specifically said that he would love to come to one
14 of our meetings to talk about California regional water
15 issues and what's going on and how big a part we play in
16 that.

17 And so I just mention that to staff so that you can
18 follow up with him and invite him to come to one of the
19 appropriate upcoming meetings because he said he would
20 love to do that. He never gets invited by anyone, not
21 just from our regional boards. He said that nobody
22 thinks about it. I said, "Well, we'll invite you."

23 MR. UNGER: We'll be happy to extend that
24 invitation.

25 MR. STRINGER: Great. Thank you. Thank you, Sam.

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1 The next item on our agenda is the update from the state
2 board. Fran Spivy-Weber, are you here? We'll move
3 past that agenda item. If Fran shows up, we may circle
4 back to it. As Sam said, initially we're moving the
5 public forum to after the workshop. So next on the
6 agenda --

7 MR. UNGER: I was unclear. What I meant to say is
8 that the public forum will be held now. I think it's
9 fairly short.

10 MR. STRINGER: I'm sorry. I was reading my notes
11 here.

12 MR. UNGER: It was changing daily.

13 MR. STRINGER: Yea. Sorry. Do you want me to go
14 through all the speaker cards?

15 MR. UNGER: Yeah. With the three-minute time
16 period.

17 MR. STRINGER: Right. Okay. First up is Jason Wen
18 and John Hunter from the City of Downey.

19 SPEAKER: It was for Item 19.

20 MR. STRINGER: I apologize for the confusion.
21 First is Grace Chan from the sanitation districts for
22 L.A. County.

23 MS. CHAN: Good morning, Vice Chair Stringer and
24 board members. I'm Grace Chan. I'm the relatively new
25 chief engineer and general manager of the sanitation

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1 districts and I wanted to come to you today just briefly

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2 to update you on some activities we're involved in on
3 the -- relative to the chloride TMDL in the Santa
4 Clarita Valley.

5 I know that at your last meeting you heard a
6 presentation by Mike Solomon of the United Water
7 Conservation District recounting some of the history,
8 and I don't want to rehash that here today. I just want
9 to give you an update in what we're currently involved
10 in.

11 We are about a few months away from completing the
12 preparation of a draft environmental impact report and a
13 draft facilities plan to meet the 100 milligrams per
14 liter limit that's in the TMDL at our point of our
15 discharge, and we undertook this specifically at the
16 direction of our board last year to begin planning
17 preliminary engineering on a project that would comply
18 with the 100 milligrams per liter.

19 We retained a consultant to prepare the EIR who is
20 under contract for about \$750,000. We also retained a
21 separate consultant for the facilities plan at about a
22 \$1 million contract.

23 We also broadened our scope of public outreach
24 specifically with regard to this project and hired a
25 consultant to help us do that. We had a 40-day scoping

0030 1 period at the beginning of the year. We had public
2 meetings at that time.

3 We've since been having meetings with stakeholders,
4 various community groups and associations. We've had 16
5 of those meetings. We've got another 30 plus already
6 scheduled to follow up with other folks.

7 And so with regard to the overall schedule, as I
8 mentioned, we expect the draft documents to be completed
9 this summer sometime. Those will be released for a
10 60-day public review period. We'll also head meetings
11 during that time of course.

12 And following the review period, we will respond to
13 comments, prepare the final EIR and final facilities
14 plan and hope to bring that back to our board for
15 certification in consideration of a project around the
16 end of the year.

17 And with approval of a project and a certification
18 of the EIR, we would then immediately begin a rating
19 process to support that project. So that's where we
20 stand today.

21 I did want to make one comment in response to
22 Mr. Solomon's remarks. I did review the transcript, and
23 it just seemed like to me that he downplayed the impact
24 of our program to remove the automatic water softeners.

25 It's not a small thing for us. We removed almost

0031 1 8,000 water softeners with an associated chloride
2 reduction of about 50 milligrams per liter. So we do
3 view that as a successful program and something that's
4 significant. With that, that concludes my remarks. I'd
5 be happy to answer any questions.

6 MR. STRINGER: Thank you. Any questions? Thank
7 you very much. That was very helpful. Robert
8 Vandehook.

9 MR. VANDEHOOK: Good morning, ladies and gentlemen
10 and board members. My name is Roy Vandehook or Robert
11 Vandehook, and I'm a biologist and a geographer trained
12 at Cal State Northridge and have worked for the federal

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13 government for 10 years in wildlife as a wildlife
14 biologist and hydrologist technician and I currently
15 work for L.A. County Parks and Recreation in my day job
16 but I don't represent them. I have to work the night
17 shift today.

18 I also am a volunteer with a bionic institute and
19 the weapons defense fund where I'm their science
20 director and volunteer and board member and work for
21 them gratis, unpaid.

22 It was back in the 1950's when the water was so
23 polluted at the L.A. river where it meets the ocean and
24 Dominguez Creek near Wilmington that sailboats that
25 would have barnacles and algae from the ocean when

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1 they're out in the sea attach to their boats, they would
2 go into that area of the Dominguez river mouth in
3 Wilmington and just leave their boats there for 48 hours
4 and it would kill all life on their boat. That was 60
5 years ago.

6 Now if you take a boat there, the marine life
7 doesn't die when it's attached to your boat anymore
8 because the Clean Water Act has been successful and
9 cleaned up the major pollutants that caused death to
10 marine life and estuary life.

11 The point I want to make is that fish live, animal
12 life live unaffected now and very healthy, not just
13 there but at Malibu Lagoon, at the Biona Creek wetlands
14 because the federal law, not a county law or city law,
15 because as you all know cities and counties fought to
16 have a federal law of the Clean Water Act and they
17 fought state government because you, ladies and
18 gentlemen, are the regulators of water quality.
19 You're not the managers. You have to control those
20 managers because managers will get away with whatever
21 they can.

22 Think of yourselves driving your car today here.
23 You were not a regulator. You were a manager of
24 yourself in driving your car. As you drove, some of you
25 -- I'm not saying you per se, but some of you, others

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1 may have thrown a cigarette out the window. They made a
2 management decision to do that, throw trash out. You
3 may have decided to extra fast which mean you have to
4 push the brakes more which means metals come off your
5 brake shoes. That was a management decision to drive
6 fast and those kinds of actions.

7 So regulators and managers are two distinct
8 differences. And after you got here with your car, you
9 became a regulator right now as you sit here on the
10 board.

11 And managers, whether they're private companies or
12 even government agencies -- state parks, county parks,
13 national parks -- is that my time? -- Have to be
14 watchdogs by you all the time including problems with
15 the sewer issue in Malibu. Maybe next month I'll talk
16 about that. Thank you.

17 MR. STRINGER: Thank you. Marsha Hansen.

18 MS. HANSEN: Honorable board members, Marsha Hansen
19 with the Wetlands Defense Fund. I want to talk a little
20 bit about habitat and wildlife. I haven't really been
21 to this board more than a couple of times, partly
22 because when we were fighting the (inaudible)
23 development, we found out that the fresh water marsh

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24 there was going to be double counted by this agency for
25 both mitigation for water quality and habitat.

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1 And when I learned that your regulations are
2 different than some of the other water boards in the
3 state like San Francisco where they would never do that,
4 I thought, you know, it seems like this board just deals
5 with human health and not with wildlife; so I just kind
6 of steered clear. And not that human health is not
7 important. It's very, very important. But the wildlife
8 habitat is important too.

9 After two years of trying to educate people and
10 appeal to agencies about permits you and others approved
11 for the Malibu Lagoon project, a very misguided, extreme
12 engineering overhaul of one of the few naturally
13 functioning coastal wetlands in Southern California, a
14 regime that has tidal waters closing to the lagoon only
15 half of the year allowing thriving endangered tide water
16 gobies and many other species that depend on less saline
17 environment, a slow still movement of water, which is
18 what the tide water goby needs according to fish and
19 wildlife service endangered species regulations, I
20 decided we have to come back here because this project
21 is proposed to begin June 1st. And when I read the TMDL
22 regulations that the EPA gave you all in a memo, it said
23 that if the bacteria counts were found to be from
24 something natural other than human sources, that your
25 standards need to be reviewed again and redone. And

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1 guess what? That's what the city of Malibu and the U.S.
2 Geological survey has now found. They've now done DNA
3 analysis on the bacteria that was not able to be done
4 five years ago, and that DNA says that it is now by
5 Lawrence Berkeley Laboratories, it's shown that it's
6 from natural recurring regenerative bacteria. It's not
7 from humans. Now, it was 15 years ago.

8 But the Clean Water Act is working. It's because
9 some of the things that you have done like the tapia
10 rerouting that you now do not allow them to and you are
11 enforcing that Tapia is not allowed to discharge their
12 extra nutrients and extra bacteria during the seven
13 months of the year.

14 And you've also required a lot of the businesses
15 and residents in the area to upgrade their waste water
16 -- on site waste water treatment systems. The Clean
17 Water Act's working and so we need to have you relook at
18 this permit.

19 We would ask that Tom Hayden, who represented this
20 area for 18 years, just issued a statement this week
21 saying that we really need to look at this. The bond
22 money is not being used for the grant purposes that the
23 state water board gave it for; that there are a number
24 of misrepresentations in those applications and that
25 this all needs to be relooked at.

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1 So I would urge you to take that permit and ask
2 them to put this project on hold until we can make sure
3 that the habitat is protected as well. Thank you.

4 MR. STRINGER: Thank you very much. I have one
5 more card, Jessie, and I'm going to mispronounce the
6 last name, Turillo? Mr. Turillo, what agenda item are
7 you --

8 MR. TURILLO: Heal the Bay and the disposal of the

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9 waste to the Oceans.
 10 MR. STRINGER: Is that on the workshop?
 11 MR. UNGER: I think you want to speak on item 19,
 12 which is the MS-4 permit workshop.
 13 MS. STRINGER: We're holding that until after the
 14 workshop.
 15 MR. TURILLO: Sorry.
 16 MR. UNGER: Let me take your card.
 17 MR. STRINGER: We'll put this in the post workshop
 18 file if that's okay.
 19 MR. TURILLO: Okay.
 20 MR. STRINGER: Okay. Thank you.
 21 MS. MOFFETT: We have one more speaker.
 22 MR. STRINGER: For public comment? Okay. That's
 23 fine.
 24 MR. DUNN: Thank you.
 25 MR. STRINGER: Please introduce yourself.

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1 MR. DUNN: Thank you, board members, for this
 2 opportunity to speak to you. My name is Steven Dunn.
 3 And I'm not affiliated with any organization or agency.
 4 I have surfed in Malibu for over 50 years, and I know
 5 that the last 10 years the water quality was much worse
 6 than it is today.
 7 The discharge from this Malibu Lagoon construction
 8 project needs to be revised for the protection of the
 9 surfers and the general public. The discharge pipe to
 10 the open ocean that needed testing or monitoring is
 11 being conducted with regard to this project. This could
 12 pose a serious health hazard to the public. We ask the
 13 board to amend this waste discharge permit. Thank you.
 14 MR. STRINGER: Thank you. I believe there was one
 15 more. Just make sure you put speaker cards in for the
 16 record.
 17 MS. WERNER: We did. I don't know what happened.
 18 Members of the board, thank you. My name is Wendi
 19 Werner, and I have actively followed the water quality
 20 issues related to Malibu mainly because my husband is a
 21 surfer and I am a beach goer.
 22 Many of us are concerned with the current proposed
 23 waste discharge permit of the Malibu Lagoon construction
 24 project. We respectfully request that the executive
 25 officer works with the city -- with the Malibu city

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1 manager in revising the waste discharge permit that was
 2 issued in 2008 to be more protective to the surfers,
 3 swimmers, and beach goers.
 4 Currently the City of Malibu is requesting a stay
 5 of the project until more protective measures and new
 6 science can be reviewed with regard to public safety. I
 7 have handed you the letter of requested conditions
 8 pertaining to water quality and monitoring and the
 9 responses from state parks and ask you to review it. We
 10 have a narrow window of opportunity to amend the waste
 11 discharge permit as the project is less than 30 days
 12 out.
 13 Busloads of children will be brought to Malibu
 14 beach this year. It is one of the busiest beaches in
 15 the world. And from that discharge pipe to the open
 16 ocean that water from 1.3 million gallons a day that is
 17 going to be discharged into the open ocean is not being
 18 tested or monitored, and we are asking the board and the
 19 executive director to please meet with the city manager,

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20 discuss revising and updating this permit. It's very
21 important to all of us. We understand that water
22 quality issues have been amended. The water is much
23 better and we just ask to have this looked at. Thank
24 you very much.

25 MR. STRINGER: Thank you. I see that Fran

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1 Spivy-Weber is now in the house. Did you want to say
2 something, Sam?

3 MR. UNGER: I want to make sure we receive a copy
4 of the letter that you received.

5 MR. STRINGER: Yes. We have it. Thank you very
6 much for your comments. Maria has a question.

7 MS. CAMACHO: Sorry. Sam, can you explain what the
8 status is of this discussion with the city if there's
9 anything going on.

10 MR. UNGER: Not very clearly. Actually without
11 context by the speakers, I surmise that it's about a
12 lagoon restoration project. I'll have to read this
13 letter in detail to educate myself about the discharge.
14 It so happens though that I speak with the city manager
15 and will be meeting with him as we meet the new city
16 council people either this week or the week after. So
17 I'll take a look at this letter. I'll bring it up with
18 him and I'll report to you next time.

19 MR. STRINGER: Thank you, Sam.

20 MS. CAMACHO: Thank you very much.

21 MR. STRINGER: Okay. We're going to circle back to
22 the update from the state board now that Fran
23 Spivy-Weber is here. Fran?

24 MS. SPIVY-WEBER: Sorry to be late.

25 MR. STRINGER: No problem.

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1 MS. SPIVY-WEBER: I will be very brief in my
2 remarks. One is the budget situation is still not good,
3 and the receipts from our April taxes haven't been at
4 the height that we expected and so the budget in general
5 will be given a very detailed look over. I don't think
6 it will affect the water boards too much. Probably
7 there will be some effect but not too much because we
8 are so reliant now on fees and so that may be the good
9 news/bad news situation.

10 There is going to be a -- I don't see Maria here,
11 but there is going to be a chair (inaudible) on Monday.
12 And if she's not here, Charlie, if you could join.

13 MR. STRINGER: Right.

14 MS. SPIVY-WEBER: We will be discussing the WQCC,
15 the water Quality Coordinating Committee, which involves
16 all of you will be meeting on the first and second of
17 November. That's a Thursday Friday; so be sure to put
18 that in your calendar. And we're considering a tour of
19 the Delta as a component of that meeting. I'm not sure
20 if it will be before or during or after. But that is
21 something that we're going to be looking at because
22 several people mentioned it.

23 Also, I wanted to make sure that you know that at
24 the request of Madelyn there will be an infrastructure
25 funding fair in Los Angeles. It will be on June 12 at

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1 the L.A. County Department of Public Works, Conference
2 Room A. The check in is from 9:00 to 9:30.
3 Presentations on the funding that is available from
4 federal and state agencies will be presented between

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5 9:30 and 11:45. And then for those stakeholders who
6 have requests, they can get one-on-one counseling as to
7 exactly what to do and how best to go about getting
8 funding from the various pots of money that are
9 available in the afternoon.

10 So we have these every year. A year ago we did one
11 in Los Angeles. This year we were doing one in San
12 Diego and in Riverside. And Madelyn looked at the list,
13 and she said, "My goodness. We have to have one in
14 L.A." So we do. And thank you, Madelyn. That was a
15 good catch. And we will definitely do it.

16 We adopted at the state board level on Tuesday the
17 low threat underground storage tank policy. It has to
18 go through the normal channels, but I expect that it
19 will be on the implementation phase very quickly because
20 there's been some work done on that prior to the
21 adoption. So that has been done, and it should be a
22 relief both to the regional boards as well as to the
23 state board.

24 And a redirection of funding is not a cost cutting
25 measure. We have the money, but we will be focussing

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1 that money on areas that we are sure really need the
2 money and are the highest threats to public health.

3 We had a hearing yesterday on the septic policy.
4 We'll be voting on that in June. The comment period
5 closes at noon on Friday. There were folks there from
6 the City of Los Angeles. There were a number of
7 environmental groups from the L.A. area who were talking
8 about it and who have been asked to work with some of
9 the local county public health officials to improve the
10 policy. There is time to do that, and so I am hopeful
11 that the outcome will be something that we can adopt.
12 But it's still in flux and so, if you want to get a
13 report on that in the future, definitely let us know
14 because certainly the staff knows about this as well.

15 And for those of you who are checking the website
16 for the water board, the executive director's report
17 which is posted on the second meeting of every -- of the
18 two board meetings that we have once a month, the
19 executive directors report from the end of April has a
20 long, long, long list of policies and permits that we
21 are working on.

22 We also are working on storm water permits. We
23 have three that are in the works, one that's out in
24 public now, two that are going through final review and
25 will be out within a month or so. And we will be having

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1 workshops and hearings on those, and the vote will be
2 probably in September, October, November, possibly
3 August, September, October. But I think it will
4 probably be August, September, October, November.
5 That's for small communities, for Caltrans, and
6 industrial.

7 We'll also be updating the -- making some changes
8 that the courts asked us to make in the construction
9 storm water permit. We will be removing the numeric
10 effluent limits because the courts told us we had to.
11 So that's it for my report and glad to see all of you
12 here today.

13 MR. STRINGER: Great. Thank you, Fran.
14 Any questions for Fran?

15 MR. YEE: The funding fair is on June 12?

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16 MS. SPIVY-WEBER: June 12 and check in is between
 17 9:00 and 9:30. This is a very, very popular activity in
 18 these funding poor days; so encourage your networks to
 19 pay attention if they are looking for money. New things
 20 are coming up all the time. So if they went to the
 21 funding fair last year, they should go this year because
 22 there is new money.

23 MR. STRINGER: Thank you.

24 MS. GLICKFIELD: I also asked Sam if he would post
 25 this on our web site and notify -- I guess almost

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1 everybody who cares is here today, but just the same,
 2 notify all the stakeholders who might be eligible for
 3 this funding.

4 MR. STRINGER: Thank you. Next we move to
 5 uncontested items.

6 MR. UNGER: The uncontested calendars is item 8,
 7 10, 11, 12, 13, 14, 15, 16, and 17. Item No. 9 will be
 8 continued to a future meeting.

9 MS. LUTZ: I move 8, 10, 11, 12, 13, 14, 15, 16,
 10 17, approval.

11 MR. YEE: Second.

12 MR. STRINGER: All those in favor?

13 MS. MUNOZ: Aye.

14 MS. GLICKFIELD: Aye.

15 MS. DIAMOND: Aye.

16 MR. STRINGER: Motion carries. The next item on
 17 our agenda is the workshop and the issuance of the new
 18 L.A. County separate storm sewer system otherwise known
 19 as MS-4.

20 we'll begin today's workshop with staff presenting
 21 it's current working proposal on provisions related to
 22 receiving water limitations, TMDL's, and watershed
 23 management program. Then we'll have comments from
 24 permittees and interested persons on working proposals
 25 which will be subject to time limits. Some speakers and

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1 commentators we've agreed to give extended time to to
 2 make sure we have the benefit of their deeper thinking
 3 on the issues.

4 If board members want to make statements and/or
 5 have questions on anything that they're hearing, I ask
 6 that they hold those to the end just to keep things
 7 organized and moving along.

8 And I just want to remind the board and everyone
 9 present that although quorum is present, this is not a
 10 hearing and we are here to hear from you all and further
 11 educate ourselves on what we know will be a significant
 12 decision we'll be making later this year. So we will
 13 not be taking any action today. Thank you.

14 Sam? One further item just for the record, Mary
 15 Ann Lutz has left the room for the workshop because
 16 she's recused from participating in this particular
 17 decision that the board is preparing to make.

18 MR. UNGER: Before I turn it over to Renee, I would
 19 like to -- as we open this workshop, I would just like
 20 to provide a brief summary of where we have been and
 21 where we are now with the development of the reissued
 22 MS-4 permit. Some of this is for the benefit of our
 23 newer board members as well, and I hope it's useful.

24 It was nearly one year ago today that staff
 25 announced that it was undertaking the reissuance of the

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1 Los Angeles County MS-4 permit. Since that time work
2 staff has met with stakeholders many, many times and
3 we've held staff workshops to understand stakeholder
4 concerns and we've held three workshops before the
5 board.

6 As you well know by now, the existing permit was
7 issue in 2001 and our understanding of storm water and
8 urban runoff discharges through the MS-4 has greatly
9 improved over the last decade.

10 The first workshop that we held before the board
11 was last November. Staff had been working on the permit
12 for several months at that time, and there were some key
13 decisions that had to be made in terms of the
14 permit structure.

15 Initially staff was challenged by the basic
16 structure of the permit in which 84 cities, the county,
17 and county flood control district were noted as
18 permittees and the flood control district notes as a
19 principal permittee.

20 We informed the board at that time that we received
21 ROWD's, reports of waste discharge, which essentially
22 served as permit applications from some of the
23 municipalities and from the flood control district.

24 At the workshop in November staff presented the
25 board a survey that was conducted of the permittees as

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1 to different options for permit structures and their
2 preferences. The majority of the permittees favored
3 single permit as it provided equity and fairness and a
4 strong preference for recognizing the advantages that a
5 watershed approach could provide to storm water
6 management. There was also recognition that there were
7 a number of TMDL's that had to be incorporated into the
8 permit.

9 So what I have before you on the slide here is
10 basically the outline of the 2001 permit, the permit
11 that's currently in force and we're working with. And
12 because most of the issues that we've been dealing with
13 over the past several months fall into these areas of
14 the permit, discharge prohibitions which have a lot to
15 do with some of the dry weather discharges that are
16 prohibited from entering the MS-4 system, the receiving
17 water limitations, a section which is controversial, as
18 you know. There are special provisions and a special
19 provisions section is now -- we refer to that and you
20 folks refer to that as the minimum control measures.
21 They include areas of public participation --
22 requirements for the permittees to engage in
23 participation, to inspect and regulate the commercial
24 facilities within their jurisdictions, requirements for
25 development planning within the jurisdictions and

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1 development construction within the jurisdictions.
2 There's public agency activities such as cleaning storm
3 drains and cleaning catch basins and maintaining the
4 storm with the MS-4 system, and finally under what is
5 the special provisions there's a program or requirement
6 for illicit connections and illicit discharges.

7 The permittees have been carrying out these
8 activities under the existing permit. And as we
9 discussed, one of the more contentious issues deals with
10 development planning and low impact development
11 requirements. We have discussed that at an earlier

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12 workshop.

13 So with this I want to just go through what we've
14 accomplished over the past several months. And the next
15 slide, please, Alex. What I have didn't come out in
16 color as well as I'd wanted it. But essentially what we
17 discussed in the March workshop were the minimum control
18 measures. So you see that in red in the special
19 provisions and the monitoring requirements.

20 Again, the minimum control measures that we were
21 talking about are based on existing permits and existing
22 permits that this board adopted in Ventura except for
23 the area of development planning and the low impact
24 development. There is some differences there. The
25 permittees have been carrying out these activities under

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1 the existing permit.

2 And we also talk a bit about monitoring. The
3 current permit requires monitoring of receiving waters
4 and tributaries. In monitoring we discussed with you in
5 March several issues. The first two incorporate the
6 TMDL monitoring into this permit and the second being
7 the need for outfall monitoring. And just as a
8 reminder, outfall monitoring was included in the Ventura
9 MS-4 permit.

10 The April workshop which -- next slide, please.
11 Different color just to indicate to you which items in
12 the permit we talked about in April, we furthered our
13 discussion of the minimum control measure and special
14 provisions because, as you know, again, that's a large
15 part of the activities of the jurisdictions are
16 currently undertaking, the permittees are currently
17 undertaking. We also introduced the concept of
18 discharge prohibitions. And some of these flows, as we
19 reported to you, naturally occur and come from urban
20 operations. Over the past 10 years there have been a
21 number of BMP's that have come on line that can possibly
22 mitigate the effect of these discharges. And we've been
23 meeting, as you last saw in the workshop in April, with
24 the fire fight community and the municipal water
25 community to generate the proposed language that we are

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1 now working with in our proposed documents.

2 We also started discussions with WQBELs, water
3 quality based effluent limits, and again there is some
4 controversy on this issue and about whether they can be
5 expressed as BMP's or numeric levels, and you've seen
6 how we have addressed that in our proposed document.

7 So this brings us to today, the workshop today.
8 And today we're discussing receding water limitations.
9 So that brings us to essentially the point which I'm
10 trying to make is that we've discussed all of the major
11 areas of the permit but what you had in your working
12 proposals is two other areas in green that we've added
13 which essentially updates the permit in terms of the
14 TMDL's that this board has adopted over the past 10
15 years and our greater understanding of storm water
16 quality management.

17 And so what you see there, we're talking today we
18 have proposals for receiving water limitations, TMDL
19 provisions which are quite lengthy. But because there
20 are so many TMDL's we describe how we're going to be
21 managing the requirements of those TMDL's through this
22 permit and finally the watershed management provisions

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23 which is essentially a whole new section in this permit.

24 There may be other regions that are taking this
25 approach. We think we're one of the first ones, if not

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1 the first region to be headed down a watershed
2 management approach in this permit.

3 So the point I'm getting to before I turn it over
4 to Renee now is that we've work shopped essentially all
5 the major issues of this permit. The board has had an
6 opportunity to see what staff is thinking and proposing
7 at this point. We've had discussions, and we look
8 forward to receiving your input as well as input from
9 the regulated community and other stakeholders in
10 today's workshop.

11 MR. STRINGER: Sam, just a question for point of
12 clarification.

13 MS. GLICKFIELD: I just wanted to ask whether or
14 not this is a really good overview of where we are. Is
15 this a completely new permit or is this a rewrite of the
16 prior permits?

17 MR. UNGER: Well, that's --

18 MS. GLICKFIELD: Maybe you don't have the answer.

19 MR. UNGER: I would say the answer is yes. It's
20 both. I mean certainly what you saw, if you can go back
21 to the last slide, certainly the watershed management is
22 entirely a whole cloth rewrite. The TMDL's is whole
23 cloth rewrite. We have a little bit of input from our
24 Ventura permit because we dealt with TMDL's in that as
25 well. But other than that, those are essentially new

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1 provisions and whole new sections of the permit.

2 The other is based largely on what is in place or
3 at least you can use that as a framework for
4 understanding the requirement under the special
5 provisions definitions, things like that.

6 MS. GLICKFIELD: So we shouldn't assume that
7 everything in here is new.

8 MR. UNGER: Today you should assume that. There
9 are receiving water limitations in the existing permit;
10 so I would certainly say the TMDL provisions and the
11 watershed provisions today are new in terms of this
12 permit. So with that I'd like to turn it over to the
13 person that's done most of this work.

14 MS. CAMACHO: Sam, I just want to thank you. That
15 was really helpful to go through that.

16 MS. PURDY: Good morning. My name is Renee Purdy,
17 and I'm the chief of the regional program section. And
18 it was a helpful overview for me too just to remind me
19 of what all we've done so far. I do want to say that I
20 haven't done nearly all of the work. I've had a
21 fantastic team of people working with me on this
22 certainly starting with Sam and Deb and also our
23 attorneys Jennifer and Frances and also Ira Ridgeway who
24 is the unit chief of the storm water permit unit as well
25 as Rebecca and Nick who have been -- they're in the

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1 storm water permitting unit and they've been helping on
2 the incorporation of the TMDL provisions; so I can't
3 take nearly all the credit for this. It's been a
4 really, really fantastic team effort not only with those
5 of us at the regional board and with your support but
6 also in the many meetings that we've had with permittees
7 and with other stakeholders over the last year. So a

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8 lot of work has happened, and it's been the result of a
9 lot of support from everybody. So I just want to start
10 out with that.

11 Today's workshop, as Sam mentioned to you, is the
12 third board workshop that we've had on this and it's
13 actually the seventh workshop that we've had in the past
14 year, a little less than a year actually. The first one
15 was back on May 25, I believe, if I'm recalling
16 correctly. That was the kickoff workshop that we had on
17 the development of the permit.

18 As with the last board workshop in April, as Sam
19 said, in preparation for this workshop staff distributed
20 to permittees and interested stakeholders and you also
21 have copies of working proposals for the three sections
22 of the permit that we're going to be talking about
23 today.

24 And we've done this, the two working proposals that
25 we issued before and the three that we've issued prior

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1 to this workshop in hopes that this will really help
2 facilitate a very thoughtful and detailed and productive
3 discussion about these parts of the permit prior to us
4 putting out the tentative order.

5 These working proposals do represent our current
6 staff thinking based on our internal deliberations as
7 well as much input received from previous workshops and
8 one-on-one meetings with lots of permittees as well as
9 environmental organizations over the past six months.

10 And today I just want to let you know that we're
11 here to listen to all public comments as well as your
12 input and will consider all of this prior to issuing the
13 tentative permit which right now we're hoping to do by
14 the end of this month.

15 Based on the input that we received from the
16 previous two work proposals, we definitely think this
17 has been a valuable process and I think it's going to
18 allow us to resolve a number of issues prior to us
19 issuing the tentative order.

20 So today we're going to be discussing, as Sam said,
21 three what are actually very inner related, closely
22 inner related sections of the permit. And, therefore,
23 we're not going to divide the permit up -- or the
24 workshop up as we've done in the past. I'm just going
25 to cover all the topics at once and then we'll have

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1 public comments on all of those because they are so
2 closely related. We believe that's going to be the best
3 way to get a full picture of how these sections work
4 together.

5 So this is a little bit similar to a slide that Sam
6 just showed you. And I apologize. It's a little bit on
7 the light side. I don't know if it would be helpful to
8 dim the lights at all. I don't know if it's possible.

9 I showed you this last slide at the April board
10 workshop, and this is basically a simple outline of the
11 developing permit. And for those of you that are
12 familiar with the numbering in the current permit, on
13 the right-hand side, I'll show you here, is the
14 numbering that's used in current permit and then on the
15 left-hand side is the current new numbering of the
16 permit.

17 And as you recall, as, again, Sam gave me a good
18 introduction, but during the April board workshop we

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19 discussed working proposals for permit provisions
20 introducing nonstorm water discharges through the MS-4
21 and the six so-called minimum control measures. And
22 those have historically made up the permittees'
23 basically core or baseline storm water management
24 program which we've referred to as the SWMP.

25 These parts of permit are shown in kind of the gray

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1 or beige color on the slide, and today we're going to be
2 discussing the parts of the permit that are on the slide
3 in orange including the TMDL provisions which also
4 includes water quality based effluent limitations, or
5 WQBELS, to implement those TMDL wasteload allocations,
6 the receiving water limitation provisions, as well as
7 the watershed management program provisions.

8 We have discussed some of these topics before, as
9 Sam mentioned to you. You might recall, for example,
10 during March when we had a workshop, it was actually a
11 staff level workshop immediately following the board
12 meeting, and we discussed WQBELS and what those are and
13 how we use those in the permit. I'll touch on that a
14 little bit today just as a reminder.

15 During last month's workshop I introduced the
16 concept of watershed management programs as a way of
17 integrating many of the permit provisions. And so today
18 we're going to talk about those in much more detail and
19 how they can be an effective way of meeting the
20 requirements of this permit.

21 So because the watershed management programs are
22 intended to be integrative, I'm going to actually begin
23 with them even though they don't really fall in that
24 order on the outline that I just showed you.

25 Next I'm going to discuss the TMDL provisions

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1 including the inclusion of numeric water quality based
2 effluent limitations and receiving water limitations
3 based on available TMDL wasteload allocations, and I'll
4 walk through the various means of determining compliance
5 with these WQBELS under different circumstances
6 including distinctions between how we are going to
7 propose to allow compliance determination for interim
8 water quality based effluent limitations and water
9 quality based effluent limitations as well as how
10 compliance determination can be addressed in situations
11 where discharges commingle within the MS-4 prior to
12 discharge to the receiving water.

13 I'm also going to discuss staff's working proposal
14 to address EPA established TMDL's that don't include an
15 implementation schedule under state law and to address
16 state adopted TMDL's where in some cases final
17 compliance states have already passed.

18 Finally, I'm going to be discussing staff's working
19 proposal on the receiving water limitation provisions of
20 the permit.

21 So before I go on, there are two terms that I'm
22 going to be using a lot today and I'm guessing that many
23 of the public comments you will be hearing will use
24 these terms a lot too. And I apologize. These aren't
25 in the printed copy of the slides that you have before

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1 you.

2 There are two terms I wanted to define before we go
3 on. One is water quality based effluent limitation, and

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4 I did define this in a previous workshop. But, again,
5 just for clarity, that is a restriction on the quantity
6 or concentration of a pollutant that may be discharged
7 that's necessary to achieve a water quality standard.
8 And by definition, a water quality based effluent
9 limitation must be set at a level that will achieve the
10 applicable water quality standard in the receiving
11 water.

12 The other term that I want to define for you before
13 I go on is receiving water limitation. And this is also
14 included as a footnote in your packet. I think it's
15 section 19-3, and it's on the first page, footnote one,
16 that provides a definition of receiving water
17 limitation. It's any applicable numeric or narrative
18 water quality standard or limitation to implement the
19 applicable water quality standard that applies to the
20 receiving water in question.

21 And I take the time to do that because I'm going to
22 be saying those terms more times than I can count today.
23 So I thought it would be good to define them up front
24 and make sure everybody understands what those terms
25 mean.

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1 So next what I'd like to do is turn to the
2 watershed management programs specifically in those
3 provisions that are in the working proposal. The
4 purpose of the watershed management programs is to
5 provide a framework for permittees to work
6 collaboratively to implement individual as well as
7 collective best management practices and other types of
8 watershed control measures to address the highest
9 watershed priorities.

10 The watershed management programs are intended to
11 provide permittees with flexibility to customize some of
12 the core permit requirements as I discussed at the last
13 board workshop we had and sequence some of the
14 implementation actions to reduce pollutants in MS-4
15 discharges in the most effective way possible while
16 achieving these water quality based effluent limitations
17 and receiving water limitations that I just defined.

18 Staff intends for these watershed management
19 programs to be focussed in large part on pollutant
20 control strategies that will be necessary to achieve
21 TMDL's and those that may be necessary to address
22 persistent exceedances of receiving water limitations
23 that might not be covered by a TMDL at this point.

24 This is another slide that I showed you at the last
25 workshop which illustrates how staff intends for these

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1 watershed management programs to serve as the integrated
2 framework for the various individual parts of the
3 permit.

4 And what's noteworthy here is that there will be
5 significant overlap in the strategies, the control
6 measures, the BMP's that are implemented in each of the
7 four major areas or parts of the permit shown on the
8 slide. These are not completely distinct additive
9 requirements. There will be a lot of overlap and
10 commentary among these.

11 For example, controls to address non storm water
12 discharges through the MS-4, which we've talked about
13 previously, will in many cases be the very same controls
14 that are needed to achieve dry weather wasteload

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15 allocations from TMDL's that we have in effect for Los
16 Angeles County.

17 Similarly, measures to eliminate exceedances of
18 water quality standards that are not currently addressed
19 by a TMDL will often fall within one of the categories
20 of the minimum control measures which we've also
21 discussed at previous workshops, and it may be that
22 these measures just need to be enhanced in a certain
23 geographical area or focused on a certain pollutant
24 source.

25 And we actually have some examples of situations

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1 where customization has already been happening through
2 the implementation of TMDL implementation plans.

3 For example, in some of the south bay cities of
4 Santa Monica Bay they've been implementing a restaurant
5 education and BMP certification program to address
6 pollutants specifically from commercial restaurant
7 establishments.

8 And one of the things that I just want to say
9 before going on is we think with these watershed
10 management programs where we have examples of this
11 customization already, that these watershed management
12 programs are intended to provide even more flexibility.

13 So next I want to talk about the scope of the
14 watershed management programs. Specifically in the
15 working proposal we've identified the regional water
16 board seven watershed areas within the Los Angeles
17 County as the recommended geographic areas of focus.

18 These are the same watershed areas that staff has
19 used in the development of the TMDL's for Los Angeles
20 County and, therefore, they provide a good geographical
21 scope for watershed management programs and control
22 measures to address those TMDL requirements.

23 However, I do want to note that we are proposing to
24 allow flexibility within the scope of the watershed
25 management areas covered by a watershed management

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1 program. And in particular I bring this up because, as
2 we all are well aware, there is a county water quality
3 funding initiative that is underway and that we're all
4 hoping passes soon and that watershed management or the
5 water quality funding initiative does have slightly
6 different watershed boundaries. Specifically they break
7 the seven watershed boundaries that we have and we've
8 used in the regional board slightly further than that.

9 For example, there's an upper and lower Los Angeles
10 River. There's an upper and lower San Gabriel River.
11 Santa Monica Bay is further subdivided such that Biona
12 Creek is separated out.

13 So the permit provisions would allow the
14 flexibility to develop a watershed management program on
15 the basis of what the funding initiative refers to as
16 the watershed authority groups or WAGs.

17 Staff strongly encourages permittees to work
18 collaboratively on these watershed management programs
19 as a group to develop and implement the watershed
20 control measures.

21 Some permittees may end up participating in more
22 than one watershed program where their jurisdictions
23 cross watershed management boundaries. In these cases,
24 the watershed management program would include both
25 individual actions taken by individual permittees within

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1 their jurisdictions as well as actions that could be
2 taken by permittees collectively on a sub watershed or
3 watershed scale.

4 I do want to say while staff does strongly
5 encourage permittees to work collaboratively and as a
6 group on these programs, at present the working proposal
7 does not preclude an individual permittee from
8 developing an individual watershed management program
9 for each watershed within its jurisdiction.

10 I would say, however, that working individually in
11 such a manner would have ramifications on the resources
12 available for planned development, the suitable
13 monitoring approaches if it was just an individual
14 watershed management approach as well as opportunities
15 for collaboration on regional controls.

16 This is just a diagram that I wanted to show you of
17 the seven watershed management areas included in the
18 working proposals. And, again, as I said, these could
19 be further subdivided consistent with the funding
20 initiatives water quality -- excuse me -- WAGs or
21 watershed authority groups.

22 So next I just want to talk about generally what we
23 view as the implementation cycle that would occur in
24 these watershed management programs. At present staff
25 is proposing in the working proposals that thus

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1 implementation cycle which includes, first, the planned
2 development itself, then implementation of the plan and
3 during that implementation monitoring of the plan and
4 then an assessment of the effectiveness of the results
5 and then revisions to the program based on that
6 monitoring assessment would be completed twice during
7 the permit term at approximately 18-month intervals.

8 I'll go over this a little bit more on this next
9 slide. And this is on page 19-2 of your board agenda
10 package. So if you'd like to see a somewhat clearer
11 version of this table, it's just copied from your agenda
12 package.

13 It provides the timeline for the development,
14 implementation, and evaluation and revision of the
15 watershed management program. First, staff is proposing
16 that permittees must notify the board of their intent to
17 pursue a watershed management program within six months
18 of permit adoption.

19 And this is included because whether or not a
20 permittee chooses to pursue a watershed management
21 program may have some ramifications for implementation
22 timeframes for other permit provisions. So if they
23 choose to just follow the default permit provisions,
24 they won't need the additional time that it takes to
25 develop the watershed management plan.

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1 Staff understands that plan development, this
2 particularly, watershed plan development may take
3 sometime particularly in the case where multiple
4 permittees are working together collaboratively to
5 develop one watershed management program.

6 Though staff also recognizes that in many cases a
7 foundation for these watershed management programs has
8 already been laid through the development of some TMDL
9 implementation plans.

10 So balancing these two things staff has proposed to

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11 provide permittees with one year from the date of permit
12 adoption for permittees to submit a draft watershed
13 management plan to the regional board.

14 Plans would be subject to executive officer review
15 and approval, and then staff proposes that permittees
16 would submit a final plan within three months of
17 receiving comments from the executive officer on the
18 plan.

19 Implementation would begin immediately upon
20 submittal of the final plan to the regional board, and
21 this likely would occur about one and a half years into
22 the permit term or around March 2014.

23 The first assessment would occur approximately
24 three years into the permit term, and then the second
25 would occur basically as part of the ROWD or report of

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1 waste discharge process about four and a half years into
2 the permit term.

3 And we propose the somewhat extended reporting
4 cycle. Typically the permit in the past has had an
5 annual reporting cycle. We're proposing a slightly
6 longer timeframe to report on the effectiveness of the
7 watershed management programs because of the
8 coordination and the effort that it will take to really
9 do a very comprehensive evaluation of how effective the
10 program is.

11 Next I want to describe some of the steps in
12 developing the watershed management program plan, and I
13 won't go into these in a huge amount of detail because
14 you've seen them in your working proposal.

15 But generally these include the identification of
16 watershed priorities and then the selection of watershed
17 control measures to address those watershed priorities.
18 And then one thing that I have talked about previously
19 is a reasonable assurance analysis that would
20 demonstrate that the watershed control measures that are
21 selected and included in the watershed management
22 program are likely to achieve the water quality based
23 effluent limits and receiving water limitations required
24 by the TMDL's.

25 So with regard to the identification of the water

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1 quality priorities, as I said earlier, we expect that
2 the drivers for these watershed management programs will
3 primarily be TMDL's and TMDL requirements. We have a
4 number of TMDL's, as you all well know, within the
5 region and those in large part will drive watershed
6 control measures that will be undertaken as part of
7 these programs.

8 These we consider to be the highest priority water
9 quality issues that should be addressed in the watershed
10 management program, and we're referring to these as
11 category one.

12 Another priority area which I mentioned earlier
13 would be water bodies that have persistent exceedances
14 of water quality standards that are not yet covered by a
15 TMDL, and right now I'm referring to these in the
16 working proposal as category two.

17 So after identifying these water quality
18 priorities, the next step in the planned development
19 would be to conduct a source assessment to identify
20 potential sources of pollutants to the MS-4 that might
21 be causing or contributing to the water quality problems

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22 that were identified in these category one and two water
23 body pollutant combinations.

24 Staff expects that this source assessment would
25 include a review of available data from a number of

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1 sources. One key source would be each individual
2 permittee storm water management program and then in
3 particular there's a lot of information that permittees
4 have gathered on an individual jurisdictional basis from
5 programs such as their illicit detection, detection and
6 elimination program, the commercial industrial
7 facilities inspection program, the development
8 construction program, as well as their own public agency
9 activities program in terms of where some of these
10 pollutant sources are occurring within their
11 jurisdictions.

12 Additionally, with each TMDL that's developed we do
13 a TMDL source analysis, and that's another potential
14 source of information for permittees to look to to do
15 this source analysis.

16 Also watershed modeling is another tool that can be
17 used in a number, and a number of the permittees have
18 developed very detailed watershed models that can be
19 used to identify priority areas with regard to pollutant
20 loading.

21 And finally, of course, the results of the
22 monitoring program, those that the permittees have
23 conducted as well as any other monitoring program data
24 that are available.

25 The other part of the source assessment -- and this

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1 is also consistent with other requirements within some
2 of the minimum control measures -- would be to ensure
3 that all MS-4 outfalls that are discharging to water
4 bodies in categories one and two would be identified as
5 part of that source assessment.

6 So based on the water quality priorities, the water
7 body pollutant combinations that have been identified as
8 priorities as well as the source assessment, there would
9 then be a final prioritization of where the
10 jurisdiction's efforts and the watershed permittee's
11 efforts would be directed.

12 And, of course, the first priority would be to
13 address TMDL's and the water quality based effluent
14 limits and receiving water limitations that in
15 particular have interim or final compliance deadlines
16 within the coming permit term; so basically compliance
17 deadlines from 2012 until 2017.

18 The second priority would be to begin addressing
19 water quality based effluent limitations and receiving
20 water limitations that have compliance deadlines that
21 are going to be falling within the next permit term.

22 And then next would be addressing other receiving
23 water considerations. And this would be, as I mentioned
24 before, some of those potentially persistent exceedances
25 of standards that aren't yet covered by a TMDL. Because

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1 we have so many TMDL's in this region, I think this is
2 not going to be a large category of waters.

3 Based on this prioritization, the next step and
4 really the key here is the selection of the watershed
5 control measures. And the objectives of these watershed
6 control measures is, as I mentioned before, we're trying

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7 to create an efficient and effective program to focus
8 both the individual permittee's resources as well as the
9 collective resources of permittees within a watershed
10 area on the highest priorities.

11 And, again, it would be focused on those categories
12 one and two that I mentioned earlier. And specifically
13 we'd be looking for control measures that are, one,
14 going to address nonstorm water discharges that are
15 coming through the MS-4.

16 As I mentioned in a previous workshop, we do have a
17 lot of exceedances of dry weather -- of water quality
18 standards during dry weather and a lot of dry weather
19 wasteload allocations that would need to be implemented.

20 It would also be focused on implementing controls
21 to achieve interim and final effluent limitations and
22 receiving water limitations that have deadlines in this
23 permit term and then, related to the receiving water
24 limitations, to ensure that MS-4 discharges do not cause
25 or contribute to exceedances of other water quality

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1 standards not yet addressed by TMDL's.

2 So I want to just make the linkage now as I did at
3 the last workshop between these watershed management
4 programs and some of the other provisions like the
5 minimum control measures that we've talked about
6 previously because we see that these watershed control
7 measures that would be selected through the development
8 of the plan are in many cases going to be some of those
9 very same provisions that we talked about in the minimum
10 control measures but they might be customized or
11 sequenced in such a way to address watershed priorities.

12 So part of the selection process will be to
13 identify opportunities to focus resources within the
14 minimum control measures on the category one and two
15 areas. The programs still do need to be consistent with
16 what federal regulations say needs to be included in a
17 storm water management program, and so there needs to be
18 some justification for any modifications to the minimum
19 control measures. And there may be some minimum control
20 measures such as the planning and land development that
21 we may not want to see customized or modified too much
22 because those programs are really trying to prevent
23 pollutants from leaving a site, and so I think whatever
24 the watershed priorities are, those are going to be
25 effective programs to continue to include in the

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1 watershed management program.

2 The customized actions, once they've been
3 identified, would basically be used in lieu of the core
4 minimum control measures that we've talked about in
5 previous workshops. So they would substitute for those.

6 The other aspect of the permit that we talked about
7 before which could be customized as part of this
8 watershed management program is the non storm water
9 discharge measures, and we talked about those discharge
10 prohibitions where there's a provision both in the Clean
11 Water Act and then corresponding in federal regulations
12 that non storm water discharges through the MS-4 are to
13 be effectively prohibited.

14 So where there are TMDL's with dry weather
15 wasteload allocations and, therefore, in this permit
16 water quality based effluent limitations addressing dry
17 weather discharges through the MS-4, this would be an

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18 opportunity to customize some of these actions to
19 address those particular priorities.

20 The other part that will be included in these
21 control measures is actions that have been identified in
22 the basin plan amendments adopting TMDL's and then
23 subsequently in TMDL implementation plans that have been
24 developed by permittees to implement the TMDL's.

25 So this is something that I wanted to emphasize

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1 because, as I kind of touched on earlier, there has been
2 in many cases groundwork done by many permittees to
3 develop TMDL implementation plans in response to the
4 adoption by this board of TMDL's.

5 And so we expect what will happen with these large
6 management programs is the actions that have been
7 identified through those often pollutant specific TMDL
8 implementation plans will be compiled into one place and
9 will then come under this watershed management program
10 and will be measures that would be implemented through
11 this watershed management program.

12 As I mentioned, again, we expect at a minimum the
13 actions would be included that are necessary to achieve
14 any deadlines within this permit term, but there should
15 also be thought forward to the next permit term about
16 what actions should be taken to ensure that there's
17 adequate progress so that deadlines in the next term
18 will be able to be met.

19 Finally, as I mentioned, the plan development needs
20 to include what we're referring to as a reasonable
21 assurance analysis. I've gone back and forth on what
22 I'm calling this; so I apologize for changing
23 terminology on everybody.

24 But basically the concept here is that there needs
25 to be a quantitative analysis -- it could be done

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1 through modeling or other quantitative ways -- that
2 demonstrates that those watershed control measures that
3 I just talked about, TMDL control measures, control
4 measures under the minimum control measure of
5 provisions, nonstorm water measures, that all of those
6 are likely to achieve the applicable water quality based
7 effluent limits during -- that have deadlines within the
8 permit term.

9 So we want to make sure that we have this analysis
10 because, as I've discussed before and I'm going to talk
11 about a little later, staff proposes to allow a
12 compliance with interim effluent limitations using a BMP
13 based or action based approach, but we need to have the
14 assurance that those actions are actually going to have
15 the water quality outcomes that we expect they will
16 have. So that's what this reasonable assurance analysis
17 business is intended to do is provide us with the
18 necessary support that these are the appropriate control
19 measure to be undertaking.

20 So next I'd like to turn to a discussion of the
21 TMDL provisions in the working proposal for the TMDL
22 provisions. Generally what we've done in the working
23 proposal is we have up front, as you've seen, some
24 general provisions that relate to the implementation of
25 water quality based effluents and receiving water

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1 limitations to achieve TMDL's, and then what we've done
2 is we've included a number of attachments.

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3 We have, first of all, a very detailed matrix that
4 indicates which permittees are subject to which TMDL's
5 because there are so many. And then what we have is we
6 have an attachment, one attachment for each watershed
7 management area. And then every TMDL that is within
8 that watershed management area, the provisions to
9 implement that, specifically the numeric water quality
10 based effluent limits and any specific receiving water
11 limitations applicable to that TMDL are included under
12 that attachment.

13 So a permittee can look at that first master
14 matrix, see which TMDL's it's subject to and then go to
15 that attachment and see all of its numeric water quality
16 based effluent limitations and other TMDL provisions
17 that it needs to be following.

18 So the one other thing I did want to point out
19 which I have at the bottom of the slide here is in the
20 general TMDL provisions, for trash TMDL's in particular
21 for those of you that were on the board, you know that
22 we went through a reopener of the L.A. County MS-4
23 permit and we took a lot of time in crafting language to
24 implement the trash TMDL for the L.A. river and because
25 we have taken a lot of time to do that, we are basically

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1 using that very same approach to implement all other
2 trash TMDL's within the working proposal before you now.
3 So that language is included up front. So there is
4 consistency with how we've done L.A. river trash, and
5 we're just relying on essentially that same language for
6 the rest. I think there are about 10-- nine other trash
7 TMDL's that are being included in this permit.

8 So before I go on, I do want to talk -- actually,
9 I'm going to back up. I'm not going to go to that next
10 slide yet. I want to talk a little bit about the
11 inclusion of numeric water quality based effluent
12 limitations in the permit. I talked about this before.
13 And, as I mentioned, we were intending to and we have
14 included numeric water quality based effluent
15 limitations to implement TMDL's. That is the only place
16 in the permit right now in the working proposal where we
17 have numeric water quality based effluent limitations to
18 implement the TMDL wasteload allocations.

19 And we've done that because the implementing
20 regulations for the Clean Water Act state that each MPS
21 permit needs to include any requirements in addition to
22 or more stringent than any of the technology based
23 requirements to achieve water quality standards.

24 And more specifically the water quality based
25 effluent limitations are required for discharges where

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1 the permitting agency has determined that there's a
2 reasonable potential that that discharge could cause or
3 contribute to an exceedance of standards.

4 In this case, because we have TMDL's and TMDL's are
5 developed because you have an impairment of water
6 quality standards and we've identified that MS-4
7 discharges are one of the sources that are contributing
8 to that, we found that it's necessary to include numeric
9 water quality based effluent limitations in order to
10 achieve water quality standards in this permit.

11 I keep wanting to go on but not quite because I
12 have something else I want to say about this. In the
13 working proposal basically staff has translated all

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14 available wasteload allocations into either numeric
15 water quality based effluent limitations, actually in
16 allocations into numeric water quality based effluent
17 limitations and then in some cases also into specific
18 receiving water limitations.

19 And this is somewhat -- the latter is somewhat
20 unique to our bacteria TMDL's because in our bacteria
21 TMDL's, as many of you know, we have requirements for an
22 allowable number of exceedance stays of the bacteria
23 standards and that's really a receiving water
24 limitation. It's a limitation that applies in the
25 receiving water.

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1 So in the case of bacteria TMDL's, we have both the
2 numeric water quality based effluent limitations which
3 apply to the discharge at the outfall itself as well as
4 these receiving water limitations that apply in the
5 receiving water in terms of the number of allowable
6 exceedance stays that we can have and still be
7 protective of beneficial uses.

8 Now I am going to move onto the next slide which is
9 with regard to how we're proposing to demonstrate
10 compliance with both the interim water quality based
11 effluent limitations and the final, and I want to walk
12 you through each of these.

13 For the interim water quality based effluent
14 limitations, we're basically in the working proposal
15 saying that there are four different ways that
16 permittees can demonstrate compliance with the interim
17 water quality based effluent limitations.

18 The first is to show there's no discharge from the
19 MS-4 outfalls that are subject to the water quality
20 based effluent limitations. The second is to show that
21 those water quality based effluent limitations are met
22 at the outfall. The third is to show that the receiving
23 water limitations are met in the receiving water, for
24 example, the number of allowable exceedance stays is
25 achieved. And the fourth, which is special to the

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1 interim water quality based effluent limitations is the
2 action based compliance pathway that I've previously
3 described whereby based on the watershed control
4 measures that were identified in an approved watershed
5 management plan, then permittees instead of showing
6 compliance directly with the numeric effluent
7 limitation, they can document that they have conducted
8 the actions per the schedule that was approved in this
9 watershed management program, and during these interim
10 deadlines they can demonstrate compliance using that
11 action base approach.

12 For the final water quality based effluent
13 limitations the first three options are available in
14 that case, and that is there's no discharge from the
15 outfall, that the discharge meets the water quality
16 based effluent limitations, or that the receiving water
17 limitations are met in the water body.

18 The action based approach we have not provided as
19 an option at the final compliance deadline. And really
20 the reason for that is because with the reasonable
21 assurance analysis that I described previously, there
22 should be -- there's an expectation that the final
23 numeric limitations will be able to be met by those
24 control measures.

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25 And in order to ensure accountability and that that
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1 does happen and water quality standards are achieved, we
2 did not provide that last option. And we feel like it's
3 necessary to just demonstrate at that final deadline
4 that compliance with the final effluent limitations and
5 receiving water limitations is achieved based on looking
6 at monitoring data and comparing that with what the
7 requirements are.

8 One thing I want to talk about briefly before --
9 I'm going to go back to that slide in a minute, but I do
10 want to take a minute to talk about the fact as we all
11 know, because we have 88 permittees and many of the
12 permittees have commingled discharges within the MS-4
13 before they are discharged to the receiving water, I
14 want to talk a little bit about each individual
15 permittee's responsibility as well as collective
16 responsibility when there are commingled discharges.

17 Federal regulation does say each permittee is only
18 responsible for discharges from the MS-4 for which it is
19 the owner or operator.

20 In L.A. we have a difficult situation where,
21 because it's such an urbanized area, we do have
22 situations where there are discharges from multiple
23 permittees that commingle within the system before they
24 reach the receiving water.

25 And so because of this, in many of our TMDL's, the
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1 wasteload allocations are assigned jointly to a group of
2 permittees because these discharges do commingle before
3 they're discharged to the receiving water.

4 So where permittees have commingled discharges
5 compliance is determined for the group as a whole unless
6 an individual permittee can demonstrate that it achieved
7 compliance for its discharge individually.

8 This individual demonstration can be done in a
9 couple of ways. First of all, as I mentioned before, a
10 permittee could demonstrate that there was no discharge
11 from its MS-4. So it could look at its jurisdictional
12 boundary and it could basically document that there was
13 not a discharge or there was not a discharge that
14 exceeded the water quality based effluent limitations
15 that came from its jurisdiction. So those are two ways
16 that it could do that.

17 It could also conduct -- and this is somewhat
18 unique to the bacteria standards, but it could conduct a
19 source investigation to basically show that it did not
20 have sources of that pollutant that were coming from
21 that particular part of its MS-4 into the receiving
22 water. So there are a couple ways that an individual
23 permittee can address its individual responsibility.

24 And so when I talk about outfalls -- and outfall
25 traditionally we think of as an outfall to the receiving
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1 water. But if a permittee was looking at its individual
2 compliance, that outfall might actually be a location at
3 the permittee's jurisdictional boundary where it could
4 separate its contributions to the MS-4 from that of
5 other permittees.

6 So I just wanted to return to this slide about
7 compliance demonstration and the alternatives. And what
8 I've done here, I've basically just indicated over here
9 whether these different compliance demonstration

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10 alternatives could be used by an individual permittee or
11 by a group of permittees.

12 If you kind of read the chart from left to right,
13 you can basically see that the first two could be used
14 either by an individual permittee or by a group of
15 permittees. The mechanism by which you would
16 demonstrate compliance in the receiving water would most
17 likely be used by a group of permittees to demonstrate
18 that all the permittees discharging from that outfall
19 were achieving the receiving water limitations.

20 And then the last option for the interim water
21 quality based effluent limitations which is action based
22 obviously could be an individual permittee
23 demonstration.

24 And one of the things that I meant to mention with
25 regard to the watershed management programs and the

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1 control measures is one element of the plan, if it is a
2 plan that's developed by multiple permittees, will be a
3 requirement to include what are each permittee's
4 responsibility so it's very clear what the individual
5 roles and responsibilities are in a collective watershed
6 management plan. So when we come to looking at
7 compliance, we know what each permittee has done and
8 whether they've met their obligations under the plan.

9 The next thing that I want to talk about is
10 compliance schedules. And specifically what we've done
11 in the working proposal is the compliance schedules that
12 we have included for TMDL's are equivalent to the TMDL
13 implementation schedules that were adopted as part of
14 the TMDL itself in the case of state adopted TMDL's.

15 So when you adopt a TMDL, you adopt some numbers in
16 terms of wasteload allocations but you're also adopting
17 a limitation schedule to come into compliance with those
18 numbers understanding that that's going to take
19 sometime.

20 So in the case where we do have a state adopted
21 TMDL with an implementation schedule, we have included
22 schedules that are consistent with that.

23 The other two situations that we have are, first of
24 all, some cases where the compliance deadlines have
25 already passed as well as some cases where we have EPA

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1 established compliant or -- excuse me -- TMDL's that
2 don't have implementation schedules in them.

3 We have thought long and hard about these two
4 situations and what we should do when we don't currently
5 have the authority to include compliance schedules
6 within the permit itself in these latter two cases.

7 And as I said, one of these is EPA established
8 TMDL's, and that's because EPA established TMDL's do not
9 have implementation plans or schedules adopted as part
10 of them. EPA doesn't have that authority and,
11 therefore, we don't have a schedule within our state
12 water quality regulations that we can then carry over
13 into the permit.

14 And then the second case, as I mentioned, is the
15 fact that we do have some TMDL's for which final
16 compliance states have passed. These are at this point
17 primarily related to some of our bacteria TMDL's and
18 particularly to some of the dry weather wasteload
19 allocations requirements of those TMDL's.

20 In the case of those, the latter where we have

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21 deadlines that have passed, basically because those
22 schedules are in the basin plan amendment, right now the
23 regional board doesn't have the ability to extend those
24 deadlines because those are part of our water quality
25 regulation and, therefore, the permit needs to be

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1 consistent with those implementation schedules that are
2 included in the basin plan.

3 So what we've done is we've looked for tools that
4 we've had. We've consulted with our attorneys about
5 this, and we've identified the time schedule orders are
6 an appropriate tool potentially in either one of these
7 situations where appropriate.

8 What we could do with a time schedule order is
9 basically provide additional time, and particularly in
10 the case of TMDL's we have a number of EPA TMDL's that
11 have just been adopted by EPA in the last few months,
12 actually in the end of March.

13 We have four new EPA established TMDL's where
14 immediate compliance with the wasteload allocations in
15 those TMDL's would be in most cases very difficult to
16 achieve. And so a time schedule order provides us with
17 a way of giving permittees time to come into compliance
18 with those water quality based effluent limitations that
19 will be necessary to implement the EPA established
20 TMDL's.

21 In the second case, as I said, there's some state
22 adopted TMDL's where the final deadlines have passed.
23 And in these cases what we would do is we would have
24 permittees actually in both cases request a time
25 schedule order from us. We would evaluate the request

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1 for the time schedule order to determine whether it was
2 appropriate and justified. And then, if it was, we
3 would prepare a time schedule order to be adopted by the
4 board.

5 And let me just turn to the next slide. For the
6 time schedule orders what we're intending is different
7 types of information would need to be provided for the
8 EPA TMDL's versus for the state adopted TMDL's.

9 For the EPA TMDL's, because there has not been any
10 effort at this point because they are so new to start
11 implementing those TMDL's, we would not have quite as
12 high of a threshold of the information that would be
13 needed to request time for that.

14 It would basically require that they include in the
15 request a time schedule of the actions, they would take
16 a demonstration of the schedule as short as possible and
17 interim requirements and deadlines for their achievement
18 within the permit term.

19 For the state adopted TMDL's, because in many cases
20 these deadlines are somewhat long passed, we would
21 require additional information including a chronology of
22 all the actions that have been taken since the TMDL went
23 into effect to achieve the water quality based effluent
24 limitations, and also we would require a justification
25 for the need for additional time beyond that which was

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1 already provided in the state adopted TMDL
2 implementation schedule. And then the rest of the
3 requirements would follow along the lines of those
4 required for EPA TMDL's.

5 So we know this is a difficult issue and I think

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6 one that you'll hear about today and one that is, I
7 think, causing some consternation among permittees, the
8 use of the time schedule order.

9 However, we do feel like it is an appropriate tool
10 and a valuable tool that would provide additional time
11 where the request is justified and warranted. So that
12 is all I'll say about that, and I'm happy to answer
13 questions, of course, more specifically about that as we
14 get into discussion.

15 The last thing that I wanted to do is talk about
16 the receiving water limitation provisions in the permit.
17 And I want to start out by saying that the receiving
18 water limitations are in every MPS permit that comes
19 before you, not just MS-4 permits but receiving water
20 limitations are included in all MPS permits.

21 And they're essentially equivalent, as I mentioned
22 at the beginning at the presentation, to the applicable
23 water quality standards for the receiving water. And I
24 mentioned there's a definition in your working proposal.

25 Their purpose is to ensure that the permitted

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1 discharges and in this case both the individual and the
2 collective discharges from the MS-4 do not cause or
3 contribute to exceedances of applicable water quality
4 standards that are necessary to protect beneficial uses
5 in the receiving water.

6 And the Clean Water Act and the implementing
7 regulations in 40 CFR require that there are permit
8 conditions necessary to achieve water quality standards.
9 The language that we're proposing in the receiving water
10 limitations is not new, and it's not significantly
11 changed from what's in the 2001 permit or what was
12 adopted in the Ventura 2010 MS-4 permit.

13 The language that is in the working proposal and
14 also in the 2001, the current permit and Ventura is
15 based on the state water board's precedential orders
16 9801 and 91905 whereby the state water board provided
17 instructions to the regional boards regarding receiving
18 water limitations language to be included in all MS-4
19 permits throughout the state.

20 And the state board adopted this language in
21 response to some of objections by U.S. EPA sometime ago.
22 I think it was primarily during 1998 on the receiving
23 water limitations provisions of several MPS permits,
24 MS-4 permits that had been adopted by other regional
25 boards.

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1 The language that is in the receiving water
2 limitations provisions essentially includes three main
3 parts. The first is a provision that discharges from
4 the MS-4 may now cause or contribute to exceedances of
5 receiving water limitations. The second is basically a
6 parallel requirement that discharges may not cause or
7 contribute to a condition of nuisance in the receiving
8 water. And the third is a provision that establishes a
9 process by which permittees are to come into compliance
10 with the first two provisions within the receiving water
11 limitation provisions.

12 And basically this is a process to address any
13 failures, like I said, to achieve those first two
14 provisions. And a lot of times what we've done is we've
15 referred to this as the iterative process in the past or
16 the iterative BMP implementation process.

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17 while each of these provisions is independently
18 applicable, the third provision, as I said, is intended
19 to ensure that the necessary storm water management
20 programs and controls are in place and that they are
21 modified by MS-4 permittees in a timely fashion when
22 necessary to achieve those first two provisions.

23 So I wanted to take just a couple more minutes to
24 talk about this issue some more because it's been a
25 long-standing issue as part of the 2001 permit between

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1 the regional board and several permittees as to whether
2 compliance with the iterative process shields a
3 permittee from violations of receiving water
4 limitations. And a lot of people have referred to this
5 as whether there's a safe harbor in the permit. The
6 regional board has contended that there is not this safe
7 harbor. Well, several permittees have interpreted the
8 provisions in this section to include a safe harbor.

9 This issue with respect to the receiving water
10 limitation provisions in the 2001 permit has been
11 litigated twice, first in 2005 in state court litigation
12 challenging the 2001 MS-4 permit, the current permit,
13 and second in 2011 when NRDC and Santa Monica Baykeeper
14 filed the citizens' suit in Federal court against the
15 County of Los Angeles and the Los Angeles County Flood
16 Control District.

17 In both cases the courts upheld that the regional
18 board's position that receiving water limitation
19 language in the 2001 permit does not provide a safe
20 harbor and that the first two provisions are
21 independently applicable from the third provision that
22 establishes the iterative process requirements.

23 In drafting the new permit, staff did think a long
24 time about whether it would recommend changing or
25 modifying this section of the permit or including some

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1 sort of safe harbor for all of the exceedances of
2 standards.

3 And after much thought, as you see in staff's
4 current working proposal, we're recommending that the
5 receiving water limitations language in the 2001 permit
6 essentially be carried over to the new permit.

7 However, staff's current working proposal does
8 provide a safe harbor for certain exceedances of water
9 quality standards where a TMDL provides time to comply
10 with water quality standards.

11 Specifically what we've done, because we've
12 included 33 TMDL's in this permit and these TMDL's
13 address many water body pollutant combinations and we
14 also understand that compliance with these can't be
15 achieved immediately in the receiving water, that's why
16 we included implementation schedules for these;
17 therefore, the working proposal provides basically in
18 the TMDL provisions that an MS-4 permittee would not be
19 found in violation of receiving water limitations in
20 this part 5(a) that's in the receiving water limitation
21 provisions if it is in full compliance with the
22 applicable TMDL's requirements pursuant to compliant
23 schedules in those TMDL's.

24 So we felt like that was a valuable and necessary
25 addition within the TMDL provisions to provide that time

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1 to be consistent with time that the board has provided

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2 in the TMDL implementation schedules to comply with
3 those specific receiving water limitations.

4 I just want to say with regard to this, we're still
5 hearing comments on this. I know you'll hear a lot of
6 comments today. It is a difficult issue. We're
7 continuing to listen to what people have to say about
8 this and try to work with permittees as well as
9 environmental organizations on this issue to try to find
10 the best solution and ultimately work towards our goal
11 of achieving receiving water limitations in all the
12 waters. With that I'm going to stop my presentation and
13 hand it over for public comments.

14 MR. STRINGER: Thank you very much.

15 Extraordinarily helpful. Thank you. I think we'll take
16 a -- excuse me. I think what we'll do in looking at
17 this stack of speaker cards here is take a 10-minute
18 break now and then come back and hear two lengthy
19 presentations, one from Heal the Bay and then the next
20 one after that will be from the L.A. Permit Group. That
21 will comprise about an hour and a half total. And then
22 we'll break for lunch, and then we'll come back and hear
23 a couple of additional longer presentations and then a
24 series of three-minute public comments. You want to
25 add?

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1 MR. UNGER: I was just going to add board member
2 Mary Ann Lutz is still waiving --

3 MR. STRINGER: I understand. I spoke to her about
4 it. So we'll tell her we're behind where we thought
5 we'd be but hopefully not too much. So 10 minutes now.
6 We'll be back here at 11:15, 11:20, and we'll start
7 right on time. Thank you.

8 (Brief recess.)

9 MR. STRINGER: Thank you all for staying relatively
10 on time. We're going to change things up a little bit
11 from what I said before the break. Because of some time
12 limitations we have and also because of executive
13 session we have to do at 12:30 and also and most
14 importantly because we all want to get out of here at
15 5:00. If I do the math, there's no way we're going to
16 get through all the cards.

17 What we're going to do because people have a number
18 of things to do other than sit here all day, we're going
19 to take the shorter commenters first. And typically we
20 allow three minutes for those comments, but we're going
21 to limit those to two minutes today.

22 And we ask that, if there are groups of people who
23 have similar comments, that they come up to the podium
24 together or raise their hands or stand when folks who
25 are saying things that they also would say do it that

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1 way so that we can be as efficient as possible.

2 We want to hear from all of you obviously, but we
3 also have a very full agenda today. And no matter what
4 happens, we have to leave by 5:00. So thank you for
5 your patience as we work through the logistics of this
6 and make sure we all get the benefit of all of your
7 important comments. The first person up is Sharom
8 Kerajani from L.A. City Sanitation.

9 MR. KERAJANI: Good morning Mr. Chair, board
10 members. Sharom Kerajani, Bureau of Sanitation. Just
11 very briefly I'm here in support of the watershed
12 management plan that Ms. Purdy gave her presentation on.

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13 we believe that this is the most cost effective manner
 14 for us to (inaudible) the watershed because it gives us
 15 the opportunity for us to focus on the most prioritized
 16 (inaudible), the most collaboration among the agencies.
 17 It's most cost effective, and it does provide us
 18 flexibility among the watershed because (inaudible) as
 19 far as scientific investigation. I wanted to also thank
 20 Mr. Unger, Ms. Smith, Ms. Purdy and Mr. Ridgeway for the
 21 opportunity of providing this workshop that I find very
 22 informative. Thank you so much.

23 MR. STRINGER: Thank you. Meredith McCarthy. I'm
 24 going to read a couple names at once so the next one
 25 knows who's on deck. On deck is Steven M-e-j-i-a.

0095

1 MS. MCCARTHY: My name is Meredith McCarthy. I am
 2 a local scuba diver instructor and A mother of two young
 3 boys, and I just wanted to come here today to tell you a
 4 little quick story.

5 We were celebrating Earth month April with my sons
 6 in the Los Angeles River, and he went barreling down to
 7 the river to, of course, dive head first into the river
 8 and I said, "whoa. where are you going?" He's like,
 9 "We're here. Look. This is so great." I said, "You
 10 can't get in the water." He said, "why can't I get in
 11 the water?" I said, "It's not clean enough." And he
 12 said, "well, we're here to clean it today. Can I come
 13 back when it's clean?"

14 And in that five-year-old logic it seems so
 15 reasonable like, of course, we're going to come back
 16 when it's clean because I believe we can make it clean.
 17 I believe that together with the limits of this permit
 18 that this water can get better.

19 I'm so encouraged by the county's fee permit which
 20 is going to the board at the end of the month to help
 21 the cities get the funding they need to do the projects
 22 that will get the water clean so that so much of our
 23 region can touch the water. It seems like such a simple
 24 thing.

25 So I'm here today to encourage you to set strong

0096

1 pollution limits, as strong as you possibly can.
 2 You are the trigger that will help cities create jobs.
 3 Generation water is standing by training youth. For
 4 every million dollars we spend, we create hundreds of
 5 jobs. And so together you hold that power. But it only
 6 makes sense if the limits make sense. So thank you for
 7 the time. Thank you very much.

8 MR. STRINGER: Thank you. Steven. And wendi
 9 werner and then Matthew King.

10 MS. WERNER: Thank you. I'm here to speak about
 11 the natural bacteria in the TMDL exceedances. The
 12 beaches especially, the ones persistent with bacteria
 13 exceedances are filled with mounds of kelp rack and sea
 14 grass that have lots of bird and brine feces are not
 15 being accounted for in the bacteria TMDL discussion.
 16 Beaches with high level of rack, suspended rack,
 17 obviously seaweed, suspended in the water column may
 18 persist for longer than FID and near shore beaches where
 19 there is no rack and those affect the violation of clean
 20 water standards

21 Although there is a potential role for kelp to
 22 adversely affect beach water quality with concentrations
 23 of high bacteria, it should be noted that rack plays an

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24 important role in the beach ecosystem by providing
25 nutrients to the beach food and the web chain. The sea
0097

1 birds, the invertebrate, the insects -- and insects all
2 rely on kelp as a food source.

3 Beach grooming to remove standard kelp has been
4 shown to adversely impact the beach ecosystem. This was
5 a study done from Dugan and Hubbard in 2010. Thus a
6 decision to remove rack from the beach should be only
7 undertaken after careful consideration of both water
8 quality and ecosystem needs.

9 I understand that there are water quality
10 exceedances and this whole TMDL thing is obviously
11 greatly appreciated for all of us. But we have to
12 understand that there are exceedances that are bacteria
13 exceedances that are from nature that absolutely cannot
14 be ignored. There's human shedding that occurs when
15 people come to the beach. Human shedding creates staph.
16 It's going to create a bacteria exceedance. It's
17 something that has to be implemented in these TMDL
18 overloads. And I thank you for listening.

19 MR. STRINGER: Thank you. Matthew King. Rick
20 walker.

21 MR. KING: Hello. My name is Matthew King. I'm
22 from Santa Monica. My father spent 30 years as an L.A.
23 County lifeguard. He dedicated his professional life to
24 protecting L.A.'s residents when they stepped into our
25 local oceans. As you debate the storm water permit,

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1 it's my sincere hope that you will show the same level
2 of concern for public health and safety as my father
3 did. People need to know that a day at the beach isn't
4 going to make them sick.

5 Before he died, my father was heartened to see a
6 vast improvement in ocean water quality from the 1970's.
7 As a lifeguard out in the water, he saw firsthand all
8 the dead zones in the bay.

9 Fortunately, those days are long gone. Water
10 quality has been subtly improving thanks to effective
11 TMDL's that you guys have helped implement. Now is the
12 time for stronger projections, not weaker ones. Let's
13 not go backwards. Please make sure you have the
14 strongest limits possible and make sure they're included
15 in the permit. No more foot dragging. Thank you.

16 MR. STRINGER: Thank you. Rick Blocker and Ana
17 Louisa Ager.

18 MR. BLOCKER: My name is Rick Blocker. I want to
19 thank you for listening and let you know that I'm
20 terrified because I've never been to anything quite like
21 this before. I want to thank you for taking such
22 concern for our health and safety.

23 I come because I'm a lifelong surfer. I started
24 surfing in 1960 at the reef in the bay at Santa Monica
25 and continue to do so up until yesterday anyway. And

0099
1 I'd like to just let you know that the water is such a
2 wonderful place for us and it's been a tremendous place
3 for me. And the safety and the health that I experience
4 through it is very, very important.

5 I listened for a long time, and I didn't know a lot
6 about what it is you were talking about. I'm really
7 happy that you're here taking care of our interests.

8 I was a 10-year-old boy when I started surfing. I

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9 spent my entire life going into that ocean, if not
10 weekly, daily. And I hear the younger surfers and the
11 younger people that go down to the water talk about
12 ailments that they experience, and I don't believe that
13 I ever have gotten any ailments. I believe that maybe
14 I'm immune due to the longevity.

15 But the fact is when I started there weren't any
16 regulations, and I'm grateful that today there are and
17 it's due to your efforts. And we want to continue to
18 have the strongest regulations that we can to protect
19 humans and their ability to enjoy the ocean. So thank
20 you.

21 MR. STRINGER: Thank you, Mr. Blocker. Ana Louisa,
22 Tatiana Gower.

23 MS. AGER: Hi. Thank you for hearing us today. My
24 name is Ana Louisa Ager. I live in Venice. I'm here as
25 a diver and a reef check volunteer. I spent a lot of

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1 time living in Central America and Honduras doing reef
2 check surveys and have seen firsthand the difference
3 between a place that doesn't have these kinds of limits,
4 these checks on pollutants in the waterway. There's
5 trash all over the reefs. There was sedimentation from
6 deforestation and construction and development that was
7 suffocating the corals and these very delicate ocean
8 ecosystems that they have there.

9 And I have seen a difference here where we have
10 these regulations and the water is much cleaner, much
11 healthier. The ecosystem is in much better shape. And
12 I want to thank you for that, and I also want to urge
13 you to please continue to protect the water quality and
14 the Santa Monica Bay. It's important for all of us.
15 It's important for the economy of California, and I just
16 want to say please continue with strong regulations.
17 Thank you.

18 MR. STRINGER: Thank you. Tatiana Gower. Dulce
19 Stern or Stein.

20 MS. GOWER: Good morning Mr. Chair, members of the
21 board. My name is Tatiana Gower. I am actually here to
22 speak in my capacity as a resident of Culver City who
23 lives a block away from Biona Creek and sees daily the
24 impacts of the polluted storm water and also water
25 discharges flowing to the creek and also as the mother

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1 of two young children who, unfortunately, I don't let
2 get in the ocean because I'm concerned with the poor
3 water quality and I'm, frankly, worried that they will
4 get sick.

5 This year, as most of you know, we are celebrating
6 this 40th anniversary of the passing of the Clean Water
7 Act, and there's a lot to celebrate. And also it gives
8 us an opportunity to remind ourselves that even though
9 we've gone a long way, we have a lot more to achieve to
10 get to the goals -- to achieve the goals of the Clean
11 Water Act, the fishable and swimmable waters.

12 Numerous studies and mountains of evidence and data
13 show that storm water, non storm water pollution reduces
14 the water quality of our rivers and creeks that we all
15 want to use and that's why what the board does today
16 with this permit and in the future with this permit is
17 so crucial and important because even though you've
18 heard water quality standards and TMDL's and these water
19 quality standards and TMDL's were adopted by this board,

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20 what matters is how they implement them, what matters is
21 how we enforce them. And that's what's going to
22 determine whether we can reclaim our waters and make
23 them truly fishable and swimmable.

24 I'm urging you today as a mother and as somebody
25 who wants to enjoy Biona Creek -- that's why I have my

0102

1 house there -- to really adopt the strongest possible
2 standards, to require these standards to be met as soon
3 as possible. Thank you.

4 MR. STRINGER: Thank you. I see that Mr. Stein
5 provided written comments; so I assume there isn't a
6 desire to speak. We'll put these in the record.
7 Marille Barr, and Joe Geever is on deck.

8 MS. BARR: Hello. High name is Marille Barr, and
9 I'm here today as a concerned resident of Los Angeles
10 and also as an advocate for all the critters in our
11 creeks, bays, streams, wetlands and oceans.

12 I'm here to ask you to include the strongest
13 possible protections in the storm water permits. As a
14 concerned lover of the oceans and tide pools, clean
15 water is especially important to me because those
16 critters are not able to come here and speak for
17 themselves.

18 I actually like to eat some much those critters,
19 and so do thousands of other people who fish in our
20 local waterways. However, many of these fish are too
21 toxic to consume and yet they eat them anyway.

22 To protect myself as an educated person, I actually
23 refer to the Monterey Bay Aquarium seafood watch cart
24 and yet I still get it wrong and I'm a knowledgeable
25 person. So how can you expect everybody else to get it

0103

1 right when somebody who cares about this so passionately
2 still has a hard time with all of these fine prints on
3 what you can and can't eat and what you have to avoid?
4 And, by the way, this is the shortcut menu of them
5 because other ones say you can eat it if it's less than
6 this big. Because after it gets past six inches or past
7 a foot, it's then consumed too many other things and the
8 toxins have built up in it because it's now this big and
9 it's consumed so many other little fish that have all
10 these toxins in them. So it gets rather confusing.

11 So I please, please, please ask you to protect our
12 future water and our future resources and our future
13 food and our children who eat this food. Please, like I
14 said, please include the strongest possible protections
15 in our storm water protections, in our permits that then
16 go straight out to our ocean and into our food chain.
17 Thank you.

18 MR. STRINGER: Thank you. Joe's Geever, Sara
19 Godvey.

20 MR. GEEVER: Mr. Chair and board members, my name
21 is Joe Geever, and I'm the national water programs
22 manager for Surfrider Foundation, and I want to address
23 the issue of TMDL compliance deadlines. We often
24 advocate (inaudible) spending their limited staff and
25 financial resources on programs and projects to

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1 eliminate pollution rather than fines and litigation.

2 But in this case I was around for the decision to
3 incorporate the bacteria TMDL's into the MS-4 permit.
4 At the time dischargers took an integrated management

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5 approach to compliance and they got more time for
6 compliance and we supported that.

7 So while I want to recognize that some cities made
8 some progress, we believe even the best actors have
9 fallen short and the worst case has done little to
10 nothing to come into compliance with commitments made
11 over six years ago.

12 So while I wish I could support time extensions and
13 recognitions of efforts made in good faith, I can't.
14 We're obviously sick and tired of getting sick and tired
15 when we swim and surf.

16 But there's a much larger picture to keep in mind.
17 The state is developing policies to encourage integrated
18 water management yet I don't see the necessary
19 coordination of agencies responsible for water supply,
20 pollution prevention, waste water treatment, flood
21 control. I do see some great examples of green street
22 pilots and marginal improvements in landscape retrofits
23 and even the beginnings of treatment wetland networks
24 and recycled waste water but not enough, not even close.

25 And I'll add that given that there hasn't, in my

0105

1 humble opinion, been a good faith effort to come into
2 compliance with these TMDL's and the deadlines agreed to
3 10 years ago, extending these deadlines actually creates
4 some incentives to stall even longer.

5 So we urge you to adopt the compliance schedules
6 agreed to over 10 years ago and the TMDL's and start
7 enforcing those compliance schedules even if it means
8 immediate noncompliance.

9 Dischargers can't make a compelling argument they
10 weren't on notice this day would come. They were at the
11 decision hearing 10 years ago just like we were.
12 Timelines were negotiated and commitments were made.

13 We've been waiting and time is up. Thank you very much.

14 MR. STRINGER: Thank you, Mr. Geever. Sara Godvey.
15 Ellen Bravo.

16 MS. GODVEY: Hi. My name is Sara Godvey, and I
17 live here in Los Angeles just a little bit north in a
18 neighborhood called Pico Union. And although I do not
19 live close to the beach, I love to swim and I try to go
20 out there mainly in the summer but also during the
21 winter when, as you know, that's when a lot of storm
22 water pollution is making its way out to the ocean.

23 When I make it to the beach, I do not want to worry
24 about bacteria levels or other pollutants in the water.
25 It's up to you guys here to help protect me and my

0106

1 family by adding strong pollution limits with clear
2 language and deadlines (inaudible) into the storm water
3 permits. You've already created the language. You've
4 already done the work to make the TMDL's. Now we're
5 just asking that it's in the permit.

6 And also I want to make sure that you have
7 deadlines with substance because, as the past person
8 just said, polluters have had over 10 years to meet
9 these TMDL limits and 10 years is plenty of time for
10 innovation. Six years since the deadline is plenty of
11 time for innovation.

12 You know, 10 years ago, 2002, I've gotta say I did
13 not think I would have an iPhone where I could do
14 everything in the world. They've had the time to create
15 tons of new ideas.

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16 So we need action so that, when I take my nephew,
17 who is about to be born in just a few months, to the
18 beach that I can feel safe about that decision. And
19 these permits are a way for you to hold any polluters or
20 dischargers accountable. So I entrust in you that you
21 will make these permits as strong as possible. Thank
22 you.

23 MR. STRINGER: Thank you. Evelyn Bravo. Olga
24 Ayalla.

25 MS. BRAVO: Good morning. My name is Evelyn Bravo.

0107

1 I'm here today as an inner city homeowner to ask the
2 regional board to include strong protections in the
3 proposed municipal storm water permit. As a community
4 member in the inner city, clean water running through my
5 creeks and streets near my neighborhood are especially
6 important to me and I'm here because often unrepresented
7 families and undervalued homes that are equally
8 deserving of safe environments and clean water can
9 easily go overlooked. So I'm here gladly representing
10 them.

11 Beaches at the mouth of Biona Creek, which is the
12 creek that runs nearest to my house, are among the most
13 used with millions of annual visitors that swim, fish,
14 and recreate there but that also continue to get sick
15 from the bacteria from the storm water pollution.

16 As a child my family in Compton depended on local
17 fishing that I came to find out was too toxic to consume
18 and yet we always did.

19 I know that TMDL's are pollution limits in place
20 for our beaches and fish to be protected. And I know
21 that these TMDL pollution limits are critical for
22 putting our region on the path for clean water and
23 healthier oceans.

24 So I ask you today to please support the call as it
25 is critical that these numeric TMDL pollution limits are

0108

1 put into the storm water permit with strict compliance
2 deadlines. I ask that you remember that it is your
3 responsibility as the board to protect our water
4 quality; so I urge that you include these TMDL pollution
5 limits into the permit and make these regulations
6 effective in attaining the clean water goals that we
7 seek. Thank you so much for your time.

8 MR. STRINGER: Thank you. Olga Ayalla. Blanket
9 apology for mispronouncing names.

10 MS. AYALLA: No problem. I can face that. Olga
11 Ayalla. See. Thank you so much. I trust that you guys
12 are doing an awesome, awesome job; so keep it up. Thank
13 you. I support it. Thank you.

14 MR. STRINGER: Marsha Matts. Ann Bergman.

15 MS. MATTS: Good morning. My name is Marsha Matts.
16 I am a resident of Santa Monica and for years have loved
17 to swim in the ocean. It is a true joy in me, and I'm
18 sure I share that with many of you and many, many others
19 who flock to the beaches.

20 As a local resident, I'm concerned about the
21 quality of the water and the access for my community to
22 be able to enjoy what we have. We're so lucky to live
23 close to the ocean.

24 Beyond being a local resident, I know that it's a
25 tremendous source of revenue to my community. People

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1 come, the whole tourist industry, the taxi cabs, the
2 restaurateurs, the service industry, the taxi cabs, the
3 hotels. If our waters aren't clean, tourists will go
4 elsewhere. This also impacts real estate and the school
5 system. I mean it's tremendous triple down effect. So
6 both for reasons practical and emotional I'm asking you,
7 I'm pleading with you to please use the strongest
8 possible guidelines to prevent pollution so we all can
9 enjoy what we are so fortunate to have. Thank you.

10 MR. STRINGER: Thank you for your comments. Ann
11 Bergman. Amanda Crisbach.

12 MS. BERGMAN: Hello. My name is Ann Bergman, and I
13 live in the Van Nuys, Sherman Oaks area, which is not as
14 far away from the ocean as it sounds. I'm here to
15 represent my children, Henry, who is almost 11, and
16 Ella, who is seven. We're all ocean lovers, and we've
17 escaped the valley heat many times over the years to
18 head to the beach together. And my kids like to do what
19 they call the happy feet dance when they finally get to
20 the water.

21 I know that pollution limits have helped them to
22 keep safe and from getting sick on those happy feet
23 days. And I ask that this strong TMDL pollution limit
24 and storm water permits be included with strict
25 compliance deadlines. I don't want my kids or anyone

0110
1 else's kids to ever get sick from playing or swimming in
2 our local waters. Thank you.

3 MR. STRINGER: Thank you. Amanda Crisbach. Jason
4 Wen and John Hunter on deck.

5 MS. CRISBACH: Hi. My name is Amanda Crisbach, and
6 I'm a resident of West Hollywood. And I would like to
7 encourage you to please, please put the bacteria TMDL's
8 into the storm water permits. It's super important for
9 our water quality, our tourism as a bunch of people have
10 said. I'm not going to take too much of your time, but
11 please I urge you to include the strictest guidelines
12 and timelines for those regulations. Thank you.

13 MR. STRINGER: Thank you. Jason Wen and John
14 Hunter.

15 MR. WEN: Good morning. My name is Jason Wen from
16 the City of Downey. I love to go to the beach. I see
17 everybody knows the issue is not (inaudible). This is
18 how to deliver it. So the hard work to balance the
19 resources, hard work to make a sustainable approach.
20 Now I have my counsel cover it.

21 MR. HUNTER: Thank you. We have a short slide
22 presentation. We tried to make it for exactly three
23 minutes; so I'll try to speed it up as best I can.

24 MR. STRINGER: It's okay.

25 MR. HUNTER: Some background before I get to my

0111
1 comments, Downey has over 1,000 parcels right now with
2 low impact development systems already implemented. I
3 was afraid I wouldn't be able to get the entire city in;
4 so I just got the northwest quadrant of the city. Each
5 one of those green dots represents a parcel that is
6 served with a low impact development system. On the
7 large size -- and most of the board members have seen
8 this before -- we do have a one acre LID site,
9 infiltration site, that treats over 60 acres of runoff.
10 On the small side we have a site like this where you can
11 see the water runs across pervious river rocks and then

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12 into a depressed basin with a vegetation filter and
13 infiltrates. So that's in over 1,000 sites through the
14 city.

15 Our comments are basically generally we're in
16 support of the regional board's effort to have a sub
17 watershed plan as long as it can be tailored to
18 individual cities and individual situations. We think
19 that gives cities a better chance to -- my slide is not
20 working. There we go. Anyway, we do support the effort
21 to do that plan.

22 As far as group effluent limitations, we can
23 support working together, and Downey does with a number
24 of groups. But we don't want to support any
25 nonvoluntary group compliance. Basically we don't want

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1 unwilling permittees to be forced to work together.
2 Everything should be voluntary. And that was just a
3 comment from one of the TMDL sections.

4 Water quality based effluent limitations should be
5 based on BMP's. For example, we just showed you 1,000
6 sites in the city that have BMP's. We think BMP
7 implementation should be sufficient.

8 We also would like to make a comment on load based
9 allocations. For example, grams per day should be
10 available. In most of the TMDL's that are out, you give
11 us a choice of either grams per day or grams per day per
12 liter.

13 For example, the San Gabriel river TMDL for copper
14 and Coyote Creek is a total amount how many pounds per
15 day or kilograms per day. And in the reefs that we
16 discharge to just upstream, it's in concentration base.
17 And if we reduce the amount of flow, we think we should
18 get credit for that.

19 Then we need realistic compliance targets. Downey
20 has installed nearly 400 full capture catch basin
21 inserts. This is for the trash TMDL. This represents
22 89 percent of the city's area. That remaining 11
23 percent could not be retrofitted due to physical
24 limitations. If you want to put the full capture
25 screens in those catch basins, we basically have to

0113
1 destroy the catch basin and rebuild a new one. We do
2 want some credit considering we have 1,000 of the LID
3 systems and other BMP's, street sweeping, et cetera.
4 It's going to be extraordinarily expensive to get that
5 last 11 percent done. And that basically is my final
6 comment. Even after 1,000 parcels, 89 percent of the
7 city's catch basins full capture, how are we going to
8 get to zero? I mean the last 11 percent is going to be
9 the most costly trash cleanup ever. So that concludes
10 our presentation. Thank you.

11 MR. STRINGER: Thank you very much. Steven Dunn,
12 Marsha Hansen.

13 MR. DUNN: Thank you, Board, for this opportunity.
14 I was going to read a letter from Dr. Jeff Harris from
15 Malibu, but it's too long winded. I've been a surfer in
16 Malibu for over five decades. I've actually followed
17 all the water quality issues related to Malibu because
18 of my love of surfing. I'm particularly interested in
19 water quality. I anxiously await the results of the
20 Pacific Coast water quality epidemiological study
21 because it was conducted using the most up-to-date
22 methodologies before making any final decisions on the

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23 bacteria regulations and the bacteria reopener that will
24 be incorporated into the new NTDES permit eventually.
25 Unless the board directs staff to allow all relevant

0114

1 information to be part of the hearing deliberation and
2 discussion making process, the board will not learn what
3 scientists and public health officials have learned in
4 the past 10 years. The reason people get rashes, ear
5 and eye infections, staph infections and
6 gastrointestinal effects after going to the beach has
7 little to do with storm water or urban runoff. It's
8 primarily what beach goers bring onto their skin to the
9 beach. They sit and walk on the sand and go in the
10 water. This starts the bacteria fungi staphylococcus
11 aureus, and that (inaudible) staphylococcus was never
12 considered in the 2002 and 2003 permit deliberations.

13 I want to be very, very clear. Scientists believe
14 that the increase of these disease causing sources is
15 primarily, if not exclusively, human shedding, not from
16 waste water discharge or leakage of storm water. The
17 results are directly correlated to the number of beach
18 goers using limited space at a popular beach, my fellow
19 surfers and fellow beach goers. Thank you.

20 MR. STRINGER: Thank you. Marsha Hanskowit, Trevor
21 Benda.

22 MS. HANSKOWIT: Honorable board members, Marsha
23 Hanskowit. I'm representing the Wetlands Defense Fund,
24 Biona Institute, and Sierra Club. I specifically want
25 to talk about the Biona wetlands TMDL's that have been

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1 adopted by EPA and I presume are going to be
2 incorporated into this because as part of the litigation
3 settlement with Heal the Bay and baykeeper, they are
4 undoubtedly, these TMDL's, going to be used to justify a
5 massive destruction and bulldozing of 600 acres of the
6 Biona wetlands ecosystem that many people work very hard
7 to protect just like what is happening at Malibu, and
8 it's based on erroneous and inaccurate statements and
9 presumptions.

10 Well, how do I know? I went to the EPA meeting,
11 and at the EPA meeting they gave us these documents that
12 had all sorts of inaccurate information about the
13 geography, the hydrology, and all of this related to
14 Biona wetlands. Bay Commission had put this forward,
15 and the Bay Commission, I'm sorry to say, has a lot of
16 inaccurate information coming from their staff.

17 We put forward a report by Dr. Travis Law and
18 Dr. David Jacobs that showed that the coastal wetlands
19 restorations that have been happening have been based on
20 erroneous T sheet typographic interpretations. They are
21 suggesting that all of our coastal wetlands were
22 supposed to be open to the sea around, and that's just
23 not the case.

24 So we are very, very concerned that, you know,
25 while you talk about strong and appropriate TMDL

0116

1 measures, that you not look at -- that you really go
2 backwards in time. You really have to look at what are
3 those things based on. Yes, we want things to be strong
4 to protect people at the beach. But these TMDL
5 standards for Biona wetlands have nothing to do with
6 health hazards. They have to do with removing mud,
7 marsh mud that was put there when the marina was built.

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8 And they're justifying a big engineering plan, and that
9 is wrong.

10 And the only reason I decided to look at that was
11 because we saw what was happening in Malibu Lagoon and
12 how some of those TMDL standards are not applicable any
13 longer.

14 So we would like you to see you address more
15 pollution standards upstream, not be spending all of
16 this money and effort to work on -- I mean really just
17 leave our coastal wetlands alone. There's habitat
18 there, one of the few places we have nature left in Los
19 Angeles.

20 And all of this receiving water limitation and
21 storm water diversion is also going to harm the wildlife
22 that we have left in Los Angeles. Nobody is looking at
23 that. You are taking away water that would have been
24 underneath the surface. Yes. We don't have our
25 underground water systems anymore because we've diverted

0117
1 it the way we unfortunately have and you're going to
2 actually put the final nail in the coffin on all of the
3 wildlife.

4 So my point, you have to have some wildlife
5 biologists starting to look at this and geography
6 experts, not just water quality TMDL chemistry experts.
7 Thank you.

8 MR. STRINGER: Thank you. Robert Van Oak. Jason
9 Winer.

10 MR. WINER: Good afternoon. Jason Winer, associate
11 director and staff attorney with (Inaudible) Foundations
12 Ventura Coast Keeper program. On behalf of our
13 organization, our members, it's imperative that the L.A.
14 MS-4 permits efficiently protects not only L.A. waters
15 but Ventura County waters, Ventura County's coast and
16 especially also the Santa Clara river, which lies
17 downstream of the Los Angeles/Ventura County line.

18 The ecological, cultural, agricultural,
19 recreational and all the other official uses are just
20 too important to not have this L.A. County MS-4 permit
21 be protective of water quality. Thus in regards to TMDL
22 requirements in L.A. and the (inaudible), we want to
23 emphasize the importance of, one, the full adoption of
24 all L.A. County TMDL's into the L.A. County MS-4 permit
25 and, two, the MS-4 permit adopting and requiring full

0118
1 and immediate compliance with the numeric effluent
2 limits in the TMDL's including, one, immediate
3 compliance with the numeric wasteload allocations and,
4 two, immediate compliance of protective numeric
5 (inaudible) limits that should be adopted before numeric
6 wasteload allocations are established. And we'd also
7 like to voice our full support for the receiving water
8 limitations as currently proposed. Thank you.

9 MR. STRINGER: Thank you very much. Richard
10 Watson. Six minutes.

11 MR. WATSON: Vice Chair, I believe I was granted a
12 six-minute presentation.

13 MR. STRINGER: Yeah. That's what I said.

14 MR. WATSON: Okay. Thank you. Vice Chair Stringer
15 and members of the board, my name is Richard Watson.
16 I'm before you today representing the cities of Cerritos
17 and Signal Hill. My comments today focus primarily on
18 the special provisions for the watershed management

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19 programs and related TMDL provisions, and our written
20 submission will be with other subjects.

21 Both Cerritos and Signal Hill are vitally
22 interested in watershed planning. In fact, each city
23 participates in two separate TMDL watershed management
24 organizations pursuant to memoranda of understanding.
25 They worked together on the Los Cerritos Channel since

0119

1 2008, first in negotiating elements of the metals TMDL
2 established by EPA and then in developing an
3 implementation plan and working with the regional board
4 on a basic (inaudible) amendment to appropriately
5 incorporate the TMDL (inaudible).

6 The cities are particularly intrigued by the
7 provisions of the working proposal that encourage
8 watershed management program by allowing permittees to
9 customize control measures, strategies and BMP's to
10 address the highest priorities. This, I think, is very
11 good. And we trust that customization will foster
12 creativity and allow experimentation.

13 For instance, with the metals TMDL's, we believe
14 that to be successful in meeting water quality standards
15 over the long term, we need to address the sources of
16 metals deposited on watershed through atmospheric
17 deposition, and in that case we're going to need the
18 help of other regional and state agencies.

19 The cities also appreciate the fact that watershed
20 management areas may be subdivided into sub watersheds
21 as well as the opportunity for individual municipalities
22 to establish their own water management programs for
23 subterranean (inaudible).

24 Further we appreciate the provision on page 9 that
25 specifies that water management program plans shall

0120

1 "clearly identify the responsibilities of each
2 permitting or participating permittee for implementation
3 of water quality control measures." We trust this
4 provision in combination with a provision in the federal
5 codes which states the (inaudible) only comply with
6 permit conditions related to discharges from municipal
7 storms sewers for which they are operators will protect
8 conscientious permittees from being held liable for the
9 actions or inactions of other permittees.

10 We do have one area of major concern, which was
11 partially addressed earlier, and that's the compliance
12 schedule portion of the watershed management program.
13 While we appreciate staff's action based approach
14 explained earlier for the interim milestones, it's not
15 really been clearly articulated or explained in the
16 permit or the attachments.

17 The current section appears to assume that the
18 permit needs to incorporate numeric water quality based
19 effluent limitations or QBELS based on wasteload
20 allocations in the TMDL's, and that's not really the
21 case.

22 Federal regulations in both the 2002 and the 2010
23 EPA guidance memo clearly require that permits contained
24 QBELS consistent with the assumptions and requirements
25 of the wasteload allocations in applicable TMDL's, but

0121

1 they also clearly allow QBELS and permits to be
2 expressed numerically or in the form of BMP's; so
3 there's a choice.

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4 The 2010 memo also says that when WQBELS are
5 expressed in the form of BMP's, quote, the permit should
6 contain objectives and measurable elements and gives
7 example of those.

8 The cities of Cerritos and Signal Hill strongly
9 urge the board to direct staff to follow this approach
10 and incorporate narrative BMP action based WQBELS in the
11 permit consistent with wasteload allocations in the
12 TMDL's, especially for the interim milestones.

13 This approach will facilitate the use of a deemed
14 compliance approach as was done in the L.A. river and
15 Biona Creek trash TMDL's with the approval of full
16 capture devices. It would also allow credit for
17 compliance approach where credit could be given for
18 pollution prevention programs which target the true
19 sources of pollutants over which permittees have little
20 or no regulatory authority.

21 Integrating WQBELS into the next generation of MS-4
22 permits in the form of BMP's will encourage
23 experimentation, strong pollution prevention efforts in
24 a cost effective manner.

25 And I have an example from the L.A. rivers metals

0122

1 TMDL. One of the provisions says each jurisdiction
2 group shall demonstrate that 75 percent of the group's
3 total drainage area served by the storm drain system is
4 effectively meeting dry weather WLA's.

5 This could be expressed in permit consistent with
6 federal regulations in the following way. Permittees
7 shall demonstrate that source control measures and
8 treatment controls designed to effectively meet dry
9 weather WLA's have been implemented and maintained in 75
10 percent of the total area served by the storm drain
11 system.

12 In most cases converting wasteload allocations to
13 WQBELS expressed as BMP's should not be time consuming.
14 Having BMP implementation targets is understandable and
15 a management task for cities.

16 On the other hand, meeting numeric WQBELS
17 particularly in a short timeframe can be frustrating and
18 potentially paralyzing and could cause more money to be
19 spent on lawyers than on BMP's and drill majors. I urge
20 you to direct staff to use the approach of expressing
21 WQBELS in a BMP manner in both the watershed management
22 program and the TMDL provisions of the permit. Thank
23 you.

24 MR. STRINGER: Thank you very much. Next we have
25 Gary Hildebrand with L.A. County who's been allotted 15

0123

1 minutes.

2 MR. HILDEBRAND: Good afternoon Vice Chair, board
3 members. My name is Gary Hildebrand. I'm with the L.A.
4 County Department of Public Works, and I'm here today on
5 behalf of the County of L.A. and the L.A. County Flood
6 Control District.

7 First off, I'd like to say relative to the
8 watershed management program that's been proposed by the
9 board staff that we do see the approach as being very
10 beneficial. We are supportive of that approach. We do
11 recognize the flexibility that the approach provides in
12 dealing with the prioritization of TMDL's and the
13 efforts needed to comply with those.

14 we also appreciate the opportunity as part of that

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15 approach to be able to prioritize the efforts that are
16 required under the minimum control measures.

17 And as part of the watershed management program the
18 adaptive management process that's included in there
19 really recognizes the sort of evolutionary process that
20 developing and implementing BMP's will occur over many
21 years.

22 As we continue to learn more on the BMP
23 implementation and design and the monitoring efforts, I
24 think the management process has us revisit what's been
25 learned during that time period to be able to modify our

0124 plans to better reach the ultimate goals.

1 But looking at that, I think the receiving water
2 limitation approach that's being proposed doesn't really
3 I think meet the spirit of the watershed management
4 program in the adaptive management process.

5 As is mentioned by the staff, there are actually
6 two approaches for receiving water limitation
7 compliance, one for constituents that are part of a
8 TMDL. For those constituents, if there's a receiving
9 water quality exceedance, the permittees need to
10 demonstrate full implementation of the watershed
11 management program and with proof of that
12 implementation, they are then no longer considered in
13 violation of future water quality exceedances.

14 However, for efforts that are implemented as part
15 of the minimum control measures, that same standard is
16 not there. You have a situation where you can have two
17 watersheds with the same constituent, bacteria, for
18 example. One watershed can have a TMDL with the
19 compliance for that constituent and with the TMDL under
20 the exceedances. The permittee merely needs to
21 demonstrate full implementation of the watershed
22 management program.

23 Another watershed with that same constituent you
24 can have an exceedance and the permittee can, again, be

0125 fully implementing the watershed management program and
1 not be protected from being considered in violation for
2 future exceedances.

3 So I think in the spirit of the watershed
4 management approach that's being proposed, there needs
5 to be a consistent level of compliance in the permit for
6 constituents as part of the receiving water limitations.
7 And we request that the same standard be applied to all
8 constituents across the board irregardless of whether
9 it's part of the TMDL or part of the minimum control
10 measures.

11 The purpose here is to on a watershed basis
12 prioritizing and integrating the various pollutants and
13 proposing the best approach. To do that I think we need
14 to have a common standard of compliance apply to all of
15 the constituents, something that's allows the permittees
16 to demonstrate compliance and demonstrate the good faith
17 efforts that we are implementing over the course of the
18 program.

19 Moving on to the TMDL requirement portion, we
20 appreciate the fact that as part of the interim effluent
21 limitations, the adaptive management process is part of
22 that compliance.

23 However, we are concerned about the fact that for
24 the final effluent limitations that adaptive process is

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0126

1 not included as part of the compliance determination.
2 And what I'm proposing here today is that, as was shown
3 by the staff, as part of the interim wasteload
4 allocation compliance, you have that last step to take a
5 look at the adaptive process. And as part of the
6 watershed management program, we're being required to
7 assess our efforts over the course of the permit period
8 through the adaptive management process.

9 I think prior to the approaching of the final
10 effluent limitation deadline for TMDL, I propose that
11 there be included in the permit a provision that there
12 is a reassessment of the activities undertaken as part
13 of that particular TMDL, monitoring efforts, (inaudible)
14 and based on that assessment that a TMDL be reopened and
15 the compliance dates reevaluated based on this
16 information that's gathered over the life of the permit.

17 Again, I think the whole purpose here is that
18 permittees are being provided the opportunity to
19 demonstrate in good faith that they're implementing the
20 programs, and the fact that storm water permit
21 implementation, BMP implementation is not an exact
22 science, the adaptive management process recognizes that
23 and we are wanting the ability to fully embrace the use
24 of that process in both the TMDL implementation
25 determinations and also the non storm water discharges.

0127

1 And with that thank you.

2 MR. STRINGER: Great. Thank you very much. Our
3 three additional speaker cards all are likely
4 presentations; so I think we'll break now for lunch and
5 hopefully get a court reporter.

6 MR. UNGER: We still have an audio recording, do we
7 not, Al?

8 MR. STRINGER: Do we have audio without a court
9 reporter here? So worst case scenario, we'll at least
10 have audio.

11 MR. UNGER: That's what I'm trying to say. Yeah.

12 MR. STRINGER: We'll talk about whether it's okay
13 to do it that way.

14 MS. MUNOZ: Is it possible to get a copy of the
15 presentations that were given to us from the city of
16 Downey and others that read from comments? I would like
17 copies of those, if possible.

18 MR. STRINGER: Yes, of course.

19 MR. STRINGER: We're going into closed session.

20 MR. UNGER: There's one more short card we can take
21 right now before we break.

22 MR. STRINGER: Okay. Great. I'm sorry. I didn't
23 have this one. James Alameo.

24 MR. ALAMEO: Thank you for the opportunity to
25 speak. My name is James Alameo. I'm here representing

0128

1 as a resident of the Culver City and as a parent in
2 particular asking the regional board to include strong
3 protections in the proposed municipal storm water
4 permit. And what do parents like to do besides talk
5 about their kids; right? And so you as a board are
6 parents to 87 cities, for lack of a better word. There
7 may be one or two in here that we're missing.

8 But basically what we like to do beyond talk about
9 our kids is how we raise our kids. So as parents it is
10 our responsibility to make sure that our kids do what

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11 they need to do to be healthy and to grow strong and
 12 what that means sometimes is you need to eat your
 13 vegetables, you need to brush your teeth, and you need
 14 to clean up after themselves. And we as parents need to
 15 be vigilant in making sure that these items get done on
 16 a daily basis, and it can be tiring especially when our
 17 kids whine and complain and throw tantrums about
 18 complying with, in this case, water quality standards.

19 And worse yet is when our kids get older and get
 20 wise and try to play us for fools. And that can be very
 21 frustrating, and at that point at some point we say to
 22 ourselves enough is enough and we threaten the
 23 consequences or loss of privileges or fines in terms of
 24 loss of allowance.

25 If you don't follow through with those threats,

0129

1 then what happens with our kids? Our kids begin to then
 2 take over and not necessarily respect what we need done
 3 and have them to do. Finally so you as parents have
 4 asked your kids time and time again to clean up their
 5 rooms. In 1990, '96, 2002, 2012 you passed or you're
 6 about to pass the four iterative of the municipal storm
 7 water permit. In 1998 -- time? Okay.

8 MR. STRINGER: A few more seconds to wrap up.

9 MR. ALAMEO: A few more things. So in 1998 528
 10 was passed. 2002 bacteria TMDL's. 2003 SB72. 2008
 11 (inaudible) extension. 2008 NOB's were sent out. 2012
 12 NOB's were sent out. What I'm trying to get to is you
 13 have the opportunity to include critical numeric TMDL
 14 limits in this storm water permit with respective
 15 compliance deadlines and you should because you said it
 16 enough times. Thank you very much.

17 MR. STRINGER: Thank you very much. And I
 18 apologize to Jesse Trujillo. Did you want to make a
 19 comment now? This is an opportunity for a two-minute
 20 comment before we break for lunch. I apologize. I
 21 forgot.

22 MR. TRUJILLO: Thank you Mr. Chair, board.
 23 Yes. My name is Jesse Trujillo. I'm a diver,
 24 scientific diver as well as I am a volunteer with Heal
 25 the Bay, with MTA Watch. So walking along these beaches

0130

1 and coastlines, I do witness the point source of
 2 activity being discharged onto and off of the cliff
 3 sides and directly into the Oceans. What I'm
 4 understanding and hearing is we have bacteria versus
 5 we're trying to actually permit these limitations. So
 6 which one of the two? We have bacteria entering the
 7 oceans which is depleting the oxygen levels inside the
 8 ocean itself versus we can apply these limitations to
 9 the permit and hopefully decrease that activity.

10 Bacteria. Bacteria consumes oxygen that's in the
 11 ocean water. If we don't implement these limitations
 12 now, we're going to have to implement an aeration system
 13 into our oceans in order to give back or create more
 14 oxygen levels in order for the organisms and marine life
 15 to sustain their habitats. Including that will deplete
 16 the sickness and the involvement of surfers, divers,
 17 beach goers and including the marine life itself. We
 18 have to have these limitations implemented now or we're
 19 going to have to implement more into our oceans.

20 Looking into the future I see we have a 2012 to
 21 2021 electric submersible submarines and electric boats

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22 to become. If we include these limitations now, we will
 23 sustain and hopefully restore and keep our oceans
 24 healthy before we have to take further actions into our
 25 oceans itself. Thank you for listening.

0131

1 MR. STRINGER: Thank you very much. Okay. I
 2 apologize for that. We'll now head into closed session.

3 MS. FORDYCE: The Regional Board discussed items
 4 22.8, 22.10, 22.11(b), and 22.12.

5 MR. STRINGER: We'll reconvene here properly at
 6 1:30. See you back here. Thanks very much.

7 (Proceedings suspended at 12:20 P.M.)

8 (Whereupon Katrina Woyjeck, CSR No. 13603
 9 reported the remainder of the proceedings,
 10 resuming at 1:33 p.m.)

11 MR. STRINGER: Thank you everybody for being so
 12 prompt. I hope you had a good lunch. We're going to
 13 get right back into our MS4 workshop.

14 One point of information: Those that are here for
 15 the information items, items 20 and 21, we had two
 16 speaker cards, and we looked at the schedule. I don't
 17 see how we're going to get to those items today given
 18 the fact that we have to get out of here at 5:00.

19 So I've decided to just tell you now that those
 20 information items are going to be continued to the next
 21 meeting in case you don't want to stay around or -- just
 22 thought we'd let you know that now.

23 And thank you for accommodating the moving target
 24 here of our agenda. It's a lot to get through in a
 25 short period of time. So we have three more

0132

1 presentations.

2 All have asked for extended periods to make their
 3 comments in and all have been asked to really keep their
 4 comments within 30, 40 minutes if they can and just be
 5 efficient.

6 And the Board really wants to have time to ask
 7 questions and make comments of its own, and the more
 8 time we have to do that, I think the more informed we
 9 will all become. We don't have opportunities at having
 10 these conversations given our ex parte limitations, so
 11 we really want to take advantage of the time we have
 12 today.

13 First up is Heal the Bay.

14 MS. JAMES: Good afternoon. My name is Kirstin
 15 James, and I'm the water quality director with Heal the
 16 Bay. I'm going to start off today and then my
 17 colleagues at Santa Monica Baykeeper will follow with
 18 similar specific comments. I did have a presentation.

19 And we're going focus today on two of the sections
 20 mainly, and that's the TMDL provision section and the
 21 watershed management program provisions. And what I'm
 22 going to do is set the stage a bit for the importance of
 23 strong requirements in these sections and the elements
 24 that are critical to keep in mind as these provisions
 25 are both discussed and developed.

0133

1 So the charge of you as water board members are to
 2 develop and enforce water quality objectives. This is
 3 stated on your web page. And I think it's a fairly
 4 clear mandate and given that, there are a few things I
 5 want go to go over and to help set the stage and things
 6 that should be kept in mind through this entire process.

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7 And the first is up here. The goal of protecting
8 human health. No one should get sick from swimming at
9 their favorite beach. In Santa Monica Bay back in 1995
10 an epi -- epidemiological study was conducted, and
11 basically this was the first epi study conducted in
12 urban runoff contaminated waters.

13 And the purpose of this study was to answer two
14 questions. First, is the distance of swimming from a
15 storm drain associated with risk of adverse health
16 outcomes? And two, is bacteria an indicator to predict
17 risk of adverse health outcomes?

18 And what the major findings of the epi study shows is
19 that yes, there was a correlation between incidents of
20 adverse health effects and swimming in water with high
21 indicator densities. And also, those who swam in front
22 of a flowing storm drain are twice as likely to get sick
23 than those 400 yards away.

24 Another interesting component of this study was the
25 demographic breakdown. And I've put this up here

0134

1 because it really shows that all Angelenos are impacted
2 by dirty water at the beaches and not all are not
3 impacted in the same way. But the bottom line is that
4 they all deserve protection.

5 And unfortunately the goal of fully protecting public
6 health is not being met at our beaches all the time.
7 Another goal that you are all charged with protecting
8 aquatic life.

9 Pollution should not impact our habitat and our
10 species. And for anyone who has participated in Heal
11 the Bay or Baykeeper Beach or Creek Cleanup, you know
12 that this is not the case at all times, and our goal
13 here is not being met. We see trash littering our
14 beaches and impacting our habitats.

15 Again, back to the protection of public health, a
16 goal that your Board is charged with protecting here.
17 Unfortunately, fisherman including subsistent fisherman
18 that fish for their families, you know, every day of the
19 week, should not have to worry about toxins that are in
20 the fish they eat.

21 But again, unfortunately, we have many fish
22 advisories in place in our region and we need Heal the
23 Bay Angler Outreach team that you've heard about before
24 to educate these people about the toxins, so that they do
25 not eat these fish.

0135

1 But unfortunately, again in this case our goal of
2 public health protection is not being met all of the
3 time. So unfortunately, many of these goals including
4 the three I just mentioned aren't being met.

5 Here is our 303D list. As we see, unfortunately
6 there's a lot of red up there on the screen. We have an
7 extensive list of 303D impaired water bodies in our
8 region as you well know. But the promising and good
9 news is that we have tools that can get us on track for
10 cleaning up these waters. And TMDLs are the tools that
11 are putting us on this track.

12 Here's a recent press release from USEPA that many of
13 you probably saw a month or so ago. Your chair is
14 quoted in the piece. And basically it's touting the
15 accomplishments done by your board and EPA jointly where
16 175 water bodies in LA and Ventura counties now have
17 TMDLs. And these TMDLs are going to hopefully put us on

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18 track for making progress and reaching our goals at the
19 end of the day.

20 So we obviously have an extensive list of TMDLs that
21 have already been adopted. We have TMDLs to clean up
22 our beaches, TMDLs to clean up our trash, ridding creeks
23 and beaches, TMDLs to clean up our contaminated fish,
24 among many others.

25 And I'm going to provide just a few minutes on one
0136

1 example of TMDL that we all know very well, and that's
2 the Santa Monica Bay beach bacteria TMDL, just to get a
3 little perspective on how these TMDLs actually have come
4 in place and are being worked on now.

5 So I apologize if this is a little small, but what
6 we're trying to do here is set the stage for the
7 extensive amount of time that permittees have been on
8 notice to clean up our beaches and to clean up our
9 waters.

10 Back in 2003, we have this Santa Monica Bay Beaches
11 TMDL that was in effect, and this was a notice to
12 permittees that cleanup was going to need to occur to
13 make sure that water quality standards are met at our
14 beaches and that public health is not compromised.

15 In 2006, we had the compliance deadline for the TMDL
16 summer dry weather period. That means that these
17 permittees were on the hook for ensuring that public
18 health was in fact protected. And at the same time that
19 year -- it was an eventful year -- we also had the TMDLs
20 put into the stormwaters permit.

21 So moving forward a bit, in 2008, your board sent
22 another notice, so to speak, of actions that were not
23 sufficient by sending NOVs and asking for more
24 information because some of these beaches were not
25 meeting these compliance deadlines. So a list of NOVs

0137
1 were sent out in 2008, again, another notice that
2 cleanup is needed.

3 And then in 2010, we saw the TMDLs taken out of the
4 permit in effect due to attorney error, but the TMDL
5 itself was still in effect. So it is a long extensive
6 history and permittees had plenty of notice that they
7 were on the hook for cleaning up our beaches.

8 So we should note that there are some positive
9 stories and there have been some efforts made. Here's a
10 map full of low flow diversions that folks like the city
11 of LA have put into place to try and comply with the
12 beaches bacteria TMDLs. You know, just of note,
13 environmental groups have been very supportive of these
14 efforts and have actually helped secure funding through
15 the clean beach initiative for these.

16 Here's an example using our Heal the Bay beach report
17 card of the Santa Monica pier and some progress is being
18 there as well. We've seen grades that have jumped up to
19 A grades after being on the beach (inaudible) list for a
20 very long time and being chronically polluted. So we
21 have seen some progress there.

22 However, across the board, unfortunately, there
23 hasn't been enough done and these totals I've shown you
24 before; they're quite staggering.

25 So here we have just since 2006 when that initial

0138
1 date which I mentioned the compliance period for the
2 Santa Monica Bay beaches dry summer weather TMDL was

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3 supposed to be complied with. At that point, we had
4 181 exceedances. Come up to today, and you see over
5 3,000 exceedances.

6 So what does that mean? That means our goal of
7 public health protection is not being met at the
8 beaches. And that means that six years of violations
9 and public health threats have been accumulating. And
10 this is just simply unacceptable. TMDLS give us the
11 path to clean up beach water bodies and to meet these
12 goals and to meet the charge of your water board here.
13 And they need to be taken seriously.

14 So with that, I'm going to turn the stage over to
15 Liz Crosson of Santa Monica Heal the Baykeeper. And
16 she's going to talk about some of those specific
17 concerns we have with the TMDL provisions. Thank you.

18 MS. CROSSON: Good afternoon, members of the Board.
19 Thank you for the opportunity to speak today. So in
20 this long history of exceedances which threaten public
21 health, that is exactly why we do have some serious
22 concerns with staff proposal for TMDLS.

23 In particular, we're concerned at the proposal that
24 actually backed by previous permits as well as previous
25 provision this board has taken.

0139

1 So I'm going to discuss our issues with the TMDLS
2 section in four sections. One, the inclusion of time
3 schedule orders and the languages of permits; two, the
4 treatment of long overdue TMDLS and this includes TMDLS
5 developed both by the regional board and EPA; three, the
6 lack of clear interim TMDL requirements; and four, the
7 need to comply with federal and state regulations.

8 So first and foremost, the inclusion of an option for
9 time schedule orders in the permit is inappropriate.
10 Time schedule orders are actions within the
11 prosecutorial instruction of the Board pursuant to the
12 water code. This is an action to enforce permit
13 requirements, not an actual permit provision itself.
14 This unnecessarily complicates the permit.

15 The permit instead should have those limitations and
16 the requirements (inaudible) provided this option of
17 time schedule order in cases where its necessary. If
18 the Board really feels like it needs to clearly
19 articulate that the time schedule order is an option, in
20 addition to where it's stated in the clean water code --
21 in the California water code, then, you know,
22 potentially mentioning it in a fact sheet would be a
23 much more appropriate place to have information like
24 that.

25 However, our concerns do not stop with just the

0140

1 inclusion of the TSO provisions in the permit. We are
2 also concerned with the appearance that the Board's
3 intentions grant additional time through the TSO for the
4 TMDLS that are way past their compliance dates.

5 So I'm going to talk about these past due TMDLS in
6 two different categories the way that the working
7 proposal does. TMDLS are issued by the regional board
8 and are also issued by the EPA. But I'd like to note
9 that this distinction is somewhat irrelevant in my mind
10 when we're talking about TMDLS that are five to ten years
11 overdue -- passed due.

12 So whether it's an EPA TMDL or a regional board TMDL,
13 we're talking about really old TMDLS. So as you can see

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14 in this slide, and I apologize if it's too small, but
15 there are just a handful of passed due TMDLs.

16 Thirty-three TMDLs are going to be incorporated into
17 this permit. But they are critically important, and the
18 majority of them are bacteria TMDLs. So they're dry
19 weather bacteria TMDLs at beaches intending to protect
20 public health.

21 And as Kirsten pointed out, the TMDLs are based on
22 data, you know, back -- over a decade ago demonstrating
23 that bacteria is carried by stormwater and is a serious
24 threat. We have the data, we have proving TMDLs in
25 2003, 2004, 2005. Some are dry weather requirements and

0141 became effective in 2004, 2006, and 2007.

1 I mean, these are things that have been in place for
2 quite a long time that are meant to protect those
3 swimmers and surfers that you heard testifying this
4 morning.

5
6 So again, Kirsten mentioned this. This takes us down
7 all the way to that period TMDLs. It was approved in
8 2003. It became effective in 2006. It was incorporated
9 into the permit, and we did see improvements. And that
10 is something that I think is really important to think
11 about, is that those requirements, having them
12 enforceable in the permit really did compel
13 municipalities to take action, for permittees to take
14 action. And we saw some great progress. And not
15 everyone, not every permittee made those steps, but many
16 of them did, and that's a clear example of why we need
17 these strong permit limitations in the permit.

18 So staff's proposal that municipalities may request a
19 time schedule order for an extension of time to comply
20 with almost ten-year-old standards is unacceptable.
21 Furthermore, there is no time limitation suggested. We
22 could be looking at a TSO approved, like, a year from
23 now with, what? Five, ten-year extension. It really -- we
24 don't know. And the TMDL based on years of data and the
25 public health risks wouldn't actually be enforceable on

0142 that date until what? 2023?

1 The beach bacteria TMDL has been in place since 2003.
2 That's 20 years later. There are millions of people
3 that visit our beaches every year. According to lifeguard
4 data, 56 million people visited the Santa Monica Bay
5 beaches in 2010.

6 The Santa Monica Bay beach bacteria TMDL provides
7 protection for over 50 beaches in our region. This is a
8 critical piece of regulation that you are required
9 (inaudible) to use and protect, and it's a fantastic
10 tool to actually making progress.

11 The same is true for EPA TMDLs. I have included all
12 eight of the EPA TMDLs. These are just a handful.
13 These are three. And you can see that the effective
14 date of these TMDLs are 2003 and 2007.

15 So we're not talking about the EPA TMDLs from 2012.
16 We're talking about almost ten years old in some of
17 these cases. Permittees will note that these are
18 requirements that they need to comply with and the
19 permit needs to reflect that.

20 So the third point that I would like to talk about is
21 the interim. The interim deadlines and the TMDLs and
22 the fact that we need some clear ways to track progress.
23 So right now there is an action-based alternative into a
24

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25 working proposal.

0143

1 And while we support implementation of (inaudible) to
2 reach those final effluent limitations, there needs to
3 be numeric interim as well to track compliance. That's
4 the only way that we are actually going to be able to
5 reach those end dates.

6 So we've got these water quality based effluent
7 limitations or we've got receiving water limitations at
8 the end of the day, but there has got to be some numeric
9 in between, so that we make sure that we get there.

10 I think this would also provide a much easier way for
11 your overextended staff to reach the goals that they
12 need and to make sure that these ADA permittees are
13 actually on track and they are actually going to comply
14 with the permit at the end of the day.

15 And my -- the fourth point I want to make about the
16 TMDL section is we need to ensure that the TMDL section
17 complies with federal and state regulations. So there
18 are regulations that say that the provisions need to be
19 consistent with the wasteload allocations.

20 And I will note that also includes (inaudible)
21 allocations that are past due. So things like
22 Santa Monica Bay bacteria TMDLs, those are past due
23 allegations, and this permit needs to comply with those.

24 Secondly, there are -- CFR, Code of Federal
25 Regulations provisions that (inaudible) compliance

0144

1 schedule. And that same compliance schedule that's
2 incorporated into this permit needs to comply with those
3 criteria, which are things like as soon as possible,
4 there has to be interim dates if it's longer than one
5 year.

6 There needs to be clear requirements step-by-step and
7 only when necessary. There are also California toxic
8 rules deadlines that need to be considered when you're
9 talking about things like metals TMDLs. That's going to
10 be a critical part of determining when compliance is
11 required.

12 And lastly, any state policies, regulations dealing
13 with compliance schedules also need to be complied with.
14 And then to kind of jump into another section in the
15 receiving water limitation section, we do support
16 retaining the language as it is in the receiving water
17 limitations.

18 Renee Purdy clearly laid out that the legal
19 justification for that is been -- this language has been
20 upheld in state courts in federal court. And I would
21 also note that the regional board itself has provided
22 (inaudible) in one of our cases where the regional board
23 also took the position of being with -- (inaudible)
24 being stand-alone requirements that are enforceable
25 under the permit. So I would urge you to (inaudible).

0145

1 And now I'll introduce Noah Garrison from NRDC.
2 Thank you.

3 MR. GARRISON: Good afternoon, Mr. Vice Chair and
4 members of the Board. Thank you again for taking time
5 to hear our testimony here. I want to absolutely
6 support the statements that were made by my colleges at
7 Heal the Bay and Baykeeper and point out that the TMDLs
8 are really the backstop in the permit.

9 These form a safety where our waters are failing to

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10 meet (inaudible) pollution. The TMDLs are there to
 11 protect public health, to protect the environment, to
 12 protect our coastal and inland water-dependent economy,
 13 so these are something absolutely critical for the
 14 permit. And making sure that the limitations are in the
 15 permit and enforceable is something that absolutely
 16 should be enforced by the Board.

17 (Inaudible) to the discussion of the watershed
 18 management program. And the first thing that I would
 19 say to that is we absolutely support collaboration by
 20 the permittees in terms of pulling our programs
 21 together. And we also do agree that there are
 22 circumstances in which flexibility may be appropriate,
 23 particularly for new control measures such as education
 24 or public participation.

25 It may vary widely by different jurisdictions, but

0146

1 the first thing I would say is that for the watershed
 2 management programs, requirements independently can meet
 3 TMDL standards or (inaudible) cannot be replaced or in
 4 effect excused by participation or (inaudible) in the
 5 watershed management program. These are independently
 6 enforceable provisions, and they need to remain that way.

7 As a sort of related point to that, but sort of a
 8 following we find with the way the watershed management
 9 program is derived right now, I want to turn sort of the
 10 overall structure for adopting a permit and the
 11 requirements for a permit. And particularly the
 12 watershed management program states that permittees can
 13 effectively draft their own minimum control measures, or
 14 augment the minimum control measures.

15 So I'll point out that the first part is the initial
 16 permit requires that discharge of pollutants is reduced
 17 to the maximum extent practicable. So that's the
 18 overarching standard generally for the minimum control
 19 measures is it has to be reduced to be maximum extent
 20 practicable.

21 With that, the Ninth Circuit in (inaudible) vs.
 22 (inaudible) pointed out that in making that
 23 determination, programs like this that are (inaudible)
 24 evaluated permittees as the watershed management
 25 programs board have to in every instance be subject to

0147

1 meaningful review by an appropriate regulating entity.
 2 And in this case, that's the full board.

3 The way the watershed management program is currently
 4 designed is that the program would be noticed and
 5 submitted for review and approval by the executive
 6 officer. And unfortunately, that's an improper
 7 delegation of authority that this board has. The
 8 watershed (inaudible) measurement programs to the extent
 9 that they are making any determination as to what the
 10 maximum percent practicable provisions or other
 11 requirements the permit will be has to be reviewed by
 12 this board and also the court pointed out that public
 13 participation is an integral part of that.

14 So it has to be subject to notice and time by the
 15 public, and we would suggest put forward by the Board
 16 for a hearing. That would be our primary position on
 17 this is that it really needs to be board (inaudible)
 18 entity for any changes that are made to permit requirements
 19 that invoke minimal control measures.

20 Following further from that -- and I would like to

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21 thank Renee Purdy for pointing this out -- but when we
 22 start getting to the planning and development of
 23 planning the land use provisions of the permit
 24 requirements that new development or redevelopment
 25 projects in hydromodification controls these specific

0148

1 numeric controls.

2 In particular, these are effectively practicable. It
 3 seems it would be improper to allow a program that would
 4 alter anything or provide anything below which are required
 5 in these (inaudible) permit. (Inaudible) as practicable
 6 requirement to retain 85th percentile storm onsite for new
 7 development or redevelopment. This is the Ventura permit,
 8 and it requires that, though using slightly different
 9 language stating that it will result in the effective
 10 permit area, that the (inaudible) is retaining 85th
 11 percentile storm onsite as this permit does in its drafted
 12 provisions. The same provisions are required in the
 13 Orange County permit which states and the South Orange
 14 County permit as well as in permits for Riverside County,
 15 San Bernardino County, the San Francisco area, outside of
 16 California.

17 This is in permits in west Virginia, in the city of
 18 Philadelphia, Portland, the State of Pennsylvania,
 19 federal buildings, all have standards similar to this.
 20 And it would be improper to allow alterations to this
 21 that would require anything less than retention of this
 22 storm.

23 If the permittees want to collaborate and augment
 24 this standard in particular who apply for requirements,
 25 where we can start getting at the existing requirement

0149

1 and significant resettlement projects, we absolutely
 2 support that, but this has to form a floor, and we don't
 3 think there's any watershed program. With that, I'd
 4 again -- I'd like to support. Thank the Board very much
 5 for --

6 MR. STRINGER: Thank you very much. We next have the
 7 LA Permit Group. Heather Maloney and Heather Miranda.
 8 How much time do you think you'll need?

9 MS. MALONEY: We think about 30 minutes.

10 MR. STRINGER: Great. Thank you.

11 MS. MALONEY: We'll try to go as quickly as possible.

12 MR. STRINGER: Quickly, but not too quick.

13 MS. MALONEY: Does the clicker work? Oh, fantastic.

14 Good afternoon, board members and Chair. My name is
 15 Heather Maloney, and I'm the Chair of the LA Permit
 16 Group.

17 First off, I wanted to thank you again for continuing
 18 these workshops and this public forum. I think it's
 19 very beneficial for the permittees, and as I know you've
 20 expressed, it's beneficial for you as well.

21 And we recognize that this permit has been a long
 22 time coming, and about a theme that's kind of overarched
 23 a lot of comments today. And we want to reassure you
 24 that we share the common goals that have been expressed
 25 today as as far as water quality and human health, and

0150

1 we want to see those accomplished through comments.

2 we look forward to continuing partnership throughout
 3 the development of this permit as well. And to be
 4 utmost clear, we do share these common goals in
 5 improving the water quality. And we want to make sure

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6 that the permit keeps the big picture in focus as we
7 move forward.

8 And the general concept of staff's presentations have
9 done this especially in terms of the watershed
10 management program. And they describe a progressive
11 process so permittees can work towards improving water
12 quality especially with the integration of the TMDLs and
13 with the watershed program.

14 I'm going to flip through some of these for the sake
15 of time. Just for a quick notice here again, these are
16 all the cities that are voting agencies of the LA Permit
17 Group. We have an additional member as of our last
18 presentation, so we do, as a note, we do have 62 voting
19 agencies of the LA Permit Group.

20 And you've all seen that one, so I'm going flip
21 through that. And throughout this process of -- staff
22 proposals have identified several increased standards of
23 permits people who -- will be required to meet.

24 In general, the LA Permit Group has been advocating
25 for permit provisions that allow us to work towards

0151

1 increased water quality while allowing us to prioritize
2 (inaudible) towards efforts that will have the largest
3 impact to improved water quality.

4 In this vein, we want do want to address the
5 impression by some of the stakeholders that this permit
6 will be rolling back requirements. This cannot be
7 further from the truth. Rather, the proposed provision
8 presented by staff in prior presentations and in this
9 one are very progressive and propose requirements that
10 set the framework for a strategic process which will
11 meet the further improvements in the water quality.

12 In order to achieve further water quality
13 improvements, this process needs to set clear goals
14 while (inaudible) flexibility with the program and
15 (inaudible). We feel that this is done through the
16 watershed management program, and the way we approach it
17 is through that integrated planning approach that
18 integrates TMDLs monitoring and the planning
19 programming.

20 And this is really the only way that we're going to
21 be able to effectively address multiple pollutants
22 through a permit process.

23 Again, as I expressed at the the beginning of the
24 presentation, we are extremely thankful for these
25 workshops, and we feel that they are very helpful for us

0152

1 in developing the concept of the permit and being able
2 to get feedback from you as board members as well as
3 other stakeholders.

4 And we do want to request -- because Renee outlined
5 that there was several portions of the permit that have
6 been presented throughout the process and the
7 stakeholders, specifically the permittees, have given
8 very specific and lengthy comments on all those.

9 We have -- some of those we have not had the
10 opportunity to see revisions. So we do request that we
11 see an administrative permit or at the very least
12 another workshop that discusses the entire permit as a
13 whole so we get that holistic view of what all the
14 pieces really look like together prior to a tentative
15 permit release.

16 And this new permit will be significantly more

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17 complex. As we've heard throughout the day, there are a
18 a number of TMDLs that are being integrated, 32 overall,
19 where we have just a couple in our permit now.

20 So this really requires a completely different
21 approach in looking at this permit. We need to look
22 currently. You know, if we just slide the TMDLs into
23 the permit, we're really kind of just getting our same
24 old permit with a lot of the same TMDLs.

25 We haven't revolved a lot of issues that have been

0153

1 been discussed with TMDLs and the integration of the
2 programs. So we really need to look at a paradigm shift
3 overall. And taking the TMDLs, the permit provisions as
4 well as monitoring programs, and filtering those all
5 together and looking at them holistically and looking at
6 how can we do things better to get to water quality?

7 Because we've heard existing model doesn't work. We
8 need to look at a different approach. So we really
9 would encourage you to consider this watershed
10 management program.

11 We feel that it does integrate the water in these
12 four elements and it does try to make a paradigm shift
13 that allows us to allocate resources effectively to get
14 the most water quality bang for our buck, basically.

15 And the LA Permit Group is very much in support of
16 the watershed planning approach. This will support the
17 (inaudible) integrating planning and monitoring programs
18 as mentioned.

19 Monitoring (inaudible) time needed to determine the
20 most effective and efficient approach to adopting these
21 TMDLs. The integrated planning and monitoring programs
22 will provide additional information needed to establish
23 the best course of action to achieve those water quality
24 goals.

25 without disabilities for the planning and monitoring

0154

1 programs to provide the feedback and to go into the planning
2 of the watershed plan -- or program which we really don't
3 have this (inaudible) approach and that's very -- that's a
4 very -- to be able to take all these TMDLs and effectively
5 wrap them into a permit.

6 So don't lose sight of the horizon as we move through
7 this process. It is a completely different approach
8 that is being suggested, but ultimately if we stick it
9 through, we, you know, can have a whole different
10 approach and a very effective way of dealing with water
11 quality in this region.

12 And I'm going to start off with some comments on the
13 receiving water limitations and then my colleague,
14 Heather Miranda, is going to get up and speak on
15 comments related to the watershed management program and
16 TMDLs.

17 So the proposed receiving water limitations provisions
18 may actually end up working against the proposed
19 watershed management program in that in the watershed
20 management plan (inaudible) boards are neglecting their
21 highest priority water quality issues.

22 And then we'd either be customizing the control
23 strategies around those issues. In selecting the
24 highest priority, we are considering a lot of
25 information. We have TMDL requirements through 303D

0155

1 listings, frequency of water quality exceedance, and the

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2 opportunities for controlling other pollutants.

3 However, under the receiving water limitations
4 provision, the MS4 must address every pollutant that
5 causes or contributes to a water quality standard
6 exceedance. In this state, there's no distinction between
7 a pollutant that is an issue with every storm, such as
8 bacteria that has been mentioned in the previous
9 presentation, or some infrequent water quality standards
10 exceedance, but at least we (inaudible) in a different
11 way.

12 There is no filter to address these larger water
13 quality issues versus violations or intermittent issues.
14 As written in the receiving water limitations, they would
15 provide -- depending on the permittee and the violation
16 of the permit, at the onset of these optional permits.
17 We need to be able to work through a process to plan
18 implementation.

19 We need to be able to work through a process
20 approach. The way that those provisions are currently
21 written don't even give us the chance to implement the
22 permit before we would be in violation of it. So we
23 need to have something that's practically useful.

24 So although the watershed management program they
25 call out addressing the receiving water quality standards

0156
1 and the way the (inaudible) language is currently
2 written, and it does not allow the use of adoption
3 management approach to deal with these.

4 Rather, even through -- even though we -- we may have
5 continued -- we may have outlined the pollutant in the
6 watershed management program, we (inaudible) recent
7 permit so that just supports the previous comment that
8 we really want to be able to address all water quality
9 issues in this watershed plan.

10 So we definitely support the approach. However, it
11 is limited as we see it through TMDLs. Now, that's a
12 great approach to the TMDLs, but we want to be able to
13 apply that model to all pollutants and good models that
14 can really get us progress towards water quality in the
15 region.

16 As mentioned by some of the previous stakeholders,
17 the receiving water limitations, as it's written right
18 now, is a statewide issue among permittees, and we
19 really want to encourage this board to work with the
20 state to resolve some of those issues.

21 It's been presented at the state board level and
22 various permittees throughout the state that have
23 similar issues as we do here today.

24 So I'm going to hand it over now for the watershed
25 management program discussion.

0157
1 MS. MIRANDA: Good afternoon. My name is Heather
2 Miranda, and hopefully I won't mess up the PowerPoint
3 too much. I'm not technologically (inaudible.)

4 The watershed management program, as written, we
5 support it obviously. I think we've said that in a
6 couple different ways in parts of our presentation.

7 (Inaudible) has said to us for us to deal with our
8 highest priority issues and it provides us with
9 sufficient flexibility, but it also gives us enough
10 guidance to be able to have our groups work together to
11 come up with a document that's really going to solve our
12 water quality problems without being overly strict

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13 (inaudible).

14 We do have some recommendations for improvement. We
15 would like to see a closer integration between the
16 program and the TMDL monitoring and the stormwater
17 monitoring. We want to have sufficient time between
18 those -- those elements, as our graphics show, in order
19 to have an effective TDML factor that should really help
20 them to define what's working for them.

21 We'd also like the watershed management program to
22 more prominently include provisions in the more overall
23 habitat restriction, ecosystem health, not just water
24 (inaudible) pollution because it comes up that's also a
25 more integrative approach, and it really gets us to the

0158
1 core of supporting our (inaudible).

2 One of our major concerns, however, with this
3 watershed management program is that there's just not
4 sufficient time for us to develop it. In order to
5 develop a plan that would have our individual assurances
6 succeed, we need a year of developing the plan and
7 monitoring for one year. In collecting the information,
8 calibrating the information for another year in order to
9 really have a reasonable assurance of success.

10 We also need to have some time to go through our own
11 political processes to adopt our plans through our city
12 and through our county. One thing that we noticed was
13 absent is that this is very unclear how we would define
14 with the permit during the interim period while we're
15 developing the watershed management program.

16 We would suggest keeping our current storm management
17 programs and our TMDL limitation plans before cities
18 have a chance to evaluate new things like a minimum
19 control measures (inaudible) as part of the watershed
20 plan.

21 And I think Renee did a good job of explaining the
22 assessment. We think that she's taking a more careful
23 approach to how we would be doing our assets. We would
24 like to see those additional inclusions in the watershed
25 management plan and technical and economical

0159
1 flexibility. They were absent from the criteria.
2 That's something we would like to evaluate.

3 And we'd also like some clarification and some
4 acknowledgement of political sources that are outside
5 the permittees' authority and outside the permittees'
6 control. Examples are aerial deposition, natural
7 sources, permanent sources, things of that nature.

8 We would jump back into language that some sources
9 are going to be outside of our control, we can't do
10 anything about and we are not that accountable for those
11 sources.

12 This MSDS permit -- we're now -- I'm going into the
13 TMDL section. This MSDS permit is doing something
14 that's never been done in the State of California in
15 relationship to the sheer number and magnitude TMDLs
16 that are being incorporated into a single permit.

17 This effort needs to be done correctly given the
18 magnitude of what we're about to try to accomplish.
19 Rushing through this process is only going to cause more
20 problems down the road for an already complex and
21 difficult permit.

22 It's not going to help water quality to rush through
23 it. There's also fundamental policy provisions that

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24 should remain in the documents that will have
25 implications statewide and for every -- for all storm

0160

1 water programs throughout the state.

2 We would like to have flexibility to achieve those
3 water quality improvements that are more effective and
4 efficient. There's also a lot of uncertainty in these
5 -- in many of these TMDLS.

6 The sophistication of the TMDLS -- of the 32 TMDLS
7 vary widely. And not all TMDLS have been created
8 equally. The data available at the time of many TMDL
9 development was not the best available -- is not the
10 best available data that we have today.

11 We don't have -- we don't have the kind of data to
12 enterprise sources and solve problems that should be
13 used in watershed planning. The TMDLS included
14 re-openers to reflect the certainty of the time the
15 TMDLS were developed. And we would like to make sure
16 that those -- the re-openers are utilized in order to
17 try to make sure that these TMDLS are given us enough
18 time to (inaudible). So we need flexibility and we need
19 time.

20 The regulations, the strict numeric (inaudible) are
21 not required and they're going to be counterproductive
22 to achieving water quality. And the only effort
23 (inaudible). The regulations and the EPA guidance
24 provide this board with the power and the discretion to
25 decide whether or not we will have strict numeric

0161

1 compliance or whether or not compliance could be
2 determined through best management process.

3 You have the power to do that. It's under your
4 discretion. Wasteload allocations can be determined
5 through implementing water management practices or
6 (inaudible) limitations. Certain numeric requirements
7 are not required here. But the working proposal
8 requires strict compliance in the required time limit.

9 The working proposal allows compliance in the interim
10 limits through the state limitation, the best management
11 practices as specified in the watershed management plan.
12 And essentially what we're asking here is the compliance
13 demonstration (inaudible) under a slide, is to add the
14 watershed management plan -- the watershed management
15 plan box to the final -- final allocations (inaudible).

16 The watershed management plans are the way that
17 cities will be accountable. Just because it's not a
18 strict numeric permit doesn't mean that we won't be
19 accountable and that we won't be working hard to achieve
20 water quality.

21 One of the major fundamental policy decisions that
22 you are making in this decision is how to handle EPA
23 developed TMDLS. Do you really want to use the time
24 schedule order to address a TMDL that has not had any
25 compliance -- defined compliance time or period to

0162

1 develop any kind of action, especially when we've seen
2 many of these TMDLS as early as -- the earliest we've
3 seen them is March of this year.

4 Especially when the time schedule order still leaves
5 us open to third party litigation, it just doesn't seem
6 fair. Or it doesn't seem fair. Basin plan amendments
7 are the best way to take the necessary time to do this
8 right due to the magnitude to develop what we're trying

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9 to accomplish here.

10 The second fundamental policy position is how are we
11 going to incorporate expired TMDLs into a permit. We
12 would respectfully request that we have the re-openers
13 of the TMDLs to allow us to have more time to integrate
14 them with our watershed management plans.

15 (Inaudible) compliance TMDL (inaudible) indication of
16 best management plan and watershed management plan will
17 accomplish the goal of clean water in a more effective
18 and efficient way, and yet will allow to correlate with
19 all the other pollutants that we're going to have to
20 deal with on all these other issues and make sure that
21 what we're doing is effective and efficient that we can
22 create a situation where we're treating many water
23 quality pollutants with one action. That's what we're
24 going to have to do.

25 And we need time to do that. We would like to have

0163

1 the basin plan amendment processed immediately for these
2 expired TMDLs to give us more time and to give us the
3 protection from water quality that we need.

4 So in closing, cities implementing the LAMS4, we're
5 halfway through running a marathon. We're not dragging
6 our feet. We have hundreds of people. We have done
7 close to a billion media -- close to a billion media
8 (inaudible). We have hundreds of thousands of
9 inspections, enforcement actions, thousands of treatment
10 devices, and storm drain conversion.

11 We have been working very hard. This is only a
12 sample of due process body (inaudible) accomplish. The
13 finish line for this route keeps becoming more and more
14 difficult and challenging for (inaudible) policy change.

15 As you all know, public service is a rewarding but
16 difficult job. It may never have been harder than it is
17 now. In the midst of all this difficulty, cities are
18 still working to protect water quality. We are working
19 towards the end point and some of us have even stumbled.

20 The thing about this marathon is that it's a long
21 run. It's going to require endurance and dedication
22 until we cross the finish line for water quality to win.

23 This permit, the policy decisions that you're making
24 today -- or in this permit -- could encourage the
25 runners to keep going in order for us all to reach the

0164

1 finish line of clean water.

2 This permit presents an opportunity to change the
3 paradigm if we work together to cross the finish line.
4 This requires strategic process that will take time to
5 get it right. We urge you to develop the permit
6 conditions based on a reasonable timeframe (inaudible)
7 to the existing economy and other health safety
8 regulatory quality of life factors that local agencies
9 will be held accountable for.

10 A permit tailored to (inaudible) will lead local
11 water quality conditions is the path that will lead us
12 to the finish line. Please use your authority to
13 support all of us crossing the finish line and work to
14 achieve (inaudible.) Thank you for your time.

15 MR. STRINGER: Thank you very much. The last card I
16 have is Ray Tahir. How much time do you think you'll
17 need, sir?

18 MR. TAHIR: I'm asking 40, but I'll try to keep it
19 down to 30.

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20 MR. STRINGER: Can you do it in 30?
 21 MR. TAHIR: If I go too fast, I'll (inaudible).
 22 MR. STRINGER: Don't go too fast. Great. And could
 23 you identify for us who you're -- who you're
 24 representing today?
 25 MR. TAHIR: It'll be flashed on the next screen.

0165

1 There you have it.
 2 MR. STRINGER: Okay. Is there an overlap between any
 3 of those and the previous speakers?
 4 MR. TAHIR: There is to some extent, but to a small
 5 extent. There are 80 -- I'm sorry. There are 23 cities
 6 that are not part of the LA Stormwater Permit Group.
 7 Several of them are probably listed up there. Beyond
 8 that --
 9 MR. STRINGER: Can you speak into the microphone,
 10 please?

11 MR. TAHIR: Beyond that, I'm going to provide a little
 12 bit more microcosmic detail on some of the issues that
 13 were presented by the permit group. Information that I
 14 think you'll need in order to make a fully-informed
 15 decision here.

16 MR. STRINGER: Great. Thank you.

17 MR. TAHIR: Thank you, sir. Appreciate it.
 18 I'm going to kick off on the receiving water
 19 limitations, you know, language issues. I'm -- I'm
 20 sorry. This is basically -- that's required in all
 21 (inaudible) in the State of California.

22 This line is pretty much remained the same since
 23 2001. Most receiving water language provisions in
 24 California permits are pretty much the same.
 25 Staff's version, however, does not fully comply with

0166

1 the State Board Order 99-05, which was adopted by the
 2 State Board in June of 99. You'll find it also repeats.
 3 But the (inaudible) limitation language is different,
 4 unnecessary, quite frankly confusing.

5 Staff said that the LA permit was to be modeled by
 6 the Ventura permit. This was last year. However, this
 7 is not the case. The clean water limitation language
 8 that is proposed in this intermission (inaudible) permit
 9 is totally different.

10 Okay. Standard receiving water limitation language
 11 includes provision of compliance instructions for water
 12 quality standards which includes TMDLs. How do you
 13 comply with those standards? Stormwater discharges
 14 shall not cause or contribute from developing water
 15 quality standards. This includes (inaudible) from the
 16 MS4.

17 Now, this provision of the receiving water limitation
 18 language applies only to stormwater, not to non-stormwater.
 19 Permittees shall also be responsible for discharges over
 20 which they have control. And I shall point out there are
 21 a number of sources in cities that don't have control.
 22 They don't have superior jurisdiction over such entities
 23 as public education facilities, school districts.

24 School districts are basically state (inaudible)
 25 discharges from that. That goes for state and state or

0167

1 federal facilities. Discharged from the MS4
 2 post-stormwater (inaudible) provision shall not cause or
 3 contribute a to a condition of nuisance.

4 Now, this is not a Clean Water Act requirement. This

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5 is a California water Code provision and basically gets
6 that nuisance provision associated with stormwater
7 (inaudible). But in order to violate this particular
8 standard, there are three criteria that all must be met
9 before you can create a nuisance condition.

10 Staff, though, has added a new provision based on
11 interpretation of a federal regulation CFR. And by the
12 way, this information is in a packet that will be given
13 to you after this presentation. So what's happening
14 here is staff is mixing California water code --
15 Porter-Cologne with the Clean Water Act.

16 And this is what -- how staff interprets this
17 provision, Clean Water Act provision. A permittee is
18 only responsible for discharges from stormwater and
19 non-stormwater from the MS4 for which it is an owner
20 slash operator. Put on my glasses.

21 So what I've done is I have broken this regulation in
22 terms of what -- how staff interprets it and what the
23 federal regulation actually says. Okay. Staff's
24 interpretation is "permittee is only responsible for
25 discharges of stormwater and non-stormwater from the

0168

1 MS4 for which it is an owner/operator."

2 what the regulation actually says -- it says use the
3 term "co-permittee" for -- with respect to the MS4
4 permits. Permittee and co-permittee are used
5 interchangeably. Permittees or co-permittees may only
6 comply with permit conditions. That's the difference.
7 Relating to discharges from the municipal public storm
8 services for which they are operated.

9 So it doesn't apply to both stormwater and
10 non-stormwater. It only applies to stormwater. And it
11 doesn't comply with permit conditions. That's something
12 totally different. And not all permittees are owners
13 and operators. There's some that are just operators.
14 So this needs to be changed.

15 The consequence of all this is that if you were to go
16 to the staff interpretation, the permittee and
17 co-permittee, both an operator and an owner. Puts them
18 on the hook for all discharges. Makes the permittee
19 responsible for all discharges from (inaudible) staff
20 law requirements because it would make permittees
21 responsible for all the discharge, including those that
22 haven't been involved. How are you going to know which
23 dischargers are originated by a particular source?

24 However, our view of this is that permittees is -- is
25 only an operator. Again, you can't be both an operator

0169

1 -- you can't be an owner and operator at the same time
2 unless you're the County of LA and a few other
3 permittees.

4 The permittee need only comply with current condition
5 or limited conditions again over the California code.
6 And the permittee need only comply with discharges from
7 the MS4. And from the MS4 means stormwater, not
8 non-stormwater. The federal term into MS4 is used and
9 applied exclusively only to non-stormwater.

10 Okay. So little reminder. You kind of want to
11 loosen this provision or you're going to find it has
12 nothing to do with the price of eggs. It also will make
13 mandatory creek and make it necessary to challenge it
14 later.

15 Okay. staff -- additional staff or changes to the

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16 (inaudible) of water limitation (inaudible) existing
 17 language. Charges -- discharge from the MS4 that cause
 18 or contribute to the violation of the water quality
 19 standard, water quality objective is basically
 20 prohibited. That's the existing permit.

21 So what staff wants to do is change that to
 22 discharges from the MS4 that cause or contribute to the
 23 violation of an existing water limitation are
 24 prohibited. It's a significant difference here.

25 Okay. So staff defines receiving water limitation in
 0170

1 a footnote in that -- in its proposed change. Any
 2 applicable numeric or metric water quality standard will
 3 implement the typical water quality standard for the
 4 receiving water has been named in the water quality
 5 control plan for the LA basin.

6 water quality control plans or policies approved by
 7 the Statewide Resources Control Board (inaudible)
 8 including, but not limited to (inaudible) and the
 9 California Toxics Group. So it goes back to saying
 10 they're including the kitchen sink under this
 11 definition. It's not necessary.

12 It's like a municipal code saying that every single
 13 family home shall have a smoke detector in living room,
 14 dining room, kitchen, but not -- but not the bathroom.
 15 A better way to say it is that a smoke detector shall be
 16 in every room except a bathroom. It just makes it
 17 unnecessarily complicated.

18 water quality standards are the way -- are connected
 19 to all of these. Basin plans contain water quality
 20 standards. So you don't really need to apply the water
 21 quality standards. You don't need all this other stuff.
 22 It's actually extraneous and confusing. I just
 23 mentioned that.

24 Referencing the State Board policies are not
 25 necessary because the LA Board is only obligated to

0171
 1 comply with LA Basin Plan requirements as approved by
 2 the state. For example, state policies such as the
 3 anti-degradation policy is a California water quality
 4 standard, which are already in the LA Basin.

5 And this has to do with the California (inaudible).
 6 Again, it's not necessary to mention all that because
 7 water quality standards are predicated on the toxics
 8 group. Staff is, I think, trying to fix something that
 9 isn't broken.

10 It basically requires a remand to stormwater
 11 (inaudible). And that is a big deal and that takes a
 12 long time. In particular, it's only created (inaudible)
 13 for permittees to enforce water quality discharge
 14 standards over which they have control because the new
 15 compliance standard is overbroad.

16 Okay. What's the recommendation? Don't fix it. Use
 17 the receiving water limitation plan developed by the
 18 San Diego Regional Board, which I think really addresses
 19 everybody's concerns including making sure that maximum
 20 said practical, which is missing in the staff's proposed
 21 receiving water limitation language.

22 NEP must be in all MS4 permits. This is pursuant to
 23 the Clean Water Act site (inaudible). And just
 24 (inaudible) compliance with Clean Water Act and -- I'm
 25 sorry. Section 402B, blah, blah, blah. This order

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1 describes conditions to ensure compliance with the Clean
2 Water Act with owners and operators (inaudible).

3 So effectively prohibits non-stormwater discharge in
4 the MS4 and requires control to discharge of stormwater
5 from the MS4 to the maximum extent practicable.

6 It says it right that there and that this MEP standard
7 only applies to stormwater, not to non-stormwater. I
8 should point out that phase two of the USEPA's permit
9 contains the definition of MEP, which staff really should
10 consider including in the -- its proposed permit which
11 it evolves into the receiving water limitation language.

12 Here it says the MBP standards are ever evolving
13 flexible and advancing concepts which considers
14 technical and economic feasibility. TMD development is
15 a dynamic process and may require changes over time of
16 the program (inaudible) and are progresses.

17 This is very, very important. We don't have this kind
18 of language in the current dated MS4 permit. They
19 really need to put it in the next MS4 permit. Basically
20 included in this definition of MEP is a reference to the
21 energy problem.

22 And this is where it goes back to the (inaudible)
23 process. First off, evaluating, revising, or adding new
24 TMDs is commonly referred to as the instant process.

25 Now, the state uses the term "instant process." The

0173

1 feds use the term "instant process slash adaptive
2 management" because sometimes only adaptive management.
3 And I'll tell you why in a moment. Okay.

4 Here's the (inaudible). Now, the state board
5 requires the completion of the other profits (inaudible)
6 as mandated in this water quality board. (Inaudible)
7 says, "We will generally not require strict compliance
8 with water quality standards with the numeric
9 (inaudible) limitations.

10 "And instead, we will continue to follow an (inaudible)
11 approach which seeks compliance over time with water
12 quality standards." In other words, it's going straight
13 compliance with the number.

14 Okay. What's the recommendation here? Use existing
15 receiving water limitations in the current permit and
16 add -- or -- I'm sorry -- use the Orange County permit
17 that I mentioned earlier. Add MEP, which is preferably
18 from the same tune -- add the (inaudible) using the
19 South Orange County MS4 permit as the model. Okay.

20 Now we're going to jump to the watershed management
21 program where it goes step by step. The watershed
22 management plan we're here for is unjustifiably suspicious.
23 Staff proposes a watershed management plan that
24 permittees must implement or the alternative, implement
25 minimum control measures. Discussed at the last

0174

1 workshop.

2 This really becomes a matter of picking our own
3 poison because both require numeric limitations.
4 Pollutants which, if not met, could place the permittees
5 into a state of noncompliance -- into the state of
6 noncompliance. But (inaudible) the use of strict
7 numeric limitations as proposed by staff.

8 (Inaudible) also is not in favor of numeric
9 limitations as just mentioned. We know of no other
10 permit adopted by other regional boards of the state
11 that requires stringent -- such stringent permit

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12 conditions. Even federal regulations (inaudible) it
13 would be premature to impose them because one, there
14 has been outflow monitoring at the outflow. And two,
15 there has been no true ambient monitoring in the state
16 (inaudible). This is supposed to take place after
17 (inaudible).

18 Now, what am I talking about here? In the Clean
19 water Act, and this is kind of a list of water quality
20 data outflow recommendations I'll get to in a moment,
21 but the Clean Water Act defines (inaudible) as
22 discharges from the outfall or compliances to be
23 determined.

24 And compliances not to be determined here in runoff
25 that occurs during the storm event. This does

0175

1 absolutely nothing. This monitoring from running water
2 during a storm event doesn't tell you anything. What
3 tells you stuff is when you have a tranquil period,
4 preferably two or three days after storm event.

5 What you want to do is compare what's coming out of
6 your outfall with what's ambient in the receiving water.
7 That's telling you where your discharges are relative to
8 that calm standard.

9 So if you're exceeding that standard, then you'll
10 know what you'll have to do to to adjust your BMP in the
11 interim process to get to that number. But there's no
12 requirement absolutely needed. But in any case, we have
13 not any of this. And the reason we haven't done any of
14 this is because the TMDLs weren't around.

15 It was more cost -- and this was the regional board's
16 logic at the time going back to 2001, that it was more
17 cost effective to do receiving water monitors. The
18 County has seven mass emission stations. And the
19 purpose of those stations, and they're located in the
20 stream -- in the water, is to gauge the health of the
21 receiving water relative to its beneficial uses.

22 Now we have TMDLs, it's a whole different ballgame.
23 Now you have to do outflow monitoring because the price
24 of poker is going up. And it's very important. You
25 need to do this. All of my clients, and I'm sure many

0176

1 cities, if not all the cities here, want to know what
2 their contribution is from their MS4.

3 They don't want to be on the hook for discharges in a
4 pool of water body. Okay. You can develop a watershed
5 management plan within six months after the permit is
6 adopted without outfall and without monitoring data.
7 Let's do this first.

8 The watershed management program also requires
9 prioritizing water quality issues. But how do you do
10 this? You know, what (inaudible) do you use to set high
11 (inaudible) and low priorities? This will require
12 guidance documents which begs the question who's going
13 to develop those guidance documents?

14 Now, we first heard about the (inaudible) adopted in
15 2001. The County actually develops stormwater quality
16 management plans. And I forgot to bring them with me,
17 but folks, they are four inches thick.

18 So who's going to be responsible for revising that
19 plan to include the requirements proposed in the
20 watershed management plan? It's going to take forever.
21 The watershed management plan requires developing
22 interim milestones for developing priorities, but what

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23 criteria do you use to determine milestones for these
24 priorities?

25 Okay. Here is a -- here's a shot of an ambient

0177

1 condition and receiving water. This is the Rio Hondo
2 River. I provide this for content for you. Okay. The
3 watershed management plan provides for an adaptive
4 management procedure that is not explained. The
5 question is, is this supposed to be a replacement for
6 the other process, one that is sanctioned by the State
7 Water Resources Control Board through the water quality
8 order I just mentioned?

9 watershed management plan for measurable and
10 (inaudible) deductions elicit discharge in the MS4 -- by
11 the way, this is inappropriate. (Inaudible) discharges
12 from the MS4 are requiring direct discharges -- or
13 requiring discharges to obtain coverage (inaudible).

14 That's all their responsibility is. And it's not an
15 insignificant one because will -- this procedure here
16 which spells out the stormwater management quality plan
17 (inaudible) under the (inaudible) discharge (inaudible)
18 program will actually reduce elicit discharges.

19 This is not to say the city (inaudible) stormwater
20 discharge away from receiving water. A number of cities
21 are committed to doing that. But there's another way
22 you can do it as well.

23 If you have, for example, an automotive repair shop
24 that's discharging liquids -- fluids from the site into
25 a component of the MS4 and a city pops that facility for

0178

1 that, then what the city would do is warn them. Either
2 stop the discharge or we'll make you do something else.

3 And that something else would be to (inaudible) the
4 municipal services. We already have that authority. So
5 it may be necessary for low flow liquids, which would
6 occur in the MS4; not on private property.

7 Okay. The long and short of it is there's not enough
8 time to list the details. Really, the devil's in the
9 details. Okay. Shifting now to TMDL components. TMDL
10 issues.

11 Now, staff is interpreting TMDLs to be the same as
12 wasteload allocations. For example, wasteload
13 allocations for copper is a W2 that permittees must
14 require which is 17 micrograms a week. Federal
15 regulations say that a W2 is a type of wasteload
16 allocation, but that's it.

17 It's a type, but when applied to F1 discharge from the
18 outfall, it must be adjusted. It must go through a
19 translation mechanism. In other words, a W2 in a waste
20 load allocation cannot be the same.

21 Federal regulations and USEPA guidance with respect
22 to W2 (inaudible) must be expressed either as wasteload
23 allocations -- I'm sorry. W2 (inaudible) must be
24 expressed wasteload allocations either as BMP or
25 numeric limitations. This was mentioned earlier.

0179

1 The BMP W2 type achieves compliance with the wasteload
2 allocation if it's implemented fully and in a timely manner
3 even if the wasteload allocation is exceeded at the outfall.
4 Earlier today someone mentioned safe harbor. There is
5 no safe harbor. You really don't need a safe harbor.

6 All you have to do is implement the BMP that you
7 agreed on implementing during the five-year term of the

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8 permit, and you're in compliance, notwithstanding the
9 possibility that an exceedance occurs. And even if an
10 exceedance were -- occurred, how do you know who caused
11 it?

12 Okay. Because other sources besides municipal
13 permittees discharge from an outfall. Again, public
14 education facilities are among them along with other
15 state and federal buildings.

16 Permittee construction sites and permitted industrial
17 facilities and there are dozens of various types of
18 general MPS permits that permit you to discharge
19 non-stormwater in the MS4 and certain categories of
20 (inaudible) and stormwater from the MS4 depending on
21 the type of general permit.

22 So how is the city going to know which is which?
23 It's impossible. Okay. Getting back to numeric
24 limitations. A numeric limitation (inaudible) w2 goal
25 may be used with federal regulations require a procedure

0180

1 for determining if it is needed which involves asking,
2 one, has a discharge caused or contributed to the
3 exclusion of water quality standard? In order to even
4 know that, you need outflow ambient monitoring data
5 which has not been done obviously.

6 And two, it requires modeling. Has modeling been
7 done which takes into account the effect of dilution on
8 the outflow discharge in receiving water? This comes
9 from the MPS writers manual. And basically all this
10 stems from section -- Clean water Act section 301,
11 which was adopted in the early '70s.

12 MPS requirements additionally (inaudible), not small
13 water discharges. This really applies to sewage. The
14 Hyperion Basin Plan, for example, it has translated its
15 wasteload allocations and numeric standards into
16 effectively BMPs, or performance data, which are
17 basically -- which are (inaudible) not in the receiving
18 water, but at a point within the treatment facilities.

19 So what you have to do is actually in many ways, the
20 requirements for sewage treatment facility are more
21 relaxed compared to what staff proposed with this
22 stormwater.

23 Okay. Stormwater -- unlike sewage, stormwater is
24 more complicated in a reasonable potential analysis is
25 labor intensity. This is why USEPA has repeatedly said

0181

1 that only rarely will the numeric (inaudible) will be
2 used.

3 But if staff wants to go with numeric limitations,
4 then it needs to to the reasonable potential analysis.
5 And that's going to involve modeling -- dilution
6 modeling, and it's going to require a great deal of
7 (inaudible) analysis.

8 Okay. What does EPA's policy say? EPA policy
9 recognizes that because stormwater discharges are in
10 due to storm events that are highly variable in
11 frequency and duration and are not easily (inaudible)
12 about.

13 Only a rare (inaudible) feasible or appropriate to
14 establish numeric limitations. (Inaudible) small
15 construction stormwater discharges. The variability
16 (inaudible) in a minimal data generated available which
17 makes it difficult to determine with precision or
18 certainty actual and projected loading for individual

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19 discharges or groups of dischargers loading (inaudible)
20 wasteload allocations.

21 Therefore, if EPA believes that, in these situations,
22 permit limitations typically can be expressed as BMPs
23 and that numeric limits (inaudible) must only be used in
24 rare instances.

25 Staff proposed to comply with USEPA-adopted TMDL --

0182

1 let me back up a sec. There are -- most metals are
2 associated to (inaudible) TMDLs. Well, because there
3 has been data generated from receiving water monitoring
4 that occurred during a stormwater event are not in
5 compliance. All them are noncompliant with stormwater
6 and most of them are noncompliant with non-stormwater.
7 What's sad is the (inaudible), as I mentioned earlier,
8 is to use a time schedule order to allow those cities
9 that have not met those numeric standards to gain the
10 time -- additional time necessary to comply.

11 Now, this applies not just to the TMDLs adopted by
12 this board, but also by USEPA TMDLs which were adopted in
13 March. Staff is proposing that those TMDLs would also
14 be subject to a time schedule order.

15 Okay. A time schedule order comes right out of
16 Porter-Cologne, right out of California water codes. As
17 you can see right here under section 13300, time
18 schedules, that's under the heading of (inaudible)
19 implementation.

20 So as soon as those TMDLs are incorporated in the MS4
21 permit, those cities that do not comply, for example,
22 with the bacteria TMDL or the metals TMDL or even the
23 bacteria TMDL in Santa Monica Bay Beaches, would be in
24 violation. This is not warranted and is not necessary.

25 Again, it's an enforcement action that's not justified

0183

1 because a TMDL wasteload allocation violation must
2 occur first (inaudible). Simply because you had an
3 exceedance in the receiving water? Well, the receiving
4 water is in the compliancy permit, the outfall.

5 There hasn't been any outfall monitoring. A
6 violation can only occur if the TMDL is placed in the
7 permit, and you don't have to put a TMDL in the permit,
8 by the way. There's no law that says you have to do
9 that.

10 An exceedance at the outfall, that would be receiving
11 water because in exceedance at the outfall, not the
12 receiving water, is where the compliance determinate
13 should be. And three, a numeric (inaudible) to
14 determine compliance has been said although it hasn't
15 gone through a reasonable potential analysis.

16 So there's no way a violation can be created. No
17 way. Compliance therefore needs to be achieved by
18 (inaudible) permit TMDLs that translate the wasteload
19 allocation BMP until we get monitoring data that shows
20 to what extent any given (inaudible) calls and
21 (inaudible) above water quality standards.

22 Now, these BMPs can be proposed in the stormwater
23 quality management plan for implementation after the
24 permit's adoption. Stormwater BMP permit requires
25 compliance with water quality standard TMDLs. We know

0184

1 that.

2 And they are to be achieved through BMP numeric
3 (inaudible). Compliance with the MS4 water quality

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4 standard wasteload allocations (inaudible) must be
5 adopted at the outfall and only at the outfall and not
6 in the receiving water.

7 Sorry. I'm being redundant about this. Federal
8 regulations (inaudible) TMDL wasteload allocations and
9 any other water quality standard, for that matter. Okay.
10 This is a definition of (inaudible). Any restriction
11 established by state or administrative about the
12 quantities of (inaudible) computation of chemicals,
13 (inaudible) and constituent which are discharged from
14 point sources into navigable waters. And requirement
15 2222.6 testifies if the outfall is a (inaudible)
16 municipal discharges (inaudible).

17 MR. STRINGER: If you can begin to wrap it up --

18 MR. TAHIR: I'll wrap up.

19 MR. STRINGER: Thank you.

20 MR. TAHIR: why don't I just cycle through all of
21 this. Oh, one other problem. There has been the
22 incorporation -- or the suggested incorporation of a
23 TMDL for bacteria that was adopted by the Santa Ana
24 Regional Board. This was effective through Claremont
25 and Pomona.

0185

1 Staff could not discuss this with affected cities.
2 There is legalities in question. Can the regional board
3 impose a TMDL adopted by another regional board
4 jurisdiction?

5 (Inaudible) go to the Santa Ana Regional Board that
6 it complied with the creek TMDL to the San Gabriel
7 River. We're not aware of those. Okay. One final
8 thing here. The cities South El Monte and El Monte
9 would like the regional board to consider doing a
10 workshop at City of South El Monte sometime in June.

11 And the purpose of the workshop is to provide you
12 with some concepts relative to -- and this would
13 necessitate a visit to the Rio Hondo -- reach to the
14 Rio Hondo the south bottom and hard bottom portion
15 several of the outfalls and to see what a sample point is.

16 How outfall monitoring is to be conducted, how
17 ambient monitoring is to be conducted. It would also be
18 good for the environmentalist to attend as well. They
19 need to see that the cities east of the LA River are,
20 in fact, doing a lot of things. They are installing
21 debris excluders. They are requiring (inaudible)
22 developments techniques for subject new and redevelopment
23 projects.

24 And bear in mind that these cities in terms of
25 economic affluence don't even come close to the coastal

0186

1 cities, so it would be a good experience for all of you,
2 especially those that are new to the board and are not
3 familiar with some of these terms.

4 You really need to see what these things look like
5 (inaudible). You ought to see what cities would do in
6 order to determine if there's an elicit discharge from
7 an outfall, from a particular source such as an
8 automotive repair facility or restaurant.

9 You need context and you should do that before you
10 consider adopting the permit in whatever form it
11 eventually will take to be in. And I want to thank you
12 for your patience.

13 MR. STRINGER: Thank you. Thank you very much.
14 well, that concludes public comments in the workshop.

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15 We've gone through all the speaker cards. Let's take a
16 10-minute break.

17 (Recess)

18 MR. STRINGER: Okay. Thank you. We're back on the
19 record. We're now going to move into an opportunity for
20 board members to ask questions and discuss the issues
21 that we've all been hearing about today and thinking
22 about the last several months and we'll be thinking
23 about the next few months.

24 I want to just remind everybody that this is a
25 workshop. We're not making any decisions today. We're

0187

1 not rendering any opinions. And it's for our
2 information, for staff's information as we move towards
3 making a decision on a very complex matter.

4 So I'm going to start down to my right. I flipped a
5 coin, and you won. Larry, go ahead.

6 MR. YEE: Doggone it. I was going to defer to my
7 veteran mentors on the Board, but it looks like I lost
8 the coin toss.

9 MR. STRINGER: That's fine if you want to pass.

10 MR. YEE: No, I'll stumble into this. That are --

11 MR. STRINGER: Are you sure?

12 MR. YEE: Yes. You know, as a newcomer to the Board,
13 my head is kind of bursting, but I was told that I get
14 to ask dumb questions for a whole year, so I guess I'll
15 start there.

16 I haven't heard too much about any of these workshops
17 about the economics of compliance, and I know we have a
18 lot of variables and great variations between all the
19 permittees and so on. But just -- I'm just kind of
20 interested, you know, what is the cost of the
21 compliance?

22 And if, you know, if people are going to start
23 working on water management plans, what is that going to
24 cost? What are the cost benefits? So that's just
25 something that's just floating around in my head.

0188

1 As I listened to the afternoon presentations, this is
2 what I gleaned from them. Hopefully this is a little
3 bit accurate, that the environmental advocates are
4 mostly saying, "Stop dragging your heels. Urge strict
5 compliance. Protect our children and families and our
6 rivers and beaches," and so on.

7 On the other hand, the LA Permit Group is saying, you
8 know, "We're all working pretty well together. We're
9 all making reasonable efforts. We're running a
10 marathon. You know, don't just stand by. (Inaudible)
11 us from finishing. Be flexible. Be strategic. Urge
12 BMPs," so on.

13 So the question that -- that -- that I'm struggling
14 with -- and I admit I have a lot more to learn; I'm glad
15 we don't have any pressure of making a decision today --
16 is how do we -- how do we make reasonable and balanced
17 progress? I guess that's the question.

18 MR. STRINGER: Thank you. That's -- I think that's
19 something we're all struggling with because
20 philosophically, I don't think there's any disagreement
21 in the room where we're headed. Is there anyone who
22 wants to address Larry's comments?

23 MS. PURDY: Maybe I'll address the first question
24 that you had. This is Renee Purdy. I'm the section
25 chief for the Regional Permit Section, and I just wanted

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1 to mention that we are looking into cost of compliance.
2 And also just as background, looking at cost
3 considerations is also something that we do during the
4 TMDL development as well. And it's a part of the TMDL
5 adoption process where we look at the costs of achieving
6 the TMDLs.

7 And so there has been a lot of work done to look at
8 costs of complying with TMDLs as part of their initial
9 adoption.

10 And additionally, the permittees do report on the
11 annual costs for TMDLs and stormwatershed programs.
12 And we're currently looking at and evaluating some of
13 those costs and that documentation will be provided as
14 part of the full package when we prepare the tentative
15 order as well as the supporting documentation.

16 MR. STRINGER: You know, as you talk about that, I've
17 been thinking about whether it makes sense to do this
18 more thematically rather than each of us (inaudible).

19 So let's experiment with that and have a discussion
20 about costs because I have some questions about costs.

21 Maria, why don't you go ahead?

22 MS. CAMACHO: So piggybacking off of that, one of the
23 items that was brought up was the -- let's see. I think
24 it was during -- I don't remember who brought it up. It
25 was -- maybe it was the City of Downey who brought up

0190

1 this concern of 11 percent being left because of the
2 re-haul of catch base.

3 So there's an effort to, you know, install different
4 mechanisms that will assist in this goal. But that some
5 of those efforts are tough because of the need to
6 re-haul and create the ability to incorporate such
7 techniques and things.

8 Is that taken into consideration or -- or how -- and,
9 you know, that's part of the cost situation. So how do
10 we get staff to look at that and work with the permittee
11 on such issues?

12 MS. PURDY: So with regard to that, that's, you know,
13 it is somewhat of a specific issue. And one of the
14 things that I would say in response that relates to cost
15 in a certain sense, but it's that for any of the TMDLs
16 there are many ways that permittees can comply with
17 those TMDLs.

18 And that speaker in particular was talking about some
19 challenges with regard to some of the structural
20 controls that they use that we refer to as the full
21 capture devices.

22 For the trash TMDLs, there are other types of
23 compliance strategies including what we refer to as
24 invitational controls, like street sweeping and source
25 control, that sort of thing, as well as what we call

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1 partial capture controls. And they can use any
2 combination of those compliance strategies.

3 So we're in a situation where there may actually be
4 physical constraints to using a certain compliance
5 strategy. Then we provide the flexibility to comply
6 with the TMDLs in any manner, any lawful manner.

7 And so they -- in those cases, they can look for other
8 alternatives that would be more cost effective to reach
9 compliance with the requirements.

10 MR. UNGER: And may I -- may I get a word in --

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11 MS. STRINGER: Sure.

12 MR. UNGER: -- if I might. Costs are reported in the
13 annual report that we get under the term permit now.
14 They're in broad categories. Generally aligned somewhat
15 with the monitoring and the six elements of the memo --
16 or the staff revisions for the -- excuse me -- special
17 provisions for the minimum control measures.

18 Mr. Ridgeway of staff and Renee, Deb, and I, we've
19 all -- and Connie -- we've all been looking at those
20 numbers at this point. We don't have anything to report
21 to you on it at this point.

22 We're just getting familiar with those costs, but
23 there is a lot of information there we're trying to
24 parcel out, you know, what the costs of compliance
25 really are.

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1 So we expect we will have more information for you
2 sometime in the near future on that. But we have been
3 looking at the annual reports for the last several years
4 on accomplishing that. Thank you.

5 MR. STRINGER: Fran, did you have any questions about
6 costs?

7 MS. DIAMOND: Yeah. Is it -- can you hear me? I
8 wanted you to be sure also to address the issues which I
9 think Larry alluded to. That the costs -- there are
10 costs of noncompliance and then there are also -- what
11 are the costs to the economy of the -- of the beach
12 tourism? And how much -- I've seen figures. I don't
13 know. It's a couple billion dollars a year in tourism
14 dollars in the coastal areas and beach region of LA.

15 What are the costs of noncompliance? What kind of --
16 in terms of illnesses, when people get sick and can't go
17 to work. I know that -- and one of the experiences of
18 being a board member for so long is I remember this
19 discussion in terms of previous permits and current
20 permits that we have now and TMDLs.

21 What is it, what does it cost us when we have people
22 getting sick, when beaches could be closed, those kinds
23 of numbers that we need to get -- that I saw in the
24 past. And I'm sure they may be somewhat different today
25 because we've had some improvements, a lot of

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1 improvements over the course of the last few years. But
2 what are the costs of the economy -- economics, coastal
3 tourism and health, public health?

4 MS. PURDY: And I would say also look at that and --
5 finished -- and as well when -- during TMDL development.
6 And you probably recall us talking about some of those
7 things.

8 For example, way back a decade ago when we were
9 adopting the Santa Monica Bay beaches TMDL, just what
10 the, you know, the tourism -- the size of the tourism
11 economy. And also, as you mentioned, the cost of
12 illness as a result of people going and getting sick and
13 losing workdays and so forth.

14 So that's something that -- that we have looked at
15 and we can go back and look at some of those numbers
16 again.

17 MS. DIAMOND: I think that would be important for us
18 to have in our -- in our process as we go forward in
19 making a decision in this permit.

20 MR. STRINGER: I think -- to just add on to that, I
21 think it's important to -- to look also at costs to

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22 inland communities, (inaudible). We talk a lot of
23 beaches and beach communities and people going to the
24 beach and getting ill, but I think there's an impact on
25 the inland communities as well with -- potentially it

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1 considered. Just piggybacking on that.

2 Madelyn? On the cost issue, do you have any comments
3 or questions?

4 MS. GLICKFELD: I guess my -- my -- the concern that
5 I've been hearing from the permittees since I've been on
6 the Board is you're adopting another TMDL.

7 It's like a big stack of pancakes and the stack keeps
8 on getting higher and higher and higher. And each one
9 of these TMDLs have different deadlines, and they also
10 have been TMDs because they're about different
11 pollutants.

12 And so I think that some of the concern is how much
13 does the -- how much is the accumulative cost of
14 implementing all of these TMDLs together? We've never
15 really looked at that together. We've looked at it
16 separately.

17 And I think it needs to be taken if you could look at
18 it. I think that it's what recommends this watershed
19 approach, I'm hoping. When you are looking at the
20 watershed approach, you have a process of developing a
21 plan for which of the priority pollutants?

22 Have you also thought about ways to look at the
23 watershed management plan? Or what are the best
24 management techniques and technologies that we can use
25 and prevention that we can use to deal with as many of

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1 these pollutants as possible? Single techniques.

2 And I kept -- I keep on coming back to the fact that
3 we are requiring people to do the trash -- the trash
4 capture devices, but I don't think we've ever asked
5 anybody to analyze what they're collecting in those
6 trash devices.

7 And I suspect there's more than trash. I suspect
8 that there's some kind of sediment. I suspect there's
9 bacteria in there. So one of the things I hope that our
10 staff would do is to look at the possibility of finding
11 out, in fact, what management techniques are the best,
12 most cost effective, and do address the most pollutants.

13 And doing that with the -- with the stakeholders,
14 doing it with the -- with the environmental groups, and
15 doing it with the cities and the county to find out
16 what, in fact, are the most -- the things -- the kinds
17 of techniques that address multiple pollutants.

18 Have you looked at that at all?

19 MS. PURDY: I would say yes, we have. And in fact,
20 and again, it takes me back to 2002 when we adopted the
21 Santa Monica Bay Beaches bacteria TMDL because at that
22 time we came up with this concept of an integrated water
23 resources approach.

24 And the idea was to try to come up with strategies to
25 address multiple pollutants. And because of us being

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1 driven by consent decree requirements and economy and so
2 forth, in some cases we didn't address all pollutants
3 for a watershed at once. We did individual pollutant
4 TMDLs as you just described.

5 But again, the deal with the watershed management
6 program is this: It does give us a chance to bring all

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7 this together and to look at ways where we can find
8 strategies that would actually address multiple
9 pollutants and would -- all the pollutants that are
10 covered by multiple TMDLs for that watershed.

11 And that's what we anticipate will happen in
12 selecting control measures. We do believe that there
13 are a lot of TMDs out there that will address multiple
14 pollutants.

15 And so you can take one TMD and you'll actually
16 achieve requirements for many of the TMDLs within that
17 watershed management area. And this is the opportunity
18 to really compile the TMDL implementation plans and find
19 out where there are ways where we can just pick one
20 strategy that would address all of these requirements
21 instead of having five strategies, five different
22 strategies.

23 MS. GLICKFELD: So this is an opportunity for us to
24 instead of adding the cumulative costs to have -- to
25 have an opportunity to really look at what are your TMD

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1 costs.

2 MS. PURDY: Right. And we don't think that that cost
3 is going to be just purely additive. We think that
4 there will be strategies that can be -- meet multiple
5 requirements.

6 MR. STRINGER: Irma, did you have any questions about
7 costs (inaudible)?

8 MS. MUNOZ: Well, somewhat. You can stop me if I'm
9 on the wrong path. I see that there's a very
10 interesting adventure because we get to listen to what
11 the folks are saying and kind of understand what they're
12 saying, and then we look at the eyes of the audience and
13 see if they agree with what the person's saying.

14 And this has been my conclusion is that you've got to
15 two sides. You've got the beach cities and you've got,
16 I guess, the permittees and people inland. And they're
17 two extremes.

18 And last meeting, I said I want the environmental
19 community -- (inaudible) recommendation. (Inaudible)
20 group to get together with inland cities. And I think
21 one of the best things that came today is a suggestion
22 from Mr. Tahir.

23 I think that we should take up his offer to go visit
24 the City of El Monte and maybe to other cities and have
25 a tour and watch and find what their best practices are

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1 and how they did them and challenges that they had in
2 doing, and frustrations that they had, and speak to city
3 managers to find out what the costs are.

4 I want to hear directly from the decision makers,
5 directly from the people who are in charge of the water
6 quality in their cities. A lot of these cities in the
7 inland, San Fernando Valley, have been facing -- have
8 faced in the last couple years being on the verge of
9 bankruptcy.

10 Do we consider that? I mean, for some reason, I feel
11 that many of those cities are being told -- are -- are
12 -- there's an insinuation they haven't done enough.
13 They don't want to do enough.

14 That may be the case with some cities. I can't
15 believe that's the case with the majority of the cities.
16 And so that's the voice for me that's been missing here.

17 And so I would like us to think about doing a tour

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18 for those board members who want to participate in that.
 19 I just went on a tour. And I hadn't done that. It
 20 opens up your eyes to actually be out in the field and
 21 look at things and have people describe things to you
 22 and make your conclusions not based on what people are
 23 telling you or what you're reading or trying to read on
 24 the PowerPoint presentations, but actually getting that
 25 one-on-one.

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1 So I encourage my colleagues then to put this tour
 2 together, I guess in the next 30 to 40 days, so that we
 3 can go out there and ask those questions of the city
 4 managers. I thought the presentation of the City of
 5 Downey very enlightening because to me, part of it is
 6 the intent and your actions following your intent.

7 Have you complied at all, and what have you tried ad
 8 what hasn't worked, and what's frustrated you? And for
 9 me, they have -- they have shown intent and they wanted
 10 that little percent, you know, and they're struggling
 11 with that.

12 And so it has to do with the economy -- they do -- I
 13 agree with Board Member Larry's comments is we haven't
 14 talked about what it's costing. And it's not costing
 15 the cities. It's costing the people who live in the
 16 cities, its residents. And I know a lot of people have
 17 a lot of economic hardships, the impacts to the family.

18 And so we really have to balance a lot of this
 19 conversation and be a little more holistic about the
 20 questions that we ask and the information that we
 21 receive.

22 So I guess, Mr. Unger, I'm asking you if you would
 23 please put together a tour maybe in coordination with
 24 the City of El Monte leadership, the city manager, and
 25 other cities that are appropriate there so that we

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1 really get a feel for what's going on in the inland.

2 Because one of the things I've noticed is that some
 3 folks think that the conversation of watershed ends at
 4 the beach. It ends at the beach. It starts in the
 5 inland. You know, it starts up in the mountains. And
 6 so somehow we have to figure out the connection between
 7 where it starts and what happens in between and where it
 8 ends.

9 MR. UNDER: Comment noted.

10 MR. STRINGER: Thanks. I just have one, I guess, a
 11 question about the cost issue. And that is the
 12 availability of grants for the cities will be doing
 13 under the permit. Do you have a sense of what grants
 14 are available now and to what extent they'll be
 15 available in the future?

16 MS. PURDY: Well, there certainly have been a number
 17 of grants available in the (inaudible) and continue to
 18 be made available through a variety of different state
 19 propositions as well as of course there's been some
 20 local funding available as well through things like
 21 (inaudible) and Measure B in Santa Monica.

22 And then I think that, you know, state sources that
 23 may become willing, and we hope become willing is the
 24 water quality funding which the county is embarking on
 25 which would provide money both for individual permittees

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1 as well as for watershed groups to implement many of
 2 these water quality improvement programs for storm

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3 water. So I honestly can't give you a ballpark number.
4 I don't have that --

5 MR. STRINGER: That's okay.

6 MS. PURDY: -- but we can certainly get more
7 information and details on that for you if you'd like.
8 But there have been a number of grants. The most recent
9 -- we've just been going through a round of grant review
10 for Proposition 84 and there have been a number of storm
11 water grants available through that proposition. And
12 some of our staff have been involved in that. That
13 would be a process for the state board.

14 MR. STRINGER: It just occurred to me that the
15 (inaudible) process is perfect for the regional
16 watershed planning programs that are already out there.
17 So there are grants that exist right now that are
18 available to stormwater.

19 MS. PURDY: Right.

20 MS. FORDYCE: Can I just touch on that? (Inaudible)
21 We went through that this morning. Fran mentioned
22 (inaudible) at this morning's meeting -- I forget the
23 date, but that might be something. We'll put that on
24 the website (inaudible).

25 MR. STRINGER: And I think we all need to think

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1 creatively about how this is all going to get paid for.
2 So this isn't -- the contracts are informed of the facts
3 with just a few.

4 Maria, what's your next topic?

5 MS. CAMACHO: Eeny, meeny, miny, mo. I think I was
6 interested in the watershed management program, because
7 I know as we were discussing it in your introduction of
8 the workshop, that it's a newer -- that it's a newer
9 program, that it's something new that we are looking
10 at, which I appreciate.

11 And it sounded in the dialogue today -- it does sound
12 that people are excited about it. So one of the
13 thoughts that I had in looking at the provision, the
14 draft provision was how will it work? There may be --
15 and I think there was discussion of it during one of the
16 presentations -- is if -- if -- in a group, if there are
17 folks who are doing their best to comply and help be a
18 part of that process, that's great.

19 If there's, in that same group, those who aren't really
20 picking up their -- their end of the bargain, that kind
21 of thing, how -- how does that work? I don't know.
22 That's a really broad question.

23 MS. GLICKFELD: (Inaudible)

24 MS. PURDY: Right. I'll try to clarify a little bit
25 about what we're thinking. I mean, one of the things

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1 that would be -- and I agree that is 00 that is one of
2 the difficulties that we face with the LA County MS4.
3 It's such a big, interconnected system that coordination
4 is really important, but at the same time we need to have
5 mechanisms for determining individual compliance as
6 well. And so in the case of -- for example, when I
7 talked about the interim permit limitations and the fact
8 that those could be action-based, TMD-based where it
9 would determine compliance based on the actions that a
10 permittee has taken.

11 So in that case, the watershed management program
12 will lead to very clearly laid out what the roles and
13 responsibilities of each individual permittee that's

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14 participating in that collective program.
15 And so when, you know, when we're looking at
16 compliance from an action-based point of view, we'll
17 be able to look and see what were the individual
18 permittee's responsibilities and did they meet those
19 responsibilities.

20 So it could be that there are, you know, potentially
21 some who have done a better job at meeting the
22 responsibilities per the timelines in the program and
23 others who have fallen somewhat short of that.

24 And so I think we'll be able look at it in that way
25 and it's fairly straightforward with the action-based

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1 compliance. There will still be challenges because some
2 of the -- I mean, and somebody said we're still working
3 it all out.

4 And that's true. I mean, we don't have all of the
5 answers today, and there might be some challenging
6 situations where could be a regional TMD that the group
7 commits to then that requires a certain amount of
8 funding and some permittees are able to come up with
9 that funding, other permittees don't come up with it.
10 And as a result, it's difficult for them to implement
11 that regional TMD that was anticipated.

12 And so I think in those cases we'll need to think a
13 little bit more about how we're going to -- how we're
14 going to address that sort of situation. But the
15 important thing will be to really make it clear in the
16 watershed management program what are -- even though
17 it's a collective program, what are the roles and
18 responsibilities of each individual permittee within
19 that program so that we can look at individual
20 compliance.

21 And then the other thing which we didn't really talk
22 about today, and I think a few of the speakers mentioned
23 we need to make sure that the monitoring is integrated
24 with this watershed program and we intend to do that.

25 And I mentioned that some compliance determination

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1 can be based on outfall monitoring or monitoring at a
2 permittee's jurisdictional boundary.

3 So that would be another place where we could begin
4 to look at individual responsibility even in a
5 collective program if we have monitoring on a
6 jurisdictional basis.

7 MR. UNGER: I'd like to add -- let me add a little
8 bit to what Renee said directly in response to your
9 question. We have a number of TMDLs that can
10 potentially be very (inaudible) and potentially
11 self-organized on a watershed-type basis. And, actually,
12 some TMDLs call out different jurisdictional groups.

13 And they've done a remarkable job, I think, of
14 self-governing, self-organizing, self-financing. You
15 know, they've made a lot of those decisions themselves.

16 So this isn't anything exactly brand new given the
17 fact that we have (inaudible) initiative (inaudible)
18 various people in different watershed management areas
19 or wags. And again there's precedents that (inaudible)
20 TMDLs (inaudible) several TMDLs in which a member can
21 (inaudible) can potentially join together and
22 self-govern and to implement the requirements.

23 MR. YEE: Mr. Chair, may I?

24 MR. STRINGER: Yeah, of course.

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25 MR. YEE: So to clear up my understanding, if I'm XYZ
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1 permittee out here, do I essentially have three choices?
2 I can join the collaborative efforts to do a watershed
3 management plan. Or as you explained this morning, I
4 could go it alone; right? And the third choice is to
5 not do one at all; correct?

6 MS. PURDY: That is correct, yes. And if you chose
7 the last one, then you would follow just the baseline
8 permit provisions that we have spoken about in previous
9 workshops.

10 MR. UNGER: I have a little bit to add to that, as
11 well. You know, we've -- we've -- just -- just because
12 I know you can relate to the familiarity of Ventura and
13 the agricultural way.

14 we took a similar approach there when we allowed
15 people to either join essentially a countywide group or
16 go it alone if they were willing to (inaudible)
17 relatively.

18 You know, I would say that in terms of the
19 administration of the -- that regulation has been very
20 successful. Most people have found a way to join
21 together with some people that are enrolled as
22 individuals. So we've worked with this paradigm
23 previously.

24 MR. STRINGER: Fran, do you have any questions?

25 MS. DIAMOND: Yeah. Just a couple little things.

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1 I'll -- two things I noticed was, and I think they're
2 probably related.

3 One was someone commented that possibly customized --
4 customized actions could replace the baseline permit
5 requirement. So that would be one thing I want to hear
6 you discuss.

7 And one of the commenters said that under the
8 watershed management program that changes to the permit
9 from minimum control measures should come to the Board
10 rather than to -- not the Board.

11 And there was a concern by the same commenter that
12 we -- it's possible to use -- would it be possible to
13 use adaptive management to alter the permit? For
14 example, to be considered less in the 24th percentile or
15 85th percentile storm (inaudible).

16 In other words, what -- what kind of flexibility and
17 customization -- what would customized actions mean in
18 terms of regulations that we've already adopted?

19 MS. PURDY: Okay. I'll start with the -- the first
20 one with regard to the customized actions replacing the
21 baseline. And think I even said that.

22 And we are -- that is one of our intentions is that
23 there could be customized actions. The one thing that
24 I do want to emphasize is that those customized actions
25 would need to be consistent with what the federal

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1 regulations say should be included in a permittee
2 stormwater management program.

3 So there -- when we're thinking about customizations,
4 we're not -- we're not talking about eliminating a key
5 stormwater management program element, but we're
6 talking about basically allowing the flexibility to
7 focus that program on the watershed priority.

8 So for example, it may mean focusing on a certain
9 drainage area within a watershed that has a high

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10 concentration of a certain type of commercial
11 establishment or industry where there's a lot of
12 pollutant loading that needs to be addressed.

13 It could be focusing on a certain type of education
14 and outreach that deals specifically with bacteria. And
15 I mean, even as simple as, you know, picking up after
16 your pet or something like that. There's real concerns
17 about bacteria.

18 So it's -- it's a matter of really using the same
19 types of stormwater management programs, but focusing
20 them on the specific water quality priorities within the
21 watershed.

22 And then once proposed, and then approved through
23 what staff is saying, working proposal would be an EO
24 approval process that that would become the prevailing
25 permit requirements for those minimum control measures

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1 instead of the baseline ones in the permit.

2 So we are talking about allowing that flexibility and
3 a number of the permittees have suggested that that
4 would be really valuable to them.

5 City of LA and a number of others have suggested that
6 as a way for them to focus their resources and really
7 address the water quality problems that they're seeing
8 or problems with certain types of sources, pollutant
9 sources within their jurisdiction.

10 So that's what I'd say with regard to the first.
11 with regard to the second, I actually might let Jennifer
12 or Francis answer with regard to your question being
13 should the -- the customized and minimum control
14 measures within the watershed management program come
15 to the Board versus to the EO.

16 We're currently proposing that it would be an EO
17 approval process. Now, there would still be a public
18 process associated with that. There would still be an
19 opportunity to comment on those watershed management
20 programs, which is what we typically do.

21 We still allow, for example, a 30-day comment --
22 public comment period. And before the EO would take
23 action to approve that program, there would be a review
24 and consideration of those public comments that we
25 received on the draft watershed management program.

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1 And then we would get back in touch with the
2 permittees if we felt there were changes that were
3 needed in response to either our own internal review or
4 some of the public comments that we received. But with
5 regard to TMD versus board (inaudible), I will defer to
6 Francis.

7 MS. DIAMOND: (Inaudible) actually, there was a
8 comment made by the lawyers. (Inaudible) I wanted to.

9 MS. FORDYCE: (Inaudible) it's look in delegation
10 resolutions that the Board has adopted. But if the
11 board wants to put in the permit that they have to be
12 (inaudible) by the Board. They don't have to be adopted
13 or approved by the executive officer. I think we need
14 to confirm whether the Board can delegate that to the
15 executive officer.

16 I believe pursuant to the water code and WMP
17 resolution, the Board cannot delegate establishment of
18 discharge water. Now, there is a question of whether
19 approving these WMPs would be waste discharge
20 requirements (inaudible).

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21 MS. DIAMOND: I'd like to thank you.

22 MR. STRINGER: Madelyn.

23 MS. GLICKFELD: Thank you. That was one of my
24 concerns as well. I do think of these watershed
25 management plans as being akin to local basin planning.

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1 Looking at the entire basin plan for the management
2 period and looking at the variety of blueprints that we
3 have, if we take all the things of the basin plan, only
4 for a particular watershed here. So I think it has huge
5 policies. And I would be concerned that if it were not
6 done in very public way either through a formal hearing
7 by the staff or by the Board.

8 So that's just my opinion. I think that one of the
9 things I think the Board needs to understand and I think
10 I need to understand is this is a new experiment. This
11 is an experimental option. We won't know how well it
12 turns out until we do it.

13 But I do suggest strongly that you bring the
14 stakeholders in, all of the stakeholders in and go
15 through detailing out what it will be like. It's not
16 like TMDL groups because TMDL groups are all coming
17 together to implement what's in the TMDL.

18 Here you're developing a new plan for how you're
19 going to prioritize, where you're going to put things,
20 and how you're going to view pollutants.

21 And so the question is what -- how many cities within
22 LA County, how many cities in Orange County have to say
23 "yes, we want to do this" before we recognize it as
24 eligible for this? Because we are giving them the
25 flexibility that they wouldn't have. And so what

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1 constitutes a viable group if not everybody is
2 participating in it? That would be an issue that I
3 would want to know.

4 The second thing is that talking about costs, we have
5 -- we have permit proofs, we have now the watershed
6 authority groups that are going to be looked at again
7 for the whole process they're supposed to do, they're
8 set up to do plans as well.

9 We have plans coming out of our ears. Now, I would
10 really suggest is that you sit down particularly with
11 the County and the City and look at what the City --
12 they have done and they have negotiated over two years
13 for a government structure there and see how we can fit
14 what we need to do so that it's one process.

15 The process they have to go through to send the money
16 whether it's -- it's also a very good process for
17 planning. And they have set it up for that. So I think
18 there's not very much difference.

19 The biggest problem is that the boundaries are
20 different. They're not only, you know, what you said,
21 but actually the boundaries are different. And theirs
22 are in statute. But I think they're wrong. So I think
23 there's got to be some discussion with the County about
24 how we fix the difference in boundary.

25 The next thing, that's cost, is we have got some cities

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1 that are in three different watersheds. We have some
2 cities that are small that are in three different
3 watersheds.

4 If they have one percent of their city in one
5 watershed, and 99 percent in two other watersheds, they

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6 shouldn't have to be in three watershed groups. And how
7 do we deal with that issue? I -- I'm not not going to
8 (inaudible) the City of LA. You're going to be in all
9 of these watershed groups.

10 But I am concerned about the small cities and whether
11 they can afford to even participate in these watershed
12 programs. So I think that you're going to need to look
13 at the (inaudible). You're going to need to look at the
14 geography, the mapping. You're going to need to look at
15 the threshold of what a group could contribute to be
16 able to be in this group.

17 And then the issue that I think that the
18 environmental community is concerned about is, yeah,
19 what do we get out of -- what's the benefit of having
20 these watershed groups for the environment as well as
21 for the cities?

22 I can see the benefits for the city, but there's got
23 to be a benefit for the environmental community to be
24 able to figure out that it's worth it for them to see
25 the flexibility. I personally think it's really, really

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1 needed change, but I think it's also a great excuse to
2 bring the environmental communities and the cities into
3 the same room together to figure out what it would take
4 for them to all make it want to work.

5 MS. PURDY: And I would just say -- I would say we
6 think -- I mean, the benefit to the environment is that
7 we believe that through these watershed management
8 programs, there's going to be developing leverage
9 resources much more than individual permittees working
10 on their own and look for regional solutions that may
11 end up being much more cost effective than everybody
12 doing their own individual solutions.

13 MS. GLICKFELD: well, I think that's (inaudible) for
14 the cities --

15 MS. PURDY: And the environment.

16 MS. GLICKFELD: Anything that is going to be a much
17 more effective way, it's going to be a faster way of
18 meeting the deadlines that we've set for pollutant
19 reduction?

20 MS. PURDY: well, I think faster in the sense that
21 the fact that they're able to leverage resources and
22 look for regional solutions that may be more effective.
23 And one regional solution instead of many, many
24 individual solutions, I think it could be a faster way
25 for achieving the (inaudible).

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1 MR. STRINGER: Irma, anything on watershed management
2 planning or program?

3 MS. MUNOZ: No.

4 MR. STRINGER: I just have one sort of set of
5 questions. And it's more about implementation, I think.
6 So I was trying to think through if the group of cities
7 comes in with a plan, and the plan needs modification or
8 goes through a process, what's the -- how does that play
9 out over time?

10 And at what point would or could the Board just say,
11 "Enough. You're not there yet"? I mean, what's the
12 enforcement mechanism behind that program if a group of
13 cities isn't, you know, putting a plan together that's
14 up to the standards that's set forth in the -- I'm just
15 wondering how that would play out.

16 MS. PURDY: well, I would start out by saying that's

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17 one of the reasons that we have -- if we tie this to
18 TMDL provisions, for example, it's one of the reasons
19 that we're making sure to include the numeric water
20 quality based (inaudible) limitations either for
21 permittees that choose not to participate in the plan at
22 all or for permittees that -- see, just that they might
23 participate in the program, but then they don't follow
24 through with participation in that program.

25 Then we have a mechanism for determining their

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1 compliance with the permit provisions.

2 So I -- but I think in terms of, I guess, there are a
3 couple stages. I mean, that's the planned developed and
4 permittees participate in (inaudible) and all actually
5 participating as they should be in the development of
6 that plan where we're basically proposing a timeline to
7 give them first of all the first six months timeline to
8 say, this is our intent to participate.

9 And if they don't let us know within that first six
10 months of their intent to participate, then we would
11 just default to the other mechanisms within the permit
12 for determining compliance.

13 And so there's that stage. And then if along the
14 line, even after that six months, it appears that they're
15 not participating, then I think at any point we could
16 communicate with them and let them know that it appears
17 that this is, you know, they're not going to participate
18 in this plan.

19 And therefore, they'll just subject to the compliance
20 with the provisions of the permit just strictly as
21 they're written. There's also the assessment step of
22 the process. So once the plan is developed and once the
23 plan is approved and limitation has begun, we're
24 thinking of, as I said, an 18 month cycle, basically.

25 And in that cycle, they'll be reporting on what the

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1 accomplished during that 18 months. And that would be
2 another opportunity to do either one of two things. I
3 mean, one, if a permittee has not been fulfilling its
4 rolls and responsibilities, then it wouldn't be in
5 compliance with the provisions of the watershed
6 management plan as approved.

7 Additionally, that would be another opportunity to
8 basically say you don't care to be a participating
9 member of this watershed management program. Therefore,
10 we're just going to set your compliance according to the
11 provisions of the permit including the numeric water
12 quality based statute limitations and other provisions.

13 So I think that assessment check-in at that point
14 gives give us another opportunity to look at what's the
15 most appropriate way of treating that individual
16 permittee. Does that answer your question?

17 MR. STRINGER: Yes. That's very helpful. Thank you.
18 So Fran, what's next?

19 MS. DIAMOND: Okay. So what I'd like you to talk to
20 us about is the TMDLs. And I'm just wondering, for
21 example, since the bacteria TMDL for dry weather are the
22 most significant in terms of stormwater pollution at
23 our beaches, and they were approved in 2003. I may have
24 been the only one on the Board.

25 MS. GLICKFELD: You are.

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1 MS. DIAMOND: And the compliance should have been in

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2 2006. And we've had some really great progress, but not
3 all the cities are in compliance. And I know we're
4 involved with many TMDLs and implementation programs.
5 It's a very complicated program, and we are very
6 self-congratulatory -- I think we should be -- for all
7 the TMDLs that we have in our region, by far the most in
8 any region.

9 And I think we've been doing a great job on that.
10 But how does this new permit deal with the fact that we
11 have seven TMDLs where we have some permittees not in
12 compliance with the current permit?

13 Where do we -- how does that work into this new
14 permit? And I'd like to you discuss the issue of the
15 time schedule orders that you -- that you mentioned
16 earlier in your report to us.

17 And what -- and so how are we dealing with the TMDLs
18 that we already -- that we are going to be incorporating
19 and some that we have already incorporated in terms of
20 compliance?

21 And what does that mean in terms of is there
22 backsliding which is something that we can't do,
23 obviously, under the Clean Water Act. So just that
24 general topic. I think you know more of what I'm trying
25 to say than I'm communicating.

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1 MS. PURDY: So let me start with I did work the
2 Santa Monica Beaches and Bacteria TMDLs. There are four,
3 probably, of the most concern. It's the Santa Monica Bay
4 beaches, Marina del Rey bacteria, the Malibu Creek
5 bacteria, and then also the (inaudible) beach.

6 All of those summer dry weather allocations are
7 past due. The deadlines are past due. And so to
8 those, really what we're anticipating, first of all, as
9 I said, we -- because those -- those implementation
10 schedules are in the basin plan, we don't have the
11 flexibility to change what those schedules are within
12 the permit itself unless we were to go back and actually
13 change the basin plan.

14 That's what we would need to do in order to lengthen
15 their schedules and then provide those as compliance
16 schedules within the terms of the permits. So that's
17 why we've been applying these time schedule orders where
18 it would be justified.

19 Now, I think what I heard a lot of people's concern
20 is there are -- those TMDLs have been in effect for a
21 long time. The deadlines, in many cases, are long overdue.
22 Santa Monica Bay, like I said, was 2006 when the summer
23 requirements were to be met, and that was six years ago.

24 And so what we're anticipating is not that -- first
25 of all, there needs to be a request for a TSO by the

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1 permittees that think they need a TSO because they
2 haven't achieved compliance. In the case of Santa Monica
3 Bay, we don't expect it would be just a blanket TSO
4 necessarily for all permittees and all locations within
5 the Santa Monica Bay.

6 We're seeing TSOs as something that could be a very
7 focused tool for some situations where good efforts have
8 been made. There's been a good faith effort to try to
9 come to compliance, but there may be a few areas where
10 compliance is not yet achieved.

11 And based on an evaluation of all the efforts that
12 have been taken, you know, the chronology of those, and

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13 in evaluation of what additional conduct we needed, it
14 would be a very focused tool that may be provided only
15 to a subset of permittees essentially.

16 And we would evaluate their requests. And we would
17 -- one of those things that I had on that slide that I
18 showed would be that the permittees would need to
19 provide a chronology of what are all actions they have
20 done to try to come into compliance per the original
21 implementation schedule that was in the TMDL.

22 And so we would evaluate that then before proposing,
23 you know, before staff proposing a time schedule order.
24 And like I said, the time schedule order could be
25 focused -- you know, provided for some permittees and it

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1 could be provided just for certain areas within -- you
2 know, Santa Monica Bay you have 57 compliance points
3 within the Santa Monica Bay bacteria TMDL.

4 Not all of those locations need additional time. A
5 number of those are in compliance. And so it could be a
6 very focused tool in that sense. And I think that's
7 something that I want to make sure is clear because I
8 don't want, if that's come across, that we really would
9 look at it not necessarily as a blanket time schedule
10 order for all, you know, all locations and all
11 permittees necessarily.

12 We would look at the individual requests and what's
13 been done by each permittee and see what seemed
14 reasonable. So I don't know -- so that's part -- that's
15 part of the answer, I think, to your questions, and I'm
16 not sure if there are other aspects.

17 MS. DIAMOND: As I said, I think a lot of the
18 permittees have done a great job and we have cleaner
19 beach water quality and more A grades than ever before,
20 but -- and this is just hypothetical -- I don't know.

21 The ones we have seen, there has been a lot of days
22 of noncompliance or exceedance. What if you -- what if
23 there's some permittees that haven't been trying and --
24 we already have six years for some.

25 I'm assuming there must be a handful of noncompliance

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1 or perhaps that they're not doing things that are
2 possible. What are we -- are they going to get the benefit
3 of those that are trying and haven't come into
4 compliance yet?

5 MS. PURDY: And I would say the answer would be, no,
6 not necessarily.

7 MS. DIAMOND: (Inaudible).

8 MS. PURDY: (Inaudible). Exactly. I think because
9 we have -- you have a lot of other endorsement tools at
10 your fingertips, and I think that, you know, time
11 schedule orders are a tool to use that we think our
12 permittee is really in need of, and it's justified to
13 provide additional time.

14 And, you know, we developed those implementation
15 schedules with the best information we had available.
16 And we considered a lot of different things. But we've
17 also learned a lot along the way.

18 And there may be some situations where it might be
19 warranted to provide additional time. And certainly we
20 believe that the (inaudible) TMDLs, which are a different
21 situation. We think that it is warranted because many
22 of those TMDLs are in many ways just like our
23 state-adopted TMDLs.

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24 So we provided implementation schedules for the
25 state-adopted TMDLs whereas the (inaudible) TMDLs don't
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1 have those implementation schedules. So it would really
2 be evaluating it on a case-by-case, permittee by
3 permittee basis to look at whether it would be an
4 appropriate and warranted tool to use or not.

5 MS. DIAMOND: I just, you know, I think our TMDLs
6 have been incredibly effective, and I want to make sure
7 that we are still on the cutting edge and not
8 backsliding legally, you know, or even in perception.

9 I think, you know, we don't need to be -- we
10 certainly will not be backsliding legally. None of us
11 -- we wouldn't do that. But we want to also consider we
12 don't want to go backwards in any way when we've had
13 such a successful program. And our staff and our region
14 and our beaches are so incredibly important to us in
15 every way, economically, environmentally, for our health
16 mental and physical.

17 And so I just want to make sure that we are moving in
18 the right direction. I think I said at the last
19 workshop our Clean Water Act and again I started this
20 morning by saying I was so inspired by hearing Lisa
21 Jackson a couple weeks ago.

22 And she talked about the Clean Water Act as being
23 this incredible tool that provides us with a healthy
24 environment and we must move forward. The Clean Water
25 Act is constantly moving forward. And so I just want to
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1 be sure that that's what we're doing.

2 MR. STRINGER: Thanks. Larry, do you have any
3 questions or comments on TMDLs?

4 MR. YEE: Well, one on the bacterial TMDL. I heard
5 one of the speakers this morning talk about human
6 shedding. How do you distinguish between that kind of
7 bacterial contamination and other sources? Or do you?

8 MS. PURDY: Well, it's -- yeah, there are ways of
9 determining the -- we refer to them as micro source
10 tracking methods. And so there are ways we can look at
11 what is the source of bacteria. Usually, it's determined
12 as human versus nonhuman.

13 And there's also sanitary -- what we refer to as
14 sanitary surveys. Basically, where you -- in many cases
15 are going up the watershed doing lots of different
16 monitoring at points, collecting samples, and then doing
17 the source tracking to determine what, one, from a
18 geographical point of view, where is that bacteria coming
19 from? And two, what is it? More specific, is it human?
20 Is it nonhuman? If it's nonhuman, is it birds? Is it
21 other types of water life?

22 So there are techniques. There's actually been a lot
23 of advancement in I'd say just the last decade, maybe
24 even less than a decade, in that area. And there still
25 continues to be. And EPA is looking at that nationally
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1 and is trying to develop a lot of new methodologies so
2 that we can start to use those much more commonly.

3 They've been fairly specialized and somewhat
4 expensive techniques to use up to this point. But I
5 think it's getting to the point where more and more are
6 commercial laboratories will be able to use those
7 techniques and that sort of thing.

8 MR. UNGER: And also I would like to add one thing to

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9 that which is the basin plan already has interstate
10 provisions for permittees to look at. So they -- the
11 natural sources exclusion would essentially look at
12 natural sources in a given beach, in a given environment
13 and petition us to, you know, have alternative standards
14 for that particular water body.

15 So no one has taken advantage of that yet. And I
16 think a lot of the reason, as Renee explained, is
17 because science is just getting there right now, but we
18 expect that -- we've anticipated that issue so.

19 MR. STRINGER: Maria, anything?

20 MS. CAMACHO: No.

21 MR. STRINGER: Madelyn.

22 MS. GLICKFELD: Well, my question is a variation on
23 TMDLs. It's about -- you know, I've been on the Board
24 for five years now -- I think five years -- and I still
25 don't know who is complying and who isn't.

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1 And we don't have that information for us. I hope
2 you guys know who is and who isn't. You said you get an
3 annual report based on the current permits.

4 But I think if we go through this process and we
5 adopt the new permit and we don't know what the baseline
6 -- what people are already doing to comply, that would
7 be a really big shame because it will not -- it will be
8 starting again as if nothing had happened.

9 And I'm concerned about that. So what can we build
10 into this permit that first of all gives the Board and
11 gives the cities and the counties and the public an idea
12 of who's doing their job, who isn't doing their job,
13 where are they doing -- which pollutants are they doing
14 well on; which pollutants aren't they doing well on.

15 And so we can focus. We can understand where we're
16 starting from. Is there a way that issue of compliance
17 can be addressed? I think -- I have this gut feeling
18 that if we actually look at what people are doing in a
19 much more concentrated way, maybe some members of the
20 public will be -- and some members of the Board,
21 including me, might be more confident about moving
22 forward.

23 MS. PURDY: And I think that is in large part related
24 to the monitoring and reporting program that will
25 develop as part of the this permit. So we've talked

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1 about monitoring before. And I think particularly with
2 this permit because we're incorporating so many TMDLs
3 that have water quality-based limitations, we're going
4 to have even more monitoring data, and we will have
5 outflow monitoring data. And I think it will give us a
6 much clearer picture of how permittees are doing. In
7 the past, the way we did monitoring, which was before
8 anyway was, you know, not as -- it wasn't as clear how
9 each individual permittee was doing.

10 But I would just say that we are trying to build in
11 a number of -- of course (inaudible) monitoring --
12 monitoring programs as well as an assessment and
13 reporting program that will show us to really determine
14 how permittees are doing.

15 We do have a sense with, right now through the annual
16 reports, of how permittees are doing. They submitted
17 their annual reports reporting on the programs that
18 they've implemented, the types of actions they've taken,
19 the type of (inaudible) they've done, and that sort of

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20 thing; the public education.

21 And so we do have a sense of that. And we also have
22 a sense of looking from the TMDL monitoring data that's
23 coming in. And looking at, for example, I know I use
24 the bacteria TMDL a lot, but I've lived with that since
25 2002.

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1 But we look at that monitoring, the TMDL compliance
2 monitoring data and we have a sense of how permittees
3 are doing based on the evaluation of the TMDL compliance
4 monitoring. But it really -- it -- I think one of the
5 things that, frankly, I have been thinking about a lot
6 is how can we make sure that our reporting program is
7 effective?

8 And I think it's actually a great concern to the
9 permittees as well. They want to be able to report on
10 what they are doing. And we all want that to be a
11 meaningful report. It's really giving a good picture of
12 what the permittees are doing, what we've heard from
13 them about what they've done, and so we're looking at
14 ways to have the reporting be a more productive process.

15 MS. GLICKFELD: If I can suggest, I think what Downey
16 did was really helpful. And the sense that I can
17 encourage other cities to actually put together a quick
18 synopsis of what you're doing and what kind of coverage
19 you have and what pollutants you're addressing, so that
20 -- and that staff could find a way of assembling, so that
21 we know what's going on. I think -- and that's not only
22 me, but so the public knows this as well.

23 I think that will make a huge difference. And I'm
24 suggesting that you rethink about how you look at
25 compliance in this next five years around so that you

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1 get a lot more real data on this instead of discussion
2 and hypotheticals about what people may and may not be
3 doing.

4 MR. YEE: Is it possible to steal from Heal the Bay
5 and issue report cards?

6 MS. GLICKFELD: You want report cards?

7 MS. PURDY: I think we can think about it, how that
8 might work within the reporting program or how to use
9 program reporting data. So we'll think about that.

10 MR. YEE: I think, you know, we need to be able to
11 judge over time how an entity or permittee is doing out
12 there.

13 For instance, if they scored a C today and 10 years
14 from now they're still scoring a C, you know, then
15 obviously they haven't made much progress. But, you
16 know, if someone scores say a D and 10 years from now
17 they're up to a B or an A, then wow, you know. That's
18 terrific.

19 Also it might be a way for, you know, the public to
20 understand how these permittees, you know, are
21 functioning with respect to the residents. I mean, as
22 I'm sitting here today, I'm trying -- I know that --
23 that regulations and enforcement are not going to do it
24 all and, you know, I'm having a little bit of a time
25 adjusting.

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1 And I had a career in research education, so I'm
2 having a little bit of a time adjusting to a regular
3 hat; right?

4 But obviously, you know, if we're really going get to

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5 where we really need to get to, we need to have a
6 certain level of civic engagement and personal
7 responsibility in all of this. Citizens don't know, you
8 know, where they're at and they don't understand --
9 readily understand that it's going to be difficult.

10 MS. MUNOZ: Also, I was hoping there would be an
11 additional benefit by publishing and knowing who's doing
12 well in certain, say, TMDLs because cities who have the
13 same issues might be able to talk to that city and get
14 some guidance or some advice if they shared information.

15 It's not a competition, really. We're all working
16 together to increase water quality. So it seems to me
17 that we would be a vehicle for increased information
18 sharing.

19 And I can't forget I used to do a lot of work in the
20 San Fernando Valley; there were a group of a number of
21 Hispanic parents who had been planning for two months a
22 trip to the beach. And many times, it is a week outing.

23 And they went. And about 15 of them went, majority
24 children. And when I saw them on Monday and asked them
25 how their trip to the beach was since they were so

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1 excited about going, it was full of horror stories of
2 oh, my God, you know, the beach was dirty. My kids came
3 back, and I think they got the flu. Some of them were
4 throwing up and it was a horrible experience.

5 And the asked me what can we do here so when we go to
6 the beach next year, we don't have those problems? Is
7 it something we're doing at home?

8 So that was an incredible moment for -- I don't call
9 it watershed education because no one's going to know
10 what that is. I think that people need to know, you
11 know, and if residents knew where the cities were in
12 some of these TMDLs and translated TMDLs where it makes
13 more sense.

14 Because when TMDLs were first introduced to me,
15 (inaudible) treat people and I just thought oh, my God,
16 this is Greek. I don't know what this means. I finally
17 understood it being on the water board.

18 But translating our language to the everyday person
19 so it makes sense to them and simplifying their everyday
20 actions at home and at work to help meet those TMDLs.

21 The other point I have about the TMDLs and what I've
22 heard is, it just seems like just such an administrative
23 nightmare. This is reporting the compliance and
24 certification if the compliance is happening. Does that
25 mean there's going to be a shift in staff priorities? I

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1 mean, I know that we recently hired 212 folks, but how
2 large is the staff who's going to be in charge of that
3 piece of it? Because it just a very -- a lot of
4 burdensome paperwork.

5 And so I think you might have the answer to my
6 question because I'm sitting here thinking oh, my God,
7 that is a lot of work.

8 MS. PURDY: Right. It's a lot of administrative work
9 for us, and I would say -- I mean, it's a shift in the
10 workload will be -- we've been spending the (inaudible)
11 the stormwater permit meeting -- and that being said,
12 we've also been spending a huge amount of time
13 stormwater permits.

14 We've spent a huge amount of time over the last
15 several years developing stormwater permits.

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16 Developing the Ventura permit, developing now the LA
17 permit. And so part of that shift will be under the
18 term permit development which I'm really looking forward
19 to to permit implementation.

20 And so the staff like myself and like Aybar and
21 Rebecca and Nick and others on our stormwater
22 permitting unit will be shifted from working on permit
23 development to really working on reviewing these
24 watershed management program plans, reviewing the
25 assessment reports as they come in, and the monitoring

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1 reports.

2 We don't have a big staff. Aybar has basically five
3 -- five staff under you, Aybar? So it's not a large
4 staff. We may also rely on some of our TMDL program
5 staff to do some of the reviews of the watershed
6 management programs because TMDLs are driver for some of
7 these. You're right.

8 There is a big administrative burden and we do hope
9 there will be collaborations so that we get just a few
10 large plans as permittees are working together as a
11 group rather than having lots and lots of individual
12 plans which would be an even greater burden.

13 But we're, you know, I think it's the right direction
14 to go. And we'll do what we need to do to manage that
15 administrative burden.

16 MR. STRINGER: Okay. Thanks. That was really
17 helpful. Maria, did you have something?

18 MS. CAMACHO: Yeah. Sorry. I had one question. In
19 looking at the -- the section 19-15, the commingle
20 discharges section of the TMDL provisions and then in
21 hearing Mr. Tahir talk about and showing that image of
22 the outfall pipe and then the the waterway below it, and
23 I think there was question of where the monitoring --
24 where we capture the -- take the monitoring levels from
25 it.

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1 So I was just curious about your take on that. And
2 then in reading the commingle discharger section and
3 hearing Ray bring up the fact which now it makes sense
4 is like for example, the school districts sometimes.
5 That's their own land and cities don't have jurisdiction
6 necessarily over that land.

7 And so how does that come into play in this effort to
8 ensure and showcase, you know, when you're trying to
9 showcase and demonstrate that you did not cause that
10 source of pollutants or pollution. How does all that
11 work?

12 MS. PURDY: First of all, with regard to the first
13 part of your question in commingle discharges, the way
14 that we've laid things out, we're trying to provide a
15 number of different options for permittees in terms of
16 having them demonstrate compliance.

17 And so definitely outflow monitoring is going to
18 become a new and (inaudible) permit that we haven't
19 really had in the past. We do have it in Ventura, as he
20 had mentioned in his introductory remarks. And we do
21 think that that's very important and valuable.

22 So in the case of commingle discharges, you might have
23 different situations. In the picture that Ray showed,
24 you have an outfall. That outfall may be just draining
25 one jurisdiction. That would be the simple scenario.

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1 And you can just sample at that outfall the actual
2 discharge coming out of the outfall, not in the water
3 body itself, and know that it's coming from that
4 permittee's jurisdiction. And the working proposal that
5 we have allows a permittee to do that. And we'll have
6 the outfall monitoring data to support that kind of
7 determination.

8 If you monitor -- if your group of permittees
9 working together on the watershed plan and you choose
10 to, you can monitor in the water body and you can show
11 that that standard in the water body is achieving water
12 quality standards.

13 And so everybody that's contributing to that water
14 body would then be found in compliance in that case.
15 And so if the group of permittees choose to work that
16 way, then that may be a more efficient way to look at
17 the water quality data.

18 Another situation, of course, is if you've got that
19 outfall and this happens, and I think it's in LA, and
20 then that outfall is actually not just draining one
21 city. But you have one city right after the water body
22 then you have another one upstream of that and another
23 one upstream of that.

24 In that case, it's going to require some monitoring
25 and jurisdictional boundaries if you really want to

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1 determine what an individual permittee's responsibility
2 is. And that can be done by finding, you know, a
3 manhole where you can actually access the (inaudible)
4 near the jurisdictional boundary and taking a sample at
5 that point.

6 It is going to mean a much more, I think, complicated
7 monitoring program than we've had in the past. But a
8 lot of this monitoring is starting through the TMDLs
9 compliance monitoring that we have. So that's -- we're
10 allowing for both of those types of monitoring to occur
11 in the working proposal.

12 And then I'm sorry. Now I've lost track of the
13 second part of your question.

14 MS. CAMACHO: The topic of school district.

15 MS. PURDY: Oh, yes. Thank you.

16 So in regard to that, the school districts --
17 actually one of the things that state board is working
18 on right now is a space to -- for a permit -- or a small
19 MS4 permit.

20 And there was some contemplation initially about
21 including school districts up front. At this point,
22 state board isn't proposing to do that, but the regional
23 board has the ability to basically require that school
24 districts enroll in that phase two permit. And in that
25 case, they would be separately regulated and would have

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1 their own set of requirements under that -- what will be
2 a state board-issued general MS4 permit for small MS4s.

3 And so -- that's -- I mean, that's just one example
4 of probably a number of other situations that I think
5 Ray mentioned some other ones where there are other
6 general MPS permits that may discharge through the MS4
7 system.

8 And in that case, those MS4 permits contain their own
9 set of permit requirements. And if they -- I would say
10 is an MS4 permittee, one of our (inaudible) MS4
11 permittees identified that as a potential source, then

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12 that's something that we can then discuss that with
13 them.

14 For example, in the case of school districts, maybe
15 that would be justification for considering whether that
16 school district should be enrolled in the phase two MS4
17 permit.

18 MS. GLICKFELD: Is there a way of including this kind
19 of process as language in the permit and talking to the
20 permittees about what they do with entities that they
21 don't supervise?

22 So they basically have authority over most private
23 land and they have authority over their own streets, but
24 they don't have authority over school districts.

25 Is there a way to describe this, what happens in the

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1 community and what they should be doing to resolve the
2 problem?

3 MS. PURDY: In terms of talking to us about that
4 problem?

5 MS. GLICKFELD: No, in terms of having those other
6 entities being under other permits.

7 MR. UNGER: I think it's just regular jurisdiction.

8 MS. GLICKFELD: (Inaudible)

9 MS. PURDY: I would say I think we probably can put
10 something, if not in the permit itself, then in perhaps
11 in some of the supporting documentation like the fact
12 sheet. We actually do have some of the language in
13 already with regard to non-stormwater discharges
14 because there are a number of general MS4 permits for
15 non-stormwater discharges that end up coming through
16 the MS4.

17 And so I think that there is a way that we can talk
18 about situations where there might be separately
19 permitted discharges that are coming through the MS4 and
20 how those should be dealt with by, you know, school
21 permittees or referred to us if there's a problem with
22 compliance with that particular permit. I think we
23 could find a way to do that.

24 MR. STRINGER: Thanks. So I'm going to jump now and
25 ask a question that opens up a different topic. And I

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1 apologize ahead of time. I've got to catch a flight, so
2 I have to leave here at 4:30. When I leave, Fran is
3 going to take over and chair the rest of the meeting. I
4 apologize ahead of time. I will slip out unnoticed,
5 hopefully.

6 The issue of numeric standards versus BMPs, we've
7 heard today that we have discretion and we don't have
8 discretion. That's one issue obviously that the
9 (inaudible) can address that. But more broadly than
10 that, if you could help us kind of unpack those issues
11 and help us understand the implications of our decision.
12 That would be very helpful.

13 MS. PURDY: So with regard to the -- yeah, the
14 question of numeric or BMP-based approaches, staff has
15 evaluated this and, you know, looked at what the federal
16 regulations say which is -- and I know I've said this a
17 number of times before, but federal regulations
18 basically require that we have (inaudible) limitations
19 that are consistent with the assumptions and
20 requirements of wasteload allocations from TMDLs.

21 And so given an evaluation of how those wasteload
22 allocations are expressed in our basin plan, of course

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23 they are (inaudible) numerically, and the fact that
24 basically EPA has stated in both in the federal
25 regulation as well as in more recent guidance that if

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1 feasible, then those wasteload allocations should be
2 translated into numeric water quality based (inaudible).

3 And based on staff's analysis, we believe that it is
4 feasible to translate those wasteload allocations into
5 numeric water quality based (inaudible). We think that
6 we have the necessary data.

7 It's consistent with how their wasteload allocations
8 are expressed in our basin plan, and we think that it
9 also provides a, you know, a very important way to
10 ensure accountability and that those wasteload
11 allocations that were developed into TMDLs are actually
12 achieved at the end of the day.

13 The other thing that I do want to say that's kind on
14 the flip side of this is related to whether we can
15 include permit limitations and TMDs instead of numeric
16 water quality based (inaudible) limitations. And what
17 -- basically what EPA says about this is you can use
18 TMDs as permit limitations if you have the assurance
19 that those TMDs are going to achieve your final wasteload
20 allocations.

21 And it's a little bit of -- in some ways an issue of
22 the horse before the cart kind of thing where at this
23 point we're saying develop watershed management programs
24 to show and then make demonstrations that those
25 watershed control measures in your programs are going to

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1 achieve the final wasteload allocations in TMDLs.

2 And we don't yet have that information. We don't
3 have that information to put in the record that we know
4 that this is the set of TMDs that we need to achieve
5 those final wasteload allocations. So that's why we've
6 chosen this approach of including the numeric water
7 quality (inaudible) limitations which we believe it's
8 feasible to calculate those and include them in the
9 permit.

10 And then we've provided this dual path at least for
11 the interim water quality based (inaudible) limitations
12 where there's a little more flexibility because the
13 federal regulations don't really say as much about the
14 idea is interim wasteload allocations. That's something
15 that, in many cases, we put in our TMDLs because we have
16 a very long time (inaudible) our TMDLs, and we want to
17 ensure that there's progress along the way.

18 But there's -- there's more -- I would say there's
19 more discretion with regard to how we express the
20 interim water quality based (inaudible) limitations than
21 what we determined that we have for the final water
22 quality based (inaudible) limitations.

23 Because of the fact that, you know, we find it
24 feasible to calculate that it is numerically consistent
25 with how they're expressed in our basin plan. We, you

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1 know, we find (inaudible) approach to require the
2 compliance with the final numerics using just that more
3 direct comparison with the numeric (inaudible)
4 limitations (inaudible) approach.

5 And I think with the reasonable assurance analysis
6 with what our expectation is that that should be
7 possible to achieve this numeric. That's the whole

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8 point of the reasonable assurance analysis is to
9 basically show that this watershed control measure will
10 actually achieve the final (inaudible) limitations at
11 the end of the compliance period.

12 MR. UNGER: Can I?

13 MR. STRINGER: Sure, yes.

14 MR. UNGER: I'd like to add that the proposed
15 approach that we perform, documents that you've seen for
16 today's workshop, I think comports quite well with
17 (inaudible) who is trying to do which things -- which
18 people are trying to do things and which aren't.

19 So by giving them some latitude, you know, by using
20 TMDs as (inaudible) said, gives them a chance to
21 implement certain things, and perfect them, modify them,
22 and adjust them, things like that, add to them.

23 And they're still making good efforts which we
24 thought we heard earlier from you that you're interested
25 in knowing which of those municipalities are making that

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1 effort. So it provides an incentive in that sense.
2 (Inaudible) in terms of achieving water quality
3 standards. (Inaudible) led us to some degree to the
4 proposal that you have before you now.

5 MR. STRINGER: Okay. Could you just explain a
6 little -- (inaudible). I'm trying to understand the
7 practical implications of going one way or the other to
8 (inaudible.) It's obviously a big concern, and I'm not
9 sure I understand yet from a real, practical perspective
10 the implications of going one way or the other.

11 MS. PURDY: Yeah, I think from a practical point of
12 view, the BMP-based approach, (inaudible), I think they
13 in probably deal with this as well, but I think they
14 feel provides them with a greater amount of certainty.

15 They know if they -- I mean, just as simple, they
16 know if they implement those actions, then per the
17 schedule, then they'll be in compliance. Whereas I
18 think with the numeric there's -- and the use of
19 monitoring data and the comparison to those numeric
20 limitations, they feel like there's some greater amount
21 of uncertainty that they will be found in compliance
22 that because of some of the variability in the stormwater
23 that there could be concerns and variability in the
24 performance of some BMPs that they would be concerned
25 that they may not be able to demonstrate in all cases

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1 compliance with numeric limitations.

2 So I think in a very simple sense that's one of their
3 greatest concerns from a practical point of view. I
4 think it's much -- they have a lot more engineering --
5 maybe engineering isn't the right way to say it.

6 But to say yes, I've done this action that I said I
7 would do, and I've done it for the schedule is a more
8 straightforward way for them to demonstrate compliance.
9 Or a more certain way than to demonstrate compliance, I
10 think, than they feel using monitoring data in
11 comparison to numeric limitations would be.

12 MR. STRINGER: (Inaudible) from a water perspective
13 (inaudible) more certainty.

14 MS. PURDY: Right. Right. Exactly it gives
15 (inaudible) --

16 MR. STRINGER: The environment.

17 MS. PURDY: (Inaudible) water quality standards are
18 actually being achieved and the beneficial uses are

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19 actually being protected.

20 MR. STRINGER: Right.

21 MS. PURDY: Right.

22 MR. STRINGER: Madelyn, you wanted to --

23 MS. GLICKFELD: Sorry. I just wanted to add that
24 certainty means you're not going to be fined. I think
25 the enforcement part is a really big concern to -- for

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1 both sides. I think the (inaudible) community wants to
2 see enforcement numerics so that people feel they have
3 to do it.

4 And I think the regulated community is scared to
5 death of enforceable permits because they (inaudible)
6 about the basis they might not be able to meet them. I
7 think that's why it's important. I wanted to talk about
8 the --

9 MR. STRINGER: Hang on one second. Are you changing
10 the topic?

11 MS. GLICKFELD: Yes.

12 MR. STRINGER: Does anyone have any questions about
13 the numerics versus BMP?

14 MS. DIAMOND: I guess I'm still having a hard time
15 understanding if BMPs are -- are the measure, this would
16 be after the reasonable assurance analysis and the
17 reasonable assurance analysis would -- what would that
18 be based on?

19 How would a permittee show that a BMP that they are
20 choosing to comply with the permit limits are going to
21 work? What would that reasonable assurance analysis
22 look like? That's where I'm kind of stuck.

23 MS. PURDY: What we're anticipating for that is a
24 basically a quantitative analysis. Once they have
25 identified all of their watershed control measures,

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1 there are a number of sources of information out in the
2 stormwater arena in terms of stormwater research and
3 implementation.

4 There's a very good database, for example, an
5 international BMP database that talks about what's the
6 expected performance of lots of different types of BMPs.
7 There's been a number of research projects and so forth
8 on a lot of these stormwater management measures.

9 So the idea would be that it would be a quantitative
10 analysis based on, you know, assumptions about the
11 performance of the watershed control measures that have
12 been identified to be implemented.

13 So if a lot of the permittees or at least a number of
14 the large permittees developed very technical modeling
15 systems, like the County has one called the watershed
16 Management Modeling System.

17 City of LA has a modeling system where they can
18 actually input what the BMPs are, what they are going to
19 be doing, where they are going to be doing them within
20 the watershed area, and then in the modeling. Okay,
21 what would the water quality outcomes be?

22 And so the reasonable assurance and analysis would
23 largely be based on that type of quantitative analysis
24 based on, you know, some -- some functions, well
25 (inaudible) assumptions about BMP performance.

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1 MS. DIAMOND: And then -- I guess my question is
2 always and then -- BMP based that regional board staff
3 looks at and agrees is -- there is a good chance

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4 basically that these are going to work. And we go so
5 forth and do them.

6 Then there's monitoring to see whether they actually
7 do work. Now, what happens if they don't? We pray that
8 they do, but what happens if they don't? I'm just
9 trying to figure that part out.

10 MS. PURDY: Right. So if they don't, I think one of
11 the questions would be how far away were they from
12 working the way they thought they were going to work?
13 If it's just that they're a little bit away from where
14 they thought they were going to work, then, you know,
15 that will probably just require a little bit of, you
16 know, adaption. Maybe they can be, you know, performance
17 can be optimized, that sort of thing.

18 If they're very far away, then maybe, you know, there
19 was an error in the analysis. And there needs to be an
20 effort to go back to the drawing board and look at what
21 are the appropriate TMDs to be implemented.

22 So you're right. I mean, we might have -- we're
23 hoping that the situation will be that it comes pretty
24 close to what was expected in terms of water quality
25 outcomes and maybe there was just a little bit of

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1 difference, and maybe they actually did better than they
2 thought they were going to, but they didn't do as well
3 as they thought. And that is part of what that adoptive
4 management process is supposed to address, also.

5 MS. DIAMOND: So then you go back to the drawing
6 board and figure out what the next steps would be?

7 MS. PURDY: Right. I mean, if it was very far apart
8 from what we expected, then in that case, it may be
9 because the BMPs weren't implemented as intended, maybe
10 they weren't designed properly, maybe they weren't
11 operated or maintained properly.

12 So we'd need to do an evaluation of were the BMPs
13 done in the way that they were supposed to be done? And
14 were they operated and maintained properly? And -- but
15 we would also look at was that really the best BMP to be
16 using in that case or does a different type of BMP need
17 to be used to address that pollutant.

18 MS. DIAMOND: And would the staff then, the executive
19 director and staff have the authority to then say to the
20 permittee, "Look, this isn't" -- whatever. "This needs
21 to be tweaked" or "this isn't working." And direct them
22 to go to the next set of BMPs or -- is that how it's
23 contemplated?

24 MS. PURDY: Yes, it is. So that the review cycle
25 that would happen on about an 18-month period. At least

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1 like I said, that's what we're proposing at present,
2 would be the opportunity to look and see do any of the
3 BMPs need to be enhanced? Do they need to be changed?

4 And there will be another review process at that
5 stage and a revision of the watershed control measures
6 and basically of the watershed management program.

7 And so any revisions then would be incorporated into
8 an updated watershed management program. And that would
9 go through the approval process again. And there would
10 definitely be the opportunity, as you just said, for the
11 regional board to provide input and say to the
12 permittees, "You need to implement additional BMPs," and
13 the permittee would have the opportunity to propose what
14 these would be and then would go through the process of

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15 approving the revised plan.

16 MS. DIAMOND: Would this come to the Board at some
17 point? I'd just like an -- a lot of this doesn't come
18 to the Board. You'll be doing this internally. But it
19 seems to me I would like to know how they're doing.

20 And what -- when there are times that there needs to
21 be changes, what are the changes? what were the
22 results? I think we all want to be educated about the
23 BMPs that are being used and the state of the water
24 quality in the dynamic way as we're moving forward.

25 So that would be important for me to see that we have

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1 updates regularly, you know, the 18 month or the 20
2 month, whatever makes sense, but I think we would need
3 to know that.

4 MS. PURDY: Okay.

5 MS. DIAMOND: That's all I have on that issue. You
6 have something you want to say?

7 MS. GLICKFELD: Yeah, I do. I wanted to talk about
8 the receiving water limitations, which is another issue of
9 contention that we heard about today. When Miss Maloney
10 was speaking, she talked about the receiving water
11 limitations.

12 She said the code -- I hope I'm quoting you right.
13 The (inaudible) to liability permit is allocated and
14 that it doesn't -- it holds the municipalities as a
15 group within the watershed that are -- that are
16 discharging to water bodies responsible for those even
17 if one member of the group is complying.

18 On the other hand, I think the (inaudible) said it's
19 really important that you maintain these receiving water
20 limitations. So I -- we are -- we abandon your
21 (inaudible) for mass emissions monitoring in favor of
22 (inaudible) monitoring. Is that pretty clear?

23 MS. PURDY: We're not abandoning mass emissions
24 monitoring. We still have -- we refer to it in the
25 current permit as mass emissions. It's basically

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1 monitoring in the receiving water. We'll still have
2 receiving water monitoring. And the specific locations
3 are yet to be determined.

4 There are some potential benefits to maintaining the
5 current mass emissions station from the point of view of
6 having a lot of trend data for these stations. But we
7 will still have receiving water monitoring in the permit.

8 MS. GLICKFELD: So I'm going to take the trash TMDLs
9 as an example because -- making a great example in
10 Orange. It's not -- as I understand the trash TMDL, if
11 the City does the full capture device and they put them
12 on 100 percent (inaudible), no matter if there's trash
13 left in them or not, they're in compliance; is that
14 right?

15 MS. PURDY: Yes. Trash TMDLs are unique.

16 MS. GLICKFELD: Okay. So you're saying that's not a
17 good example. That is not a good example. But here,
18 let's say another example, which is that active outfall
19 monitoring.

20 City A -- let's say you're City A. Fran is City A.
21 Her outfall is 100 percent clean, but downstream where
22 the receiving waters are, there's a pollutant problem.
23 It's exceeding limitations.

24 Is her city held liable along with everybody else at
25 the same time when she doesn't have any TMDL pollutants

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1 coming out?

2 MS. PURDY: No, because part of the language of the
3 receiving water limitation provision is that there has to
4 be a determination that the MS4 permittee has discharge
5 (inaudible) for permittee jurisdiction is causing or
6 contributing to the exceedance that receiving water
7 limitation.

8 So in that case, Fran's city would not -- if there was
9 outflow monitoring data demonstrating that her discharge
10 was meeting water quality standards, then there would be
11 no basis for making that determination that discharge
12 from that city has caused or contributed to the
13 exceedance.

14 MS. GLICKFELD: So if I might ask Miss Maloney to
15 come up. Is that okay if I ask her to come up? Is that
16 okay, Madam Chair?

17 MS. DIAMOND: Fine with me.

18 MS. GLICKFELD: I think that maybe the problem that
19 cities are seeing with the receiving water limitations
20 may be different than I (inaudible).

21 I want to understand how is it different than -- she
22 said you're -- (inaudible) -- policy you don't have to
23 worry about receiving water limitations. And you say
24 that you're immediately placed in noncompliance as soon
25 as we pass the permit. So what do you mean?

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1 MS. MALONEY: Yeah. I think these are fair
2 statements because the way in which they work together
3 is more of where the permittees see the complications.
4 I want to back up just a couple steps to make myself
5 clear.

6 There's a number -- we're still waiting to see the
7 monitoring language. So I think that's part of the
8 question is, how these pieces are going to work
9 together. So we're kind of having to formulate that and
10 guess a little bit as we make these comments. So it
11 really depends on where that longtime compliance point
12 is set within the permit to -- and -- and -- to
13 determine where the compliance is evaluated.

14 And I think Renee outlined a number of different
15 options that would be available for permittees. Looking
16 at EPA TMDLs for example, when the receiving water
17 limitation language is applied to it, those TMDLs are
18 selected immediately upon implementing -- or rolling
19 into --

20 MS. GLICKFELD: You're talking about the new ones?

21 MS. MALONEY: I'm sorry?

22 MS. GLICKFELD: You're talking about the new ones,
23 not the old ones?

24 MR. UNGER: No, the old ones.

25 MS. MALONEY: Well, the ones that -- take the area

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1 lakes TMDL for example. Those are newly adopted as of
2 March and would be rolled into the permit the way that
3 they're written. Within the receiving water limitations
4 language, it says the first two sections talk about
5 basically the noncompliance.

6 The third section that's outlined talks about the
7 interim process that permittees could go together. As
8 we've heard, there's been a determination that those two
9 sections are separately assessed. So even though you're
10 going through an iterative process to address that

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11 pollutant that that you would still be held liable
12 numerically.

13 So when this concept applied to watershed management
14 (inaudible) keeping those EPA TMDLs as an example, if a
15 permittee selects to address all those pollutants within
16 the watershed management plan, that's going to take
17 about, you know, a year to establish.

18 MS. GLICKFELD: Going back to what the second
19 comment. I didn't mean to the --

20 MS. MALONEY: It's a little tough (inaudible).

21 MS. GLICKFELD: It sounds like what you're saying is
22 that there's still a lot of unknowns in the permit and
23 yet some of these might be able to be resolved, and
24 maybe you can provide some written comments on it.

25 MS. MALONEY: We're planning to provide a lot of

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1 detailed written comments on that. I think the core of
2 it is that if you're working through this adoptive plan
3 and the management plan, that that BMP approach should
4 be applied to it. And the way the receiving water
5 limitations language is written now, that even though
6 you're working toward (inaudible) plan that you would be
7 in violation of the permit. Does that --

8 MS. GLICKFELD: I understand what you're saying. I'm
9 just not understanding exactly whether or not it's a
10 problem that's already been solved or it's a problem
11 that can be solved. All right. That's it.

12 MS. DIAMOND: Anybody else have anything to say about
13 in that issue? Questions? Irma, do any us four women
14 that are left have anything to say about anything?

15 MS. MUNOZ: Yes.

16 MS. DIAMOND: Irma.

17 MS. MUNOZ: If you could review for us the process
18 that staff takes after meetings such as this one where
19 we've received a lot of input, a lot of questions. I
20 think it was the LA Permit Group who wanted to get the
21 draft at a certain time.

22 When are they going to get the draft? Is it going to
23 be a final draft or is it going to be a draft before the
24 draft and what the timeline is for that and when they
25 get it?

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1 You know, because I know that you're meeting with
2 folks; you're going to continue to meeting with folks.
3 I think you have a couple more meetings. So maybe you
4 can provide us that timeline and the steps.

5 MS. PURDY: I'll start, and if you want to jump in at
6 any time, Sam.

7 So currently what we're anticipating in terms of
8 process is that we've heard a lot of the comments today.
9 As I told you at the beginning, we continue to consider
10 and get a lot of comments on working proposals. We're
11 still going through comments we got on the first two
12 working proposals, and we're going to continue -- we've
13 provided a written comment period for these working
14 proposals in addition to today's board workshop.

15 And so as we get those written comments in as well as
16 digesting what we've heard today, we'll be making
17 changes to each of the filed working proposals now that
18 we've discussed with you, and we'll be putting those all
19 together into a formal tentative order.

20 And right now, the plan is for us to put out that
21 final tentative order for public notice. I'm hoping by

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22 the end of this month, or if not the end of this month,
 23 but early next month. But right now, we're shooting for
 24 the end of this month for the tentative order because we
 25 want to provide a 45-day comment period for -- normally

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1 for public comments, we would provide a 30-day comment
 2 period, but knowing the magnitude of this, we'll provide
 3 a 45-day comment period.

4 And we also need to provide enough time for us to
 5 then respond to written comments that we received at the
 6 end of comment period and make sure that you have enough
 7 opportunity to fully consider the comments and our
 8 responses to those comments prior to the Board meeting
 9 on September the 6th.

10 So right now, that's our plan. We do have -- will
 11 continue to meet with permittees and other interested
 12 parties, the environmental organizations, and others
 13 during, you know, leading up to the release of that
 14 tentative order. We already have some meetings on the
 15 books and we'll continue to meet, I'm sure, throughout
 16 the public comment period as well on the tentative
 17 order. But right now, that's the big picture of what
 18 we're looking at in terms of schedules.

19 MS. MUNOZ: Is there any benefit or any plan or
 20 thought to bring some of the environmental organizations
 21 with those entities that they -- so they can hammer it
 22 out and try to figure out -- I think what happens is
 23 when they're, like, this in a big room and talk to them.
 24 No, I think they might have a lot more in common.

25 They probably can learn from each other so that it

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1 isn't, you know, like -- this and -- (inaudible) having
 2 such a meeting in the future. Once they get this
 3 document, then they can -- you know, I'd like to be a fly
 4 in that meeting because I think it might be very
 5 interesting and useful. We need (inaudible) between --
 6 I don't want to say separate sites, but between both
 7 entities, both interest groups.

8 MR. UNGER: Just real briefly. We have recently sent
 9 out an invitation to what we think this small group of
 10 (inaudible). We've spoken to the LA Permit Group, the
 11 environmental groups, to the Los Angeles -- County of
 12 Los Angeles, (inaudible). We're hoping we can have that
 13 meeting. We're willing to facilitate it. (Inaudible)
 14 and out of the room, we're happy to leave the room at
 15 that time, and they can state officers and handle what
 16 they need to. And we're hoping to get that process
 17 started.

18 We're uncertain as to what might come out of it. But
 19 certainly we can try. And we we'll wait to hear back on
 20 the dates that we put out there that -- that would be
 21 available. We'll report back to you on that. Just
 22 specifically (inaudible) --

23 MS. GLICKFELD: I just want to say that I think all
 24 of us up here really would like these parties to sit
 25 down together and work on these issues and try to --

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1 because I can tell you from my history as a regulator
 2 for a long time before even I got on this board, a board
 3 like ours can fix about three things in a particular
 4 action at any time.

5 It really can't -- we can't revamp and fix everything
 6 at these hearings. You want to have your issues

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7 addressed, you need to do it together before you come to
8 the hearing. And hope that -- Sam, I hope that you
9 would -- I'll talk to you. I hope that you would
10 identify -- I think there's a lot of very specific
11 issues that you can narrow down to here that will --
12 that can -- that can bring us to a large amount of
13 consensus and then we can debate it at the next public
14 hearing.

15 MS. PURDY: Thank you.

16 MR. UNGER: Madam Chair, I've just been informed
17 that we have about three minutes left before we have to
18 vacate this room.

19 MS. DIAMOND: I just want to take less than one
20 minute to say thank you. First of all to staff, to
21 Renee, Sam, Deb, Paula, our attorneys, everybody who's
22 worked on it. It's been very, very helpful. This
23 workshop in particular. The last one as well.

24 And I want to thank all of the people who have come
25 forward to report to us today to give us information

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1 about this permit, your thoughts and ideas about it.
2 And I think it's very useful and thank you all very
3 much.

4 MS. PURDY: Thank you. Thank you for your feedback.
5 (Proceedings concluded at 4:46 p.m.)

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

Los Angeles Regional Water Quality Control Board**TO:** Los Angeles County MS4 Permittees and Other Interested Parties**FROM:** Samuel Unger, P.E.
Executive Officer*Chief Deputy EO
for***DATE:** May 8, 2012**SUBJECT:** NOTICE OF EXTENSION FOR SUBMITTING WRITTEN COMMENTS ON WORKING PROPOSALS FOR LOS ANGELES COUNTY MS4 PERMIT PROVISIONS RELATED TO RECEIVING WATER LIMITATIONS, WATERSHED MANAGEMENT PROGRAMS, AND TMDL PROVISIONS

On April 23, 2012, staff of the California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) released working proposals of permit provisions related to the Watershed Management Programs, Total Maximum Daily Loads (TMDLs), and Receiving Water Limitations. The original deadline for written comments on these working proposals was May 11, 2012.

Staff presented these working proposals to the Regional Water Board at a workshop on May 3, 2012. During the board workshop, Permittees and interested persons had the opportunity to hear staff's presentation on the working proposals and provide oral comments on the working proposals to the board and staff for their consideration.

The Regional Water Board has received requests to provide a short extension of the comment period. Notice is hereby given that the Regional Water Board is extending the comment period until May 14, 2012. **Written comments on the working proposals must be received by the Regional Water Board no later than 5:00 PM on Monday, May 14, 2012.** Written comments should be submitted electronically to LAMS42012@waterboards.ca.gov.

If you have any questions on the working proposals, please contact Renee Purdy, Section Chief of Regional Programs at rpurdy@waterboards.ca.gov.

Theresa Rodgers - EXTENSION FOR SUBMITTING WRITTEN COMMENTS ON THE WORKING PROPOSAL FOR THE LA COUNTY MS4 PERMIT

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Date: 5/8/2012 10:36 AM
Subject: EXTENSION FOR SUBMITTING WRITTEN COMMENTS ON THE WORKING PROPOSAL FOR THE LA COUNTY MS4 PERMIT
Attachments: 05-08-2012.pdf

Please see attached Notice of Extension for Submitting Written Comments on Working Proposals for Los Angeles County MS4 Permit Provisions related to Receiving Water Limitations, Watershed Management Programs, and TMDL Provisions.

You are currently subscribed to reg4_sw_lacounty_ms4 as: trodgers@waterboards.ca.gov.

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Finding, enjoying and maintaining clean beaches

By Jeff Harris MD MPH

Most of us seek out particular beaches by reputation or experience for their recreational attributes, ease of use, costs and safety. Nowadays, reports about getting sick after swimming or surfing at a Malibu beach are rare compared to decades ago and to others worldwide. Thanks goes out to Heal the Bay (HTB), the City of Malibu and many others for our local water quality improvements.

To better judge which Malibu beaches to use one must appreciate and go beyond the limitations of the HTB beach grades. If you avoided Malibu beaches based solely on some bad grades, you would needlessly bypass or worry about enjoying some great beauties and recreation.

What other perspectives can help you judge? How can you simply lower your risks? And finally what should be done for maintaining and monitoring shoreline water quality in cost effective ways?

Our beach illness risks typically trail behind going to parties, concerts, schools etc. where ill people can spread contagious germs called pathogens. Shoreline water risks go up significantly when human fecal bacteria are present from large volume sewage pipe leaks or plant failures and or from significant septic system failures. In contrast, Malibu's small volume septic systems have not been the current causes for bad HTB grades due to high fecal indicator bacteria (FIB) counts at Surfrider, Paradise Cove and Escondido beaches.

Unless the public understands the limitations of relying on FIB reports, they can easily be misled and mis-notified. These tests are meant for screening purposes only not the specific detection of disease causing germs (pathogens) and their sources. The validity of the FIB grades is highest when they are used to show long term trends in order to detect unexpected spikes in counts that require further investigation. "A" grades usually mean clean water trends except in some cases of parasite water borne epidemics. Limitations in testing frequency and timely reporting can also limit the validity of FIB testing. Current FIB tests are often not done daily, more typically weekly or monthly. Reports are often delayed by at least 24 hours to weeks when events can easily change water quality.

Further, the FIB screening tests have not been valid predictors at Malibu and similar sites with unique large natural shorelines and watersheds. This is because there are large numbers of shore birds, sea mammals, soil and sediments, and watershed animals accounting for the high FIB counts. These counts can naturally fluctuate depending on where birds or seals or other wildlife or domestic animals have been, whether lagoons and creeks are draining, where and when kelp and algae harboring the bacteria has been transported and what the tides have done to bring bacteria laden waters in or out. Also, our beaches also feature unique south swell surf when sand and soils sediments are re-suspended and aerosolized by waves elevating FIB counts.

What are the risks from these natural bacteria and other microbes? In our daily lives, we are immersed with millions of bacteria, viruses, parasites, fungi and the like. Most are rarely potential pathogens (human disease causes). In fact, many compete with pathogens and inactivate them or kill them (such as the penicillium mold or pro-biotics to treat or prevent illnesses). But your mother was right, there are sometimes pathogens in soils and sands, so wash your dirty cuts with pathogen killing soap.

Further, recent studies done in Malibu and other locations have indicated that some beach goers bring Staphylococcal bacteria on their skin that can be pathogens. Likewise studies have found probable instances of fecal and urinary bacteria contamination from beach goers. The more people the more likely some of them will carry potential pathogens to the beach.

Be assured that natural forces are also at work to kill off pathogens at the shoreline. Sunlight and drying reduce bacteria counts. Aeration with oxygen from flowing and bubbling water also kill some pathogens as well. And some pathogens die making the transition to and from fresh and salty waters.

You can also make your-self less vulnerable to pathogens. Habits of healthy eating, sleeping and exercise can do wonders to ward off infectious diseases.

To lower your illness risks at any beach simply do the following:

1. Learn its local reputation as to possible current illnesses and other safety threats. If the beach has had consistent A grades, it is likely safe. If it has sporadic bad grades due to natural sources and not high spikes, it is also likely safe.
2. Go to the beach after the sun has had several hours to kill off possible pathogens.
3. Stay away from actively draining lagoons, storm drains and creeks.
4. Shower with soap before and after you go to the beach and encourage others to do the same. Avoid beaches where there are or have been large crowds recently.
5. Avoid water contact after sewage spills or 72 hours of rain events.
6. If you do get sick, seek medical care for proper diagnosis and care.

To help keep your beach waters clean, pick up the litter, report man made unnatural water runoff sources and don't let others open creek berms. Finally, understand and educate your fellow swimmers, surfers and water enthusiasts about the significant limitations of relying solely on FIB as water quality measures. Don't be misled.

A leading water quality researcher points out the dilemmas we face from relying too much on FIB, “ **As a result of the exclusive emphasis on FIB in legislation, monitoring has lost sight of pathogens. A more rational approach to regulating water quality would start with available epidemiological data to identify pathogens of concern in a particular water body, and then use targeted pathogen monitoring coupled with targeted fecal source tracking to**

control them. Baseline monitoring of indicators would become just one tool among many.” 1.

This site based sequential step-by-step illness and pathogen risk based approach is what is necessary in the unique natural settings of Malibu and similar beaches worldwide to evaluate, and properly notify the public of likely risks. Likewise, valid data from this kind of approach can lead to water quality programs that will truly be cost effective and not wasteful of precious government and private resources.

Contrary to what others have stated, the costs to the City of Malibu, LA County and others of helping to develop and apply human and animal specific fecal and pathogen tests will be very worthwhile rather than wasteful. What has too often harmed the capabilities of the City of Malibu and others is to be placed in the untenable position of eradicating harmless natural source bacteria that show up as FIB. This unreasonable federal, state and local goal has been one of the major thrusts of lawsuits that have led to millions of dollars of attorneys’ fees, and misdirected staff time; it has even led to the loss of millions of dollars grant funding for Legacy Park that had to be replaced with City of Malibu’s general funds. These monies could have been used to implement even more accurate monitoring and water quality improvements.

1. Field, KG, Samadpour, M, Fecal source tracking, the indicator paradigm, and managing water quality. Water Res. 2007 Aug;41 (16):3517-38.

LAMS42012 - Comments to Los Angeles County MS4 Permit Watershed Management Programs, TMDLs and Receiving Water Limitations due 5.11.2012

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We are concentrating on those Watersheds that are in the City of Los Angeles and may be subject of past litigation.

The Final Signed Order 01-182 amended April 14, 2011, it states:

The objective of the Watershed Management Approach should be to provide a comprehensive and integrated strategy towards water resource protection, enhancement, and restoration while balancing economic and environmental impacts within a hydrologically defined drainage basin or watershed. It emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with available resources.

We do not see this comprehensive and integrated strategy. We see limited testing:

In Receiving Water Limitations

TMDLs in the Santa Monica Bay Watershed Management Area:
Santa Monica Bay Bacteria TMDL

If an approved Integrated Water Resources Approach is implemented, 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:

Problem here is that the sampling is only with the shoreline monitoring stations, so contamination can occur, but not to the ocean. You can affect the Public Health and Safety in a park, roadway, school and it does not fall into "discharge."
How are birds and wildlife expected to comply with this order.

You have not taken an integrated approach or involved cooperative relationships.

Missing is the approach to measurement and monitoring within two WMAs, not the Santa Monica Bay Watershed Management Area WMA listed:

- Malibu Creek and Rural Santa Monica Bay WMA
- Ballona Creek and Urban Santa Monica Bay WMA

How do the bacteria levels differ, during what seasons, and with what type of wet weather

since Southern California experiences extreme weather patterns including extremely heavy rainfall in a short period of time. The samples given differ, so is the percentage required for the WMA equal to all sub-areas within both WMAs. That does not make sense.

Are the levels consistent with ALL Beneficial Uses, or maximized with the highest Beneficial Use.

Does that fit into the definition of "reasonably required."

Which approach will result in the reductions demanded by the period indicated:

- Non Source Point Best Management Practices BMPs
- Public Education or
- Source Point Identification

What observations are made to human and animal behavior as an approach to the monitoring process.

TMDLs in the Malibu Creek Subwatershed

Malibu Creek Watershed Nutrients TMDL (USEPA established)

and

TMDLs in the Ballona Creek Subwatershed

Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL

Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation (USEPA established)

Same application as above.

TMDLs in the Santa Monica Bay Watershed Management Area:

Santa Monica Bay Nearshore and Offshore Debris TMDL

Missing is the approach to measurement and monitoring within two WMAs, not the Santa Monica Bay Watershed Management Area WMA listed:

- Malibu Creek and Rural Santa Monica Bay WMA
- Ballona Creek and Urban Santa Monica Bay WMA

Your goal is for Zero trash discharge. That completely ignores human behavior.

How does that fit into California Water Code (CWC) §13263(a) "shall take into consideration the beneficial uses to be protected and the water quality objectives reasonably required for that purpose."

TMDLs in the Malibu Creek Subwatershed

Malibu Creek Watershed Trash TMDL

and

TMDLs in the Ballona Creek Subwatershed

Ballona Creek Trash TMDL

Same application as above.

Santa Monica Bay TMDL for DDTs and PCBS (U.S. EPA established)

Missing is the approach to measurement and monitoring within two WMAs, not the Santa Monica Bay Watershed Management Area WMA listed:

- Malibu Creek and Rural Santa Monica Bay WMA
- Ballona Creek and Urban Santa Monica Bay WMA

We are concerned about the ministerial approach to the mitigation as compared to the discretionary approach. CEQA will still be needed for projects and this policy should not usurp that impact on a General Plan, Its Elements and Its Community Plans. You are making the assumption that these Monitoring Programs and Compliance Goals will resolve the problem.

How do oil and gas operations, gas storage operations and other industrial uses including military-current and historic-effect the WMAs. One size fits all does not take into consideration the residential from the industrial areas.

TMDLs in the Ballona Creek Subwatershed
Ballona Creek Estuary Toxic Pollutants TMDL
Ballona Creek Metals TMDL
and
TMDLs in Marina del Rey Subwatershed
Marina del Rey Harbor Toxic Pollutants TMDL

Same application as above.

The following are in single WMA, but aspects of the built environment including commercial and industrial uses need to be taken into consideration.

TMDLs in Dominguez Channel and Greater Harbor Waters Watershed Management Area
Los Angeles Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel)
Machado Lake Trash TMDL
Machado Lake Nutrient TMDL
Machado Lake Pesticides and PCBs TMDL
Dominguez Channel Estuary and Greater Los Angeles and Long Beach Harbor Waters

And

TMDLs in Los Angeles River Watershed Management Area
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
Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL
Los Angeles Area Lakes TMDLs
Echo Park Lake Nutrient TMDL
Echo Park Lake PCBs TMDL

Echo Park Lake Chlordane TMDL
Echo Park Lake Dieldrin TMDL
Echo Park Lake Trash TMDL
Peck Road Park Lake Nutrient TMDL
Peck Road Park Lake PCBs TMDL
Peck Road Park Lake Chlordane TMDL
Peck Road Park DDT TMDL
Peck Road Park Lake Dieldrin TMDL
Peck Road Park Lake Trash TMDL

Also missing from this analysis are the age, condition and repair status of storm drains and pipes.

Pipeline Safety is an issue and many pipelines do not have the records needed to see their condition. Other Federal and State regulatory agencies should be included as part of the integrated approach as fuel pipelines, gas pipelines and other utility pipelines can be contributors without a timeline for repair or replacement that even matches the compliance laid out in these documents.

DOGGR Department of Oil and Gas does not issue permits for fracking, yet that runoff has a direct impact on water quality with a proprietary hold on content of fluid used.

Echo Park Lake , a City of Los Angeles Proposition O project for TMDL remediation, demolished a fishery without consideration of quarantine of birds, turtles and fish. That ecosystem, vital to both LA River Watershed and Ballona Creek Watershed was treated without any integration and without concern for disease and the public health and safety of the citizens.

There is no science or scientific evidence applied.

We are also concerned over the approval of the State Board's Underground Storage Tank policy.

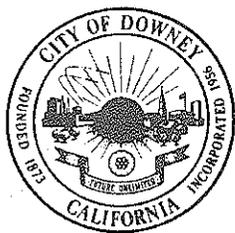
This, in essence, allows UST Underground Storage Tanks with low threat, naturally remediate. In other words, contamination may leak, but we will never be able to ascertain the source nor the spread into a plume. The problem may be compounded, not resolved and none of this policy takes into consideration failed aspects of other agency policy.

Industry clusters are not addressed.

Full Capture Systems, again, do not change the fact that the problem may not be one of receiving water limitations, but one of airborne disease with other aspects of Federal oversight such as the Clean Air Act. Any Full Capture System should not contribute to other violations.

There is no integrated approach in this proposal.

Joyce Dillard
P.O. Box 31377
Los Angeles, CA 90031



City of Downey

FUTURE UNLIMITED

May 11, 2012

Rene Purdy

LAMS42012@waterboards.ca.gov

California Regional Water Quality Control Board, Los Angeles Region

320 4th Street, Suite 200

Los Angeles CA 90013

Subject: Comments on the April 23, 2012 Staff Working Proposals for TMDL and Receiving Waters

Dear Ms. Purdy:

The City of Downey would like to thank you for the opportunity to provide oral comments at the May 3 2012, Regional Board workshop. The purpose of this letter is to follow-up with additional comments and elaboration.

1) Watershed Management Program (WMP)

At the workshop, the relatively new concept of WMPs was discussed in great detail. As we understand the concept as presented, it will allow permittees with opportunities to customize their MS4 programs to address unique demographic and geographic characteristics. This will also allow permittees to separate themselves from neighboring programs of other permittees.

As mentioned in prior communications, the City of Downey previously submitted an individual Report of Waste Discharge. One of the key factors in the city's decision for that separate submittal was the city's strong concern over the **Joint and Severability** concept in which many cities are grouped together and held jointly responsible for comingled runoff. The city is encouraged by the effort the Regional Board staff has made to allow permittees to separate and customize their programs. However, before the City can fully support this concept, several key issues need to be addressed, including:

- A) The need to inform the Regional Board of intent to pursue this option within six months is too short a time,
- B) Similarly, the twelve month time frame to develop and submit a plan, is also too short
- C) The ability of permittees to separate their responsibility for comingled discharges (while much more detailed than the previous MS4 Permit), still needs to be further refined
- D) Consideration for compliance should be given for permittees that have made an extensive BMP based compliance effort
- E) The Receiving Waters limitations need to be revised (see comment below).

Rene Purdy

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2) Receiving Waters Limitations (RWL)

The current wording of the Receiving Waters Limitations indiscriminately exposes permittees to 3rd party litigation. As Regional Board staff noted in oral comments, the current language provides no "safe Harbor" for permittees. Downey recognizes the Regional Board is simply following their interpretation of guidelines set forth in SWRCB Order 99-05, but given the recent litigation (National resource defense Council (NRDC) vs. LA County, NRDC vs. the City of Malibu, and the NRDC vs. Stockton) the threat of 3rd party lawsuits is very real and very costly (tax dollars and jobs). The Regional Board needs to work with both the permittees and the State Water Resources Control Board to revise the Receiving Waters Limitations language in order to provide permittees with viable MS4 programs a reasonable degree of protection from 3rd party litigation.

The importance of revising the RWLs is highlighted by the recent response to comments from the State Water Resources Control Board (SWRCB) regarding their intent not to apply Numerical Effluent Limits within the Caltrans General Permit. In that response, the SWRCB stated that:

"In 2005, the State Water Board assembled a blue ribbon panel to address the feasibility of including numeric effluent limits as part of NPDES municipal, industrial, and construction storm water permits. The panel issued a report dated June 19, 2006, which included recommendations as to the feasibility of including numeric limitations in storm water permits, how such limitations should be established, and what data should be required (SWRCB, 2006).

The report concluded that "It is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban discharges. However, it is possible to select and design them much more rigorously with respect to the physical, chemical and/or biological processes that take place within them, providing more confidence that the estimated mean concentrations of constituents in the effluents will be close to the design target."

Among the many impacts of this decision is that the City of Downey will potentially be held accountable for numerical effluent limits in runoff that includes runoff from Caltrans facilities, while Caltrans has no such limitation and no such need to meet specific numerical targets. This would similarly apply to runoff from schools. There is no realistic way to differentiate the contribution from Caltrans or schools since continuously monitoring all freeway and school sites is not feasible. Caltrans and schools could potentially be meeting whatever BMP standards apply to them, while discharging runoff with pollutant level exceeding permittees' MS4 limits, leaving permittees responsible for discharges they have had no control over.

Also, there are several potential pollutants such as sulfates, chlorides, etc., with water quality standards listed in the Basin Plan for water bodies that have not been listed as "impaired" and no TMDLs established. Permittees should not be subject to 3rd party litigation for the sporadic and random exceedances that may be detected by the various monitoring programs. Permittees must be allowed due process to address any significant and continuing exceedances.

3) Time Schedule Orders (TSO)

This is also a relatively new concept and applies solely to US EPA issued TMDLs and has the intent of bridging an implementation gap between the date of the MS4 adoption and a Basin Plan Amendment. This concept will have particular impact to the City of Downey (and other permittees) because Downey discharges to two water bodies (Los Cerritos Channel and San Gabriel River Reach 1) and is therefore subject to two US EPA TMDLs. The City of Downey is therefore "forced" to apply

Rene Purdy
Page 3

for a TSO, which in theory would expire or otherwise become invalid once the Basin Plan is adopted. Downey is very uncomfortable with this process as it will not provide protection from 3rd party litigation prior to the Basin Plan Amendment's adoption.

We encourage the Regional Board to continue working with the permittees over the next several months to arrive at a more satisfactory alternative. We appreciate having Ms. Jenny Newman of the Regional Board staff at the recent Joint meeting of the Los Cerritos Channel and San Gabriel River Reach 1 Technical Committees to discuss the anticipated October 2012 adoption of a Basin Plan amendment to incorporate an Implementation Schedule for this TMDL. We look forward to seeing Ms. Newman at our future meetings.

4) Trash TMDL

During the oral comments, the City voiced concern over how to demonstrate compliance with the Trash TMDL since approximately 11 percent of the catch basins where full capture inserts were intended to be installed but could not be because of flow constraints. The City was appreciative of Regional Board's acknowledgement of Downey's concern and even more appreciative of Regional Board Staff's response that institutional controls can be used to address the remaining 11 percent.

The oral testimony raises a follow-up question regarding this specific issue; will Daily Generation Rate (DGR) and Minimum Frequency Assessment and Collection (MFAC) studies in conjunction with ongoing street sweeping be considered "institutional controls? It is requested that the term "institutional controls" be defined. Also, the MS4 permit should clearly indicate that, when upon sufficient submittal of documentation of institutional controls by a permittee, that the Executive Office has the authority to make a finding that these institutional controls, in combination with full capture devices, constitute attainment of the "zero discharge".

5) San Gabriel River Metals and several other TMDLs

As mentioned during the oral comments, the City of Downey has a significant number of Low Impact development sites and these will substantially reduce the overall amount of runoff and thereby the overall amount of any pollutants transported by within the runoff. This type of volume reduction should be recognized. Mass based TMDL effluent targets that are equivalent to concentration based effluent targets should be developed. An example would be the San Gabriel River Reach 1 which has a proposed dry weather copper concentration based effluent limit of 18 ug/l; while Coyote Creek (under the same US EPA TMDL) has a dry weather copper mass based limitation of 0.941 kg/day.

6) Detailed TMDL comments

6a) For Los Cerritos Channel: The city understands that this is a US EPA approved TMDL and the city appreciates the Regional Board working on a Basin Plan Amendment to allow permittees to follow an Implementation Schedule. This is imperative for dry weather, there are (1) no interim effluent targets, (2) no provision for BMP based compliance measures, and (3) no apportioned allotment. If all permittees but one completely eliminates their copper

Rene Purdy
Page 4

contribution, but the one remaining permittee discharges 67.3 grams per day, it appears from the wording of this section that all permittees would be jointly liable. This inequity needs to be corrected.

For Wet weather, (1) there are no interim limits developed, (2) there is no provision for BMP based compliance and (3) there is no provision for mass-based discharges which would have significant benefit to permittees able to show volume reduction. There must be a mass-based effluent target for permittees that can demonstrate a significant pollutant mass reduction

6b) For Reach 2 of the San Gabriel River, which is also a US EPA adopted TMDL, all of the comments in item 6a above apply. In addition, the sampling point as we understand it is upstream of the city of Downey's discharges into this Reach. It must be clear that permittees downstream of sampling points will not be responsible for corrective actions due to upstream exceedances.

As these comments are provided in reference to the "Staff Working Proposal", the city may have additional comments in the future as the permit process progresses. Thank you again for the opportunity to comment. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Oskoui", with a long horizontal flourish extending to the right.

John Oskoui, P.E.
Assistant City Manager



CITY OF LA VERNE CITY HALL

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www.ci.la-verne.ca.us

May 14, 2012

Renee Purdy
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Regional Program Section Chief
Los Angeles Regional Water Quality Control Board
320 4th Street, Suite 210
Los Angeles, CA 90013

VIA EMAIL -

Ivar Ridgeway
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Chief, Stormwater Permitting
Los Angeles Regional Water Quality Control Board
320 4th Street, Suite 210
Los Angeles, CA 90013

VIA EMAIL -

Re: Technical Comments on Los Angeles Regional Water Quality Control Board Staff Working Proposals for the Greater Los Angeles County MS4 Permit (Permit) – Watershed Management Programs, TMDLs and Receiving Water Limitations

Dear Ms. Purdy and Mr. Ridgeway:

The City of La Verne would like to take this opportunity to provide comments on the working proposals for Watershed Management Programs, Total Maximum Daily Loads, and Receiving Water Limitations. These documents were posted on the Regional Board website on April 23, 2012. The City of La Verne appreciates the Regional Board staff's effort to develop the next NPDES stormwater permit and their commitment to meet with various stakeholders including our City via the LA Permit Group. We look forward to continuing the dialogue with the Board staff on this very important permit. The City's priorities on the Watershed Management Program, TMDLs and Receiving Water Limitations are similar and hereby submitted by reference of those comments provided by the LA Permit Group.

Additionally, the City is extremely concerned with how TMDLs for the San Gabriel River Watershed Management Area are being addressed in the Staff Working Proposal – 4/23/12. The provisions outlined in Section E, "TMDLs in San Gabriel River Watershed Management Area" are not only restrictive, they



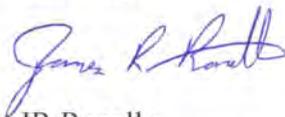
Comments on 4/23 Working Proposal, page 2

will be impossible to meet. Effluent Limitations of things such as PCBs, Chlordane, Dieldrin, and DDT are legacy pollutants that were allowed long before the today's Clean Water Act. Current levels of these pollutants are not being added but are simply already in the sediments and will take numerous years to dissipate. Additionally, Effluent Limitations for Mercury, Phosphorus, and Nitrogen appear to be so restrictive that it would be impossible to ever meet in an urban setting. This is all in consideration of an EPA issued TMDL (not until this March 2012) with no implementation plan schedule or resources to comply in an extremely short timeline. There is a possibility the City will be automatically out of compliance with the adoption of this language in a permit.

Finally, the compliance woes in general are exacerbated due to a large financial shortfall currently being experienced by the City. Not only has the City experienced several years of a multimillion dollar shortage, the City has been constantly reducing staff. The City simply doesn't have the resources, staff, expertise, or the ability to even properly review the issues in the proposed permit. The City requests assistance with exploring how the Regional Board envisions a City such as La Verne would be able to comply with the components of the proposed TMDL section.

On behalf of the City of La Verne, thank you for your consideration and review of the above issues. If you have any questions regarding this letter or if we can be of any assistance please contact me at (909) 596-8741.

Sincerely,



JR Ranells
Sr. Management Analyst

CITY OF LOS ANGELES
CALIFORNIA



ANTONIO R. VILLARAIGOSA
MAYOR

May 14, 2012

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Mr. Samuel Unger, Executive Officer
Los Angeles Regional Water Quality Control Board
320 4th Street, Suite 210
Los Angeles, CA 90013

Attention: Renee Purdy, Regional Programs Section Chief
Ivar Ridgeway, Stormwater Permitting Chief

Dear Mr. Unger:

TECHNICAL COMMENTS ON THE LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD STAFF WORKING PROPOSALS FOR THE GREATER LOS ANGELES COUNTY MS4 PERMIT – TOTAL MAXIMUM DAILY LOADS, WATERSHED MANAGEMENT PROGRAMS, AND RECEIVING WATER LIMITATIONS

The City of Los Angeles (City) Bureau of Sanitation (Bureau) appreciates the opportunity to provide technical comments on the Los Angeles Regional Water Quality Control Board (Regional Board) Staff Working Proposals for the Greater Los Angeles County MS4 Permit. The Bureau appreciates the time your staff has dedicated to meeting with us and the process that has provided the opportunity for substantial engagement and input. The Bureau recognizes that these Working Proposals for Total Maximum Daily Loads (TMDLs), Receiving Water Limitations (RWLs), and Watershed Management Programs (WMPs) are part of the overall process and appreciates your consideration of our comments at this time. Due to the integrated nature of the concepts of the Working Proposals, one comment letter on all three is provided. Comments provided herein are intended to inform the process at this point in time. The Bureau looks forward to continuing to work with Regional Board staff throughout the Permit reissuance process.

Given the complex nature of the comments, key technical issues are identified below while detailed discussions of the key technical issues are provided in Attachment A. Additional and supporting technical comments are provided in Attachments B and C.

Watershed Management Programs

- The Watershed Management Programs are a necessary and significant shift in the implementation of stormwater programs in the Los Angeles region
- The Watershed Management Program should include a monitoring program that is developed in conjunction with the watershed plans and is aimed to evaluate their progress
- Implementation of the Watershed Management Program, including the adaptive management process, should fulfill the Receiving Water Limitations requirements in Part V.A



Samuel Unger, Executive Officer
 LARWQBC
 Atten.: Renee Purdy and Ivar Ridgeway
 May 14, 2012
 Page 2

TMDLs

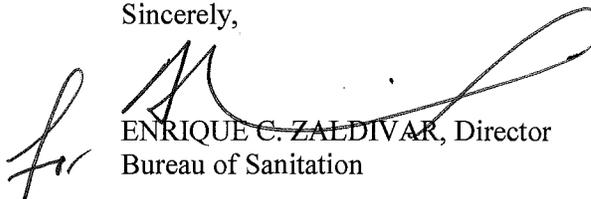
- There are multiple and substantive discrepancies between specific permit provisions and the State adopted and EPA promulgated TMDLs
- The Regional Board should use its discretion and establish Final WLAs based upon implementation of BMPs in addition to numeric effluent limitations
- Basin Plan Amendments should be utilized to address issues related to compliance schedules for State and EPA promulgated TMDLs
- Where TMDL WLAs are based upon receiving waters (i.e., the bacteria exceedance day approach), effluent limitations should not be established
- If water quality objectives are met in the receiving water, permittees should be in compliance with the associated TMDL provisions

Receiving Water Limitations

- The Receiving Water Limitations provisions are inconsistent with the intent of the Watershed Management Program
- Implementation of the Watershed Management Program should be equivalent to the process identified in Part V.A.3 of the Receiving Water Limitations
- Use of "Cause or Contribute" language should be limited to Part V.A

Thank you for considering our technical comments on the Working Proposals. We look forward to continuing to work with you and your staff. If there are any questions, please contact Dr. Shahram Kharaghani, Stormwater Program Manager, at (213) 485-0587.

Sincerely,



ENRIQUE C. ZALDIVAR, Director
 Bureau of Sanitation

Cc: Deborah J. Smith, Los Angeles Regional Water Quality Control Board
 Michael Mullin, Mayor's Office
 Traci Minamide, Bureau of Sanitation/EXEC
 Varouj S. Abkian, Bureau of Sanitation/EXEC
 Adel Hagekhalil, Bureau of Sanitation/EXEC
 Shahram Kharaghani, Bureau of Sanitation/WPD
 Mas Dojiri, Bureau of Sanitation/EMD
 Omar Moghaddam, Bureau of Sanitation/RAD

List of Attachments:

Attachment A: Detailed Discussion of Key Technical Issues
 Attachment B: Detailed Technical Comment Matrix on Watershed Management Program and TMDL Working Proposal
 Attachment C: Suggested Revisions to the Receiving Water Limitations Working Proposal

ATTACHMENT A
DETAILED DISCUSSION OF KEY TECHNICAL ISSUES

WATERSHED MANAGEMENT PROGRAMS

1. The Watershed Management Programs are a Welcomed, Necessary and Important Shift in the Implementation of Stormwater Programs in the Los Angeles Region

The Bureau supports Regional Board staff's Watershed Management Program approach, with minor modifications. A watershed-based program is the ideal approach, as it allows for integration of all program elements to focus efforts on the highest priorities for each watershed through customization and should also afford agencies the opportunity to comply with requirements. This approach also considers the current efforts undertaken by agencies to obtain grant funding for water quality projects, as many grant criteria are based on coordinated watershed management efforts. Finally, this approach supports implementation of TMDLs, which are developed and implemented at the watershed scale.

2. The Watershed Management Program Needs to Include a Flexible Monitoring Program

As currently written, the Working Proposal does not provide a sufficient link between the Watershed Management Program and the monitoring program section of the Permit. As the watershed priorities and associated control measures will vary from watershed to watershed, so too will the monitoring program vary and need to be customized and flexible to account for watershed-specific issues and support and inform management decisions.

In discussions with Regional Board staff to date, as well as comments provided by Regional Board staff during the MS4 Permit workshop on May 3, 2012, the Bureau understands that the Regional Board intends to provide such flexibility for monitoring as part of the overall Watershed Management Program. Regional monitoring efforts should be designed in conjunction with the Watershed Management Programs and geared towards evaluating their progress. The Bureau will continue to work with Regional Board staff on this concept and will provide additional comments as the monitoring program section is released for comment.

3. Implementation of the Watershed Management Program, including the Adaptive Management Process, should fulfill the Receiving Water Limitations requirements in Part V.A

The intent of the Watershed Management Programs is to focus Permittees' efforts and resources on the highest water quality priorities in each watershed. The Working Proposal includes an adaptive management process whereby assessments and modifications to the Watershed Management Program will be made, including:

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; (Working Proposal for Watershed Management Programs, Part VI.C.6.a.i(4))

The Watershed Management Program concept and review process should fulfill the process identified in Part V.A.3 of the Working Proposal for Receiving Water Limitations. Due to the integrated nature of the three Working Proposals, this comment is more fully addressed under Comment #1 and #2 in the Receiving Water Limitations section of this letter.

TOTAL MAXIMUM DAILY LOAD (TMDLS)

1. There are Multiple and Substantive Discrepancies Between the Specific Permit Provisions and State Adopted and EPA Promulgated TMDLs

The Working Proposals include the specific TMDL provisions in Attachments A through G. There are multiple and substantive discrepancies between the specific TMDL provisions and the TMDLs adopted by the State and promulgated by EPA. For example, the Los Angeles River Bacteria TMDL Basin Plan Amendment states (page 6):

MS4 dischargers can demonstrate compliance with the final dry weather WLAs by demonstrating that the final WLA are met instream or by demonstrating one of the following conditions at outfalls to the receiving waters:

1. 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;
2. Zero discharge during dry weather;
3. Demonstration of compliance as specified in the MS4 NPDES permit which may include the use of BMPs where the permit's administrative record supports that the BMPs are expected to be sufficient to implement the WLA in the TMDL, the use of calculated loading rates such that loading of E. coli to the segment is less than or equal to a calculated loading rates that would not cause or contribute to exceedances based on a loading capacity representative of conditions in the River at the time of compliance or other appropriate method.

The third and final method, which provides both BMP based and load based methods for demonstrating compliance, is not provided in the permit. The permit must be consistent with the WLAs as outlined in the Basin Plan Amendment and this method of compliance must therefore be incorporated into the permit. Additional discrepancies are identified and detailed in Attachment B.

Request: The Bureau requests that the Regional Board review and address issues with specific TMDLs as outlined in Attachment B to this letter.

2. The Regional Board Should Use its Discretion and Establish Final WLAs Based Upon Implementation of BMPs and Not Only Numeric Limitations

In the Working Proposals, a BMP-based path to compliance with interim water quality-based effluent limitations and receiving water limitations is provided, via the implementation of an approved Watershed Management Program. The Bureau greatly appreciates and supports this approach as it acknowledges the inherent challenges unique to stormwater management and provides appropriate flexibility to implement the necessary BMPs. However, the same approach is not applied to final WLAs.

State and federal law do not require the use of numeric effluent limitations for MS4 permittees, but rather encourage flexible implementation of best management practices through an iterative process. Specifically, the choice to include either management practices or numeric limitations in MS4 permits is within the regulatory agency's discretion, and on the question of whether MS4 permits must contain numeric effluent limitations, the court upheld EPA's use of iterative BMPs in place of numeric effluent limitations for storm water discharges. (See *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1166-1167 (9th Cir. 1999)¹ Moreover, EPA has indicated that it "expects that most WQBELs for NPDES-regulated

¹ See also California Regional Water Quality Control Board San Diego Region - Fact Sheet / Technical Report For Order No. R9-2010-0016 / NPDES NO. CAS0108766.

municipal and small construction storm water discharges will be in the form of BMPs, and that numeric limits will be used only in rare instances.”²

In discussions with Regional Board staff to date, staff has indicated that state law, not federal law, require the incorporation of the final WLAs as numeric effluent limitations. The Bureau is aware of no state law that contradicts this principle or otherwise requires numeric effluent limits to be inserted into MS4 permits. Indeed, in 2009, the State Water Board affirmed this approach in a precedential order, stating:

[i]t is our intent that federally mandated TMDLs be given substantive effect. Doing so can improve the efficacy of California’s NPDES storm water permits. This is not to say that a wasteload allocation will result in numeric effluent limitations for municipal storm water dischargers. Whether a future municipal storm water permit requirement appropriately implements a storm water wasteload allocation will need to be decided on the regional water quality control board’s findings *supporting either the numeric or non-numeric* effluent limitations contained in the permit. (Order WQ 2009-0008, In the Matter of the Petition of County of Los Angeles and Los Angeles County Flood Control District, at p. 10 (emphasis added).)

Further, during the May 3, 2012 MS4 Permit workshop, Regional Board staff seemed to indicate that the basis for incorporating the final WLAs as numeric effluent limitations is EPA’s 2010 memorandum pertaining to the incorporation of TMDL WLAs in NPDES permits³. This memorandum (which is currently being revised by EPA) states that “EPA recommends that, *where feasible*, the NPDES permitting authority *exercise its discretion* to include numeric effluent limitations as necessary to meet water quality standards.” (emphasis added). This statement highlights the basic principle that the Regional Board has **discretion** in how the WLAs are incorporated into the MS4 Permit. Regional Board staff commented during the workshop that staff have evaluated data and have determined numeric effluent limitations are feasible. However, such a determination directly contradicts the findings of California’s Stormwater Blue Ribbon Panel which was convened specifically to examine the feasibility of incorporating numeric effluent limits in stormwater permits. This panel of national experts ultimately concluded that numeric limits were generally infeasible across all three stormwater activities (municipal, industrial, and construction), with a few exceptions (*The Feasibility of Numeric Effluent Limits Applicable to Discharges of Stormwater Associated with Municipal, Industrial and Construction Activities, June 19, 2006*).

Additionally, during the May 3, 2012 workshop, Charles Stringer (Vice Chair of the Regional Board) asked what the practical implication is regarding how the final WLAs are expressed in the Permit. To illustrate the practical implication for Permittees, take for example Machado Lake where TMDLs have been established for trash, nutrients, and toxics. Currently, the City is implementing the \$100 million Machado Lake Ecosystem Rehabilitation Proposition O Project to restore Machado Lake, including implementation of BMPs to reduce external loadings to the lake (including nutrients, sediment, and pesticides) as well as dredging of accumulated sediment from within the lake to reduce internal loadings. The money to fund the project comes from the \$500 million bond measure approved by voters within the City of Los Angeles. Oversight of the Proposition O projects includes a Citizen’s Oversight Advisory Committee, consisting of nine members, including Francine Diamond (Los Angeles Regional Water Quality Control Board) and Dr. Mark Gold (UCLA, formerly of Heal the Bay). During the period where interim water quality-based effluent limits apply, the City of Los Angeles can comply with the TMDL

² U.S. EPA, *Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs*, Memorandum from U.S. EPA Director, Office of Wetlands, Oceans and Watersheds Robert H. Wayland, III and Director, Office of Wastewater Management James Hanlon to Water Division Directors, Regions 1-10, (Nov. 22, 2002).

³ U.S. EPA, *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*, Memorandum from U.S. EPA Director, Office of Wastewater Management James A. Hanlon and U.S. EPA Director, Office of Wetlands, Oceans, and Watershed Denise Keehner (Nov. 10, 2010).

provisions by implementing an approved Water Quality Management Program, which would include the Machado Lake Ecosystem Rehabilitation project. However, upon completion of this extensive project, if the restored lake does not meet the established final numeric effluent limitations, the City of Los Angeles would be found in violation of the MS4 Permit and subject to third party law suits even though the City may be actively working to improve BMPs.

Request: *The Bureau requests that the Regional Board exercise its discretion and establish final WLAs based upon the implementation of BMPs by adding the following provision to Part VI.E.2.e.i:*

4. *The Permittee has submitted and is fully implementing an approved Watershed Management Program pursuant to Part VI.C.*
 - a. *To be considered fully implementing an approved Watershed Management Program, a Permittee must be implementing actions consistent with the approved program and applicable compliance schedules, including structural BMPs.*
 - b. *Structural storm water BMPs must be designed and maintained to treat storm water runoff from the 85th percentile, 24-hour storm, and maintenance records must be up-to-date and available for inspection by the Los Angeles 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 final water quality-based effluent limitations and/or receiving water limitations pursuant to subpart VI.E.2.e.i.1-3, above.*

3. Basin Plan Amendments Should be Utilized to Address Issues Related to Compliance Schedules for State-Adopted TMDLs and EPA Promulgated TMDLs

The Working Proposals identify several TMDLs with expired, or soon to be expired, compliance schedules, as well as several TMDLs promulgated by EPA. For both types of TMDLs, the Bureau requests that the Regional Board pursue Basin Plan Amendments to address compliance schedule issues. As discussed below, the Bureau has identified instances where the Basin Plan Amendment approach should be used in lieu of the Time Schedule Orders (TSO) as identified in the Working Proposal.

Based upon the May 3, 2012 workshop on the MS4 Permit, comments from Regional Board staff seemed to indicate that one reason the TSO approach is being considered is that it will provide the Regional Board with a targeted approach for determining which Permittees have demonstrated good faith efforts in the implementation of the TMDLs and where more time is warranted. However, the same considerations can be included in the development of revised compliance schedules via a Basin Plan Amendment as part of the TMDL reopener process. The Regional Board can request that Permittees provide (1) chronology of actions taken since the effective date of the TMDL and (2) justification for the need for more time, consistent with the current approach identified by the Regional Board for the TSOs. Providing additional time based upon meeting a set of conditions is consistent with the approach in numerous TMDLs previously adopted by the Regional Board (e.g., Santa Monica Bay Nearshore Debris TMDL). This is not to say that TSOs do not have a place in the process; however, as described below they should not be the default and only option utilized.

a. TSOs Unnecessarily Expose the Permittees to Liability and are Less Appropriate than In-Permit Compliance Schedules

The Bureau appreciates the Regional Board's recognition that immediate compliance with the newly imposed requirements will not be feasible, and the inclusion of a provision allowing TSOs to be requested. However, TSOs are a far less appropriate vehicle for addressing the requirements in the permit than the required implementation plans and accompanying compliance schedules. This is particularly true for state-adopted TMDLs with deadlines that have already passed and EPA promulgated TMDLs with no currently adopted implementation schedule.

While there is no limitation on the compliance timeframe that may be authorized in a TSO, protection from mandatory minimum penalties for exceedances of permit limitations is limited to five years. (Water Code section 13385(j)(2)(B)(ii).) Compliance with the numerous and ambitious WLAs being imposed for the first time in the permit will, in some cases, require significantly longer than a five-year period. In addition, TSOs do not satisfy the goal of ensuring that Permittees are not placed into immediate noncompliance. A TSO does not modify the underlying permit, and therefore Permittees will be out of compliance on day one, even for TMDLs that were promulgated by EPA as recently as March 2012. Even for State-Adopted TMDLs, the City's good faith effort have demonstrated the inexactness of the TMDL development assumptions and the complexity of complying with these WLAs. Third parties may seek to judicially enforce these requirements. Yet there will be no practical difference in the water quality benefits to be achieved, given the recognized impossibility of meeting these requirements on day one or in the near term. For all of these reasons, requiring Permittees to request TSOs for all WQBELs and receiving water limitations that require additional time for compliance is less effective than simply adopting new or revised compliance schedules for these standards. The approaches discussed elsewhere in these comments, including the Regional Board reopening TMDLs to revise implementation plans and compliance schedules, adopting implementation plans and compliance schedules for EPA promulgated TMDLs, and exercising the flexibility not to include effluent limits, should be considered as superior alternatives for inclusion in the working proposal and ultimately the revised permit.

Request: *The Bureau requests that the Regional Board utilize the existing TMDL reopener process for the TMDLs with expired (or soon to be expired) compliance schedules to modify the compliance schedules. For EPA promulgated TMDLs, the Bureau requests that the Regional Board develop Basin Plan Amendments to incorporate implementation and compliance schedules (see Comments #1c and #1d).*

b. It is Unreasonable for the Regional Board to Mandate Immediate Compliance With State-Adopted TMDLs that are Being Incorporated into the Permit for the First Time.

The working proposal provision requiring Permittees to immediately comply with TMDLs for which the implementation schedules have expired is inappropriate and inconsistent with the purposes of a TMDL. The working proposal indicates that Permittees must "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." (Working Proposal at p. 5.) Several existing TMDLs adopted by the Regional Board, such as the Ballona Creek Bacteria TMDL include implementation plans and schedules, the deadlines for which have either already expired or are set to expire in the very near future. When adopted, those TMDLs clearly acknowledged that a reasonable time period was needed to undertake the appropriate control measures and BMPs. Now, the working proposal ignores this reality and would require immediate compliance without the opportunity of utilizing the concepts envisions under this working proposal.

TMDLs are not self-implementing instruments, but instead serve as informational tools. (*Anacostia Riverkeeper, Inc. v. Jackson* (2011) 798 F. Supp. 2d 210, 216, citing *Pronsolino v. Nastri* (2002) 291 F.3d 1123, 1129.) A TMDL is not directly enforceable against dischargers absent a corresponding permit provision, and the TMDL does not become binding on a permit holder until incorporated into the appropriate basin plan and then implemented in an NPDES permit.⁴ The TMDLs identified above, those for which final compliance deadlines have either already expired or will expire in the very near future, have never been incorporated into the Permittees' MS4 permit. Thus, the water quality standards contained in these state-adopted TMDLs are, for the very first time, taking effect in

⁴ Memorandum from Michael Levy, Staff Counsel, to Ken Harris and Paul Lillebo, DWQ, re: The Distinction Between a TMDL's Numeric Targets and Water Quality Standards (June 12, 2002) at p. 1 ("Levy Memorandum".)

this revised MS4 permit. To mandate immediate compliance with these TMDLs sets the Permittees up for failure and does not give each Permittee adequate opportunity to meet compliance deadlines that the Regional Board already deemed appropriate when it first adopted these TMDLs. Although the Regional Board allows the Permittees to request an outside-the-permit TSO to implement the WLAs in a state-adopted TMDL (Working Proposal Section E(4)(b).), for a variety of reasons discussed in greater detail above, a TSO is not the most appropriate mechanism for implementing the MS4 permit requirements. There is no basis for the Regional Board to require Permittees to immediately comply with limitations based on TMDLs that recognized a need for time to comply and that have never before been part of the MS4 permit.

As one alternative, the Regional Board has the authority to re-open these TMDLs to modify the compliance schedules and conform the expired deadlines to reflect the fact that these standards are only now being incorporated into the revised permit. EPA guidance acknowledges the iterative nature of TMDLs, and has endorsed the use of adaptive implementation. “Adaptive implementation is an iterative implementation process that makes progress toward achieving water quality goals while using any new data and information to reduce uncertainty and adjust implementation activities.” (EPA, *Final Phased TMDL Guidance* (August 2, 2006.)) While EPA’s preference is that this type of adaptive approach be included in the original TMDL implementation plan through statements that there will be periodic reviews and revision, the same process of refining implementation, including schedules for attainment, can be accomplished by reopening and revising TMDLs.

For TMDLs adopted by the State with expired (or soon to be expired) compliance schedules, the Regional Board is in the process of re-opening a number of these TMDLs⁵, independent of the renewal of this MS4 permit. The Regional Board can and should include revised compliance schedules in those TMDLs, which in turn would translate to revised compliance schedules required of the Permittees under the MS4 permit. This approach reflects the principle that a TMDL is designed to be a strategy to attain water quality standards, is not directly enforceable against dischargers absent a corresponding permit provision, and serves as a means to an end, not a directly enforceable end in itself.⁶

Request: *The Bureau requests that the Regional Board utilize the existing TMDL reopener process for the TMDLs with expired (or soon to be expired) compliance schedules to modify the compliance schedules.*

c. The Regional Board is Required to Incorporate EPA Promulgated TMDLs Into the Basin Plan Before Incorporating Enforceable Requirements in NPDES Permits

The incorporation of WLAs derived from EPA promulgated TMDLs directly into the MS4 permit, without the Regional Board’s adoption of an appropriate implementation plan and inclusion of that plan in the relevant basin plan, is inconsistent with state and federal law. Specifically, courts have held that “[a]ny EPA-approved TMDLs **must** be incorporated by the state into its continuing planning processes. TMDLs **then** be implemented through the NPDES permitting process to ensure attainment of WQs.” (*Am. Littoral Soc’y v. United States EPA Region* (D.N.J. 2002) 199 F. Supp. 2d 217, 229, citing 33 U.S.C. § 1313(d)(2), (e). 33 U.S.C. § 1311(b)(1)(C); 40 C.F.R. §§ 122.4, 122.44, and 122.62, emphasis added) None of the EPA promulgated TMDLs that serve as the basis for the requirements in the revised permit have been incorporated into the basin plan, as required under federal statutes and regulations. Thus, it is inappropriate for those terms to be included in the revised permit, as contemplated in the working proposal.

⁵ Reconsiderations for the following TMDLs were noticed on March 23, 2012: 1) Santa Monica Bay Beaches; (2) Marina del Rey Harbor, Mothers’ Beach, and Back Basins; (3) Los Angeles Harbor, Inner Cabrillo Beach, and Main Ship Channel; (4) Ballona Creek, Ballona Estuary, and Sepulveda Channel; and (5) Malibu Creek and Lagoon

⁶ See Levy Memorandum at p. 5.

Federal law does not require that NPDES permits incorporate any EPA promulgated TMDL that exists, regardless of whether that TMDL or an associated implementation plan has been adopted into the basin plan through appropriate procedures. The Regional Board relies on 40 C.F.R. § 122.44(d)(1)(vii)(B) for the proposition that federal regulations require permits to be consistent with the assumptions of any available WLAs, including those contained in EPA promulgated TMDLs without implementation schedules, and thus require incorporation of those TMDLs at the next permit cycle regardless of whether the TMDL has been included in the appropriate basin plan.⁷ However, pursuant to federal and state law and guidance, the Regional Board has an obligation to adopt an implementation plan before implementing an EPA promulgated TMDL in an individual NPDES permit.

A variety of sources confirm that the Regional Board's interpretation is incorrect, and that the state has an obligation to create an implementation plan before incorporating an EPA promulgated TMDL into an NPDES permit. First, according to the State Water Board, TMDLs must be formally incorporated into the basin plan to be part of the basis for Regional Board actions, and in California, the State Board has interpreted state law to require that implementation be addressed when TMDLs are incorporated into basin plans.⁸ There is no justification for treating EPA promulgated TMDLs any differently than state-approved TMDLs in this regard. Second, because EPA promulgated TMDLs do not contain implementation plans, if the WLAs contained therein are used as the basis for permit terms without the development of an implementation plan (and accompanying compliance schedule) by the State, a critical element in the process is missing. State Water Board memoranda generally confirm this assessment, noting that "[u]nder federal and state law, the Regional Boards are required to include TMDLs in their basin plans."⁹ Similarly, federal regulations require states to incorporate TMDLs in their State Water Quality Management Plans along with adequate implementation measures to implement all aspects of the plan, including TMDLs.¹⁰ California law and guidance, as well as federal regulations and guidance, all confirm the State is obligated to create an implementation plan before standards in an EPA promulgated TMDL are inserted directly into NPDES permits.

Moreover, the provision relied upon by the Regional Board, 40 C.F.R. section 122.44(d)(1)(vii)(B), states that "[w]hen developing water quality-based effluent limits under this paragraph the permitting authority shall ensure that . . . Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge *prepared by the State and approved by EPA* pursuant to 40 CFR § 130.7." (40 C.F.R. § 122.44(d)(vii)(B), emphasis added.) The plain language of the regulations states that this provision applies to WLAs "prepared by the State and approved by EPA." An EPA promulgated TMDL is not prepared by the state, and therefore does not fall under this section. Moreover, other federal regulatory provisions, read as a whole, confirm that regardless of the source, a TMDL must be incorporated into the appropriate water quality management plan before the WLAs may be used as a basis for limitations in an NPDES permit. Specifically, 33 U.S.C. § 1313(d)(2) states that "[i]f the Administrator approves such identification and load, such State *shall incorporate them into its current plan* . . . If the Administrator disapproves such identification and load, he shall . . . establish such loads for such waters . . . and *upon such identification and establishment the State shall incorporate them into its current plan* under subsection (e) of this

⁷ See Los Angeles Regional Board's Response to Comments on the June 22, 2007 Draft Los Angeles River and Tributaries Metals TMDL (Aug. 23, 2007) Response to Comment No. 13.10 at pp. 12-13, emphasis added.

⁸ http://www.swrcb.ca.gov/water_issues/programs/tmdl/background.shtml.

⁹ Memorandum from Sheila Vassey, Office of Chief Counsel, to Stefan Lorenzato, TMDL Coordinator, Division of Water Quality, re: *Economic Considerations in TMDL Development and Basin Planning* at p. 2, citing 33 U.S.C. § 1313(d); 40 C.F.R. § 130.7(d)(2); Wat. Code, § 13050(j); Wat. Code, § 13242.

¹⁰ 40 C.F.R. § 130.6.

section.” Federal regulations also state that, “[i]f the Regional Administrator approves such listing and loadings, *the State shall incorporate them into its current WQM plan.* If the Regional Administrator disapproves such listing and loadings, he shall . . . *transmit the listing and loads to the State, which shall incorporate them into its current WQM plan.*” (40 C.F.R. § 130.7(d)(2), emphasis added.)

The weight of federal statutory and regulatory authority establish that inclusion of a TMDL in the state’s relevant water quality management plan basin plan is a prerequisite to establishing permit conditions, and many of the EPA promulgated TMDLs to be included in the revised MS4 permit pursuant to the working proposal have not been so incorporated. As EPA itself has argued very recently in the context of an EPA promulgated TMDL for the Chesapeake Bay, TMDLs are not regulations, nor are they enforceable or self-implementing. Rather TMDLs rely on other provisions of federal, state, and local law for their implementation.¹¹ By inserting WLAs from the TMDL directly into the MS4 permit, without creating an implementation plan or compliance schedule, the Regional Board is converting these informational tools into a de facto federal implementation plan and circumventing the flexible, adaptive process that is supposed to follow from a TMDL.

Request: *Prior to incorporating WLAs from EPA Promulgated TMDLs into the MS4 Permit, develop and adopt Basin Plan Amendments, including the required implementation plan and associated compliance schedule.*

d. Notwithstanding Comment #3c, If EPA TMDLs are Incorporated into the MS4 Permit, the Regional Board Can and Should Include In-Permit Compliance Schedules for EPA Promulgated TMDLs Before Imposing Limitations.

The Regional Board does not propose to include compliance schedules in the revised MS4 permit for WLAs contained in EPA promulgated TMDLs that are being incorporated into the permit for the first time. Specifically, the working proposal states that “TMDLs established by the USEPA, to which Permittees are subject, do not have an implementation schedule adopted pursuant to Cal. Water Code section 13242. Therefore, a compliance schedule for attaining the water quality-based effluent limitations and/or receiving water limitations is not provided within this Order.” (Working Proposal at p. 4.) As discussed above, we agree that the proper procedure, as required by law, is to establish a compliance schedule as part of the implementation program required by Water Code section 13242. Until this occurs, the limitations cannot be applied in the permit.

EPA has acknowledged there is no “federal statutory or regulatory prohibition against development of TMDL implementation plans, either contemporaneously with *or after* development of a TMDL.” (Chesapeake Bay Brief at p.29.) A TMDL does not, by itself, prohibit or require any implementation actions. (Ibid.) Thus, nothing in federal law exempts the Regional Board from its affirmative obligation under state law to develop implementation plans including a time schedule for actions before imposing permit limitations. (Wat. Code §13242.) The State Water Board’s TMDL Policy anticipates that, in some cases, local programs may substitute for the Basin Plan implementation program. (Resolution 2005-0050, *Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options* (2005) at p. 8 (allows a TMDL to be implemented through a local regulatory program that will correct the impairment.)

As an alternative to undertaking the required basin plan amendments at this time, the Bureau would accept a permit provision requiring the Permittees to develop an implementation plan and associated compliance schedules, to be approved by the Regional Board and incorporated into the permit. As noted above, there is no federal prohibition on developing the implementation plan subsequent to

¹¹ EPA Memorandum in Opposition to Plaintiffs’ Motion for Summary Judgment, *American Farm Bureau Federation v. United State Environmental Protection Agency*, Case No. 1:11-CV-0067, United States District Court for the Middle District of Pennsylvania (March 27, 2012) (“Chesapeake Bay Brief”).

TMDL adoption, and state law *mandates* development of the plan before regulated entities can be required to comply with TMDLs. This approach would allow the Permittees time to prepare a feasible implementation plan and achievable timeframes, conserve Regional Board resources by allowing Permittees to develop the initial plan, and preserve the Regional Board's authority to approve and/or modify the proposal created by the Permittees if the compliance schedule and implementation plan developed by the Permittees do not represent a sufficiently robust approach. This would avoid the immediate compliance issues referenced above and provide a more complete vehicle for implementation rather than use of a TSO.

Request: *Notwithstanding the request under Comment #3c, add a provision that would require the Permittees to develop an implementation plan and associated compliance schedules, to be approved by the Regional Board and incorporated into the permit. For Permittees that develop Watershed Management Programs, the implementation plan could be a required element of the Watershed Management Program.*

4. Where TMDL WLAs are Based Upon Receiving Waters, Effluent Limitations Should not be Established

Assigning effluent limitations where WLAs are based upon receiving waters is inconsistent with the relevant WLAs in various TMDLs and is an inappropriate method of ensuring that MS4 permittees comply with water quality standards. Given that many of the TMDLs and the WLAs contained therein are expressed in terms of the receiving water and do not necessarily translate to effluent limitations, receiving water limitations are more appropriate under most circumstances. For example, the WLAs for the Bacteria TMDLs are expressed as allowable exceedance days, not as concentration based effluent limitations. Discharges from the MS4 that are greater than the proposed effluent limits could nonetheless result in receiving water concentrations lower than the numeric target and in conformity with the TMDL and WLAs. (See Comment Matrix for additional examples)

Thus, if the permit revision proceeds in this manner, the Regional Board will have established a system whereby a Permittee could be acting in conformity with a relevant TMDL by ensuring it meets all applicable receiving water limitations, yet still be in violation of an effluent limit established in its permit that was supposedly derived from and designed to achieve consistency with that TMDL. We do not believe such a result is intended, and can be addressed by not establishing effluent limits where the relevant WLAs have been expressed as a receiving water limit.

In addition, under the current approach in the Working Proposals, the fact that Permittees will be required to request TSOs also raises the issue of mandatory minimum penalties (MMPs). Pursuant to Water Code section 13385(h) and (i), MMPs are required for certain violations of effluent limitations. It is critical that the implementation of these WLAs in the permit be in the form of receiving water limitations, in order to avoid exposing the Permittees to MMPs for violations that cannot be prevented.

Request: *Ensure that limitations are consistent with the assumptions and requirements of the TMDLs and where appropriate incorporate receiving water limitations.*

5. If Water Quality Objectives are met in the Receiving Water, Permittees Should be in Compliance with the Associated TMDL Provisions

Parts VI.E.2.b, 2.d, and 2.e present the compliance determination provisions that provide multiple mechanisms for demonstrating compliance, which is greatly appreciated. However, some clarification regarding the definition and intent of "receiving water limitation" as used in these provisions is requested. As currently written in the Working Proposal, Parts VI.E.2.d.i.2, and VI.E.2.e.i.2 identify one of several conditions that Permittee's can use to demonstrate compliance as:

There are no exceedances of the applicable receiving water limitation for the specific pollutant(s) in the receiving water(s) at, or downstream of, the Permittee's outfall(s);

It is unclear if Parts VI.E.2.d.i.2, and VI.E.2.e.i.2 (1) limit “receiving water limitations” to those identified in the TMDL provisions, or (2) include applicable water quality objectives per the definition of “receiving water limitations” identified in Part V (Receiving Water Limitations).

As the ultimate end goal of the TMDL is protection of beneficial uses, attainment of water quality objectives/criteria protective of those uses should constitute compliance with the TMDL provisions. Therefore, please either (a) clarify that “receiving water limitations” is synonymous with the definition provided in Part V or (b) modify the language as suggested below.

Request: If the use of “receiving water limitation” in Parts VI.E.2.d.i.2, and VI.E.2.e.i.2 is limited to those identified in the TMDL provisions, modify the language as follows (additions in bold, underlined text):

*There are no exceedances of the applicable receiving water limitation **or water quality objective** for the specific pollutant(s) in the receiving water(s) at, or downstream of, the Permittee’s outfall(s);*

RECEIVING WATER LIMITATIONS

1. The Receiving Water Limitations Provisions are Inconsistent with the Intent of the Watershed Management Program

Part V.A.1 of the Working Proposal states the following:

Discharges from the MS4 that cause or contribute to the violation of Receiving Water Limitations are prohibited.

Per Regional Board staff’s presentation and discussion during the May 3, 2012 workshop, staff are intending that this provision is a stand-alone provision, with the exception of instances where TMDLs are effective with approved compliance schedules. Indeed, Part VI.E.2.c.ii, Part VI.E.2.c.iii, and Part VI.E.2.d.i.4 of the Working Proposal for TMDLs provide for Permittees to be in compliance with the Receiving Water Limitation provisions in Part V.A. by complying with the applicable TMDL provisions, which includes complying with interim water quality-based effluent limitations and receiving water limitations through the implementation of an approved Watershed Management Program.

The Bureau supports providing compliance via the Watershed Management Program for the TMDL pollutants as it comports with the compliance schedule provided in the Basin Plan. However, considering even a single exceedance for a pollutant as a Permit violation where no TMDL is in place, despite the implementation of an approved Watershed Management Program, is inconsistent with the Watershed Management Program concept and provisions.

The intent of the Watershed Management Programs is to focus Permittees efforts and resources on the highest water quality priorities in each watershed. Per the Working Proposal, the highest priorities that will form the basis of each Watershed Management Program are waterbodies with established TMDLs (Category 1) and pollutant-waterbody combinations that are on the State’s 303(d) list (Category 2). In addition, the Watershed Management Program provisions identify an adaptive management process to make the Watershed Management Program more effective, based on assessing (emphasis added):

*“**Progress toward achieving improved water quality in MS4 discharges and achieving receiving waters limitations** through implementation of the watershed control measures based on an evaluation of outfall-based monitoring data and receiving water monitoring data (Working Proposal on TMDLs, Part VI.C.6.a.i(2))*

The implication of the current approach to the Receiving Water Limitations provisions is that in a particular waterbody, where a Watershed Management Program has been developed, approved, and is being implemented, a Permittee would be in violation of the Permit for even a single exceedance in the receiving water, despite the implementation of a fully approved Watershed Management Program.

For example, if Watershed A has a TMDL for copper and Permittees are fully implementing an approved Watershed Management Program, then the Permittees will be in compliance with Part V.A.1 of the Receiving Water Limitations. However, if in Watershed B, there is an exceedance for copper in the receiving water and the frequency of exceedance does not meet 303(d) listing criteria and there is therefore no TMDL in place (Category 3 or 4, per the Watershed Management Programs provisions), the Permittees would be in violation of the Permit.

By considering exceedances for non-TMDL pollutant-waterbody combinations a Permit violation, prioritization via the Watershed Management Programs is not feasible as Permittees would be obligated to treat as equal a random exceedance for a particular pollutant and an impaired waterbody with an effective TMDL. Resources would be expended on addressing the random exceedances, resulting in either diverting funds from the highest priorities or creating additional and unnecessary financial burden on Permittees with no net environmental benefit.

Request: To remedy the inconsistency between the Working Proposals for Receiving Water Limitations and Watershed Management Programs, the Bureau has provided recommended revisions in Attachment C. Due to the integrated nature of the comments on Receiving Water Limitations, all suggested revisions to this Working Proposal are contained in Attachment C.

2. Implementation of the Watershed Management Program Should be Equivalent to the Process Identified in Part V.A.3 of the Receiving Water Limitations

The Watershed Management Program currently provides a cross-reference to Part V.A.4 of the Receiving Water Limitations provisions, which states:

So long as the Permittee has complied with the procedures set forth in Section 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.

As the Working Proposal for the Watershed Management Programs provides for an adaptive management process, an additional cross-reference to the Receiving Water Limitations provisions should be provided. Absent the additional cross-reference, the Permittee would be obligated to initiate the process identified in Part V.A.3, including the development and submittal of a Receiving Water Limitations Compliance Report and implementation schedule for BMPs, despite the implementation of an approved Watershed Management Program that addresses the TMDL requirements.

Request: Provide an additional provision in Part V.A. to directly incorporate the Watershed Management Programs as the mechanism for compliance with the Receiving Water Limitations provisions (see Attachment C). If the Regional Board opts to not include such an additional provision, Part VI.A.ii(1) should be modified as follows (additions in bold, underlined text):

*(1) The adaptive management process fulfills the requirements in **Part V.A.3 and** Part V.A.4 to address continuing exceedances of receiving water limitations.*

3. Part V.A.1 and Part V.A.2 of the Receiving Water Limitations Provisions Should not be “Stand-Alone” Provisions

On July 13, 2011, the United States Court of Appeals for the Ninth Circuit issued an opinion in *Natural Resources Defense Council, Inc., et al., v. County of Los Angeles, Los Angeles County Flood Control District, et al.*¹² (*NRDC v. County of LA*). The court’s opinion addressed the question if the “iterative process” language contained in Part 2.3 of the County of Los Angeles’s MS4 permit constitute a safe

¹² No. 10-56017, 2011 U.S. App. LEXIS 14443, at *1 (9th Cir., July 13, 2011).

harbor from violation of water quality standards. Note that the Court was silent on whether the “iterative process” in general was consistent with the Clean Water Act and only ruled on the specifics of the language in the permit.

For years, municipalities have operated under the premise that implementation of the iterative process as written in the LA County and other permits statewide constituted compliance with Permit provisions related to exceedances of water quality standards. This premise was initially based on State Water Board Order 99-05 and later reconfirmed in Order WQ 2001-15 (BIA Order)¹³. Therefore, the Ninth Circuit Court decision has significant ramifications to all MS4 dischargers, particularly with regard to the implementation of TMDLs. Municipalities have developed implementation plans to achieve compliance with TMDL requirements based on the understanding that the schedule presented within the TMDL represented the timeframe for compliance.

The iterative approach considers the challenges in the management of stormwater, including temporal, spatial, and storm event (size, intensity) variability, yet is still protective of water quality. Indeed, the appropriateness of the iterative process is noted in the BIA Order, which states:

“The iterative approach is protective of water quality, but at the same time considers the difficulties of achieving full compliance through BMPs that must be enforced throughout large and medium municipal storm sewer systems.”

Although the Ninth Circuit Court decision noted that the “cause or contribute” provision was a standalone provision and should be read as such, the Court did not state that the iterative process was not a viable method of compliance. Rather, for the Los Angeles permit in question, the iterative process, as it was presented, did not support compliance in the event of a water quality standards exceedance.

With that in mind, and for consistency with adopted TMDL implementation schedules, the Receiving Water Limitations language should be revised. Absent a revision of the language in the Working Proposal, Permittees would be subject to liability for receiving water exceedances, despite the approaches incorporated into the Working Proposals for TMDLs and Watershed Management Programs.

Request: *The Bureau recommends a two part structural solution (with specific revisions noted in Attachment C), as follows:*

1. *Include additional provisions that specifically state that Permittees will comply with Part V.A.1 through the implementation of the Watershed Management Program and/or implementation of TMDLs per the approved schedules; and,*
2. *Directly reference these provisions in Part V.A.1 by adding the following phrase: “Except as provided in Part V.A.3, Part V.A.4 [Watershed Management Programs], and Part V.A.5 [TMDLs]...”*

4. Use of “Cause or Contribute” Language Should be Limited to Part V.A

Throughout the multiple Working Proposals to date (including the Working Proposals that are the subject of this letter, as well as Working Proposals for Non-Stormwater Discharges and Minimum Control Measures), the language “shall not cause or contribute” is repeated many times. In light of the decision by the Ninth Circuit Court of Appeals (discussed above), the structure of the Permit should be taken into consideration. As the Ninth Circuit Court found the “cause or contribute” provision to be a standalone provision, repeating the exact language throughout the Permit may unintentionally compound liability of the Permittees.

¹³ See *In the Matter of the Petitions of Building Industry Assn. of San Diego County and Western States Petroleum Assn.*, Order WQ 2001-15 (Nov. 15, 2001) (BIA Order), at 7 (“... we point out that our language, similar to U.S. EPA’s permit language discussed in the *Browner* case, does not require strict compliance with water quality standards. Our language requires that storm water management plans be designed to achieve compliance with water quality standards. Compliance is to be achieved over time, through an iterative approach requiring improved BMPs.” Emphasis added.).

Request: To mitigate any structural concerns regarding the “cause or contribute” language, the Bureau requests that the Permit simply refer to the Receiving Water Limitations provisions of the Permit. Such an approach would not change the intent of the Regional Board, but would address the concept of “cause or contribute” in one discrete provision.

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Watershed Management Program

Additional Comment#	Document Reference:	Issue	Comments
1	VI.C.2.a	Timeline of Implementation	The proposed timeline especially the timeline for the preparation of the draft plan is overly ambitious. For this timeline to be met, it will be at the expense of the quality and comprehensiveness of the plan. Also in the case of the City of Los Angeles, due to its internal policies, the submitted plan may not have enough time to be approved by elected officials, and may be subject to additional changes after it has been submitted to the Regional Board.
2	VI.C.3.a.ii	Waterbody-Pollutant Classification	Categories 3 and 4 of medium and low priority pollutants comprise hundreds of pollutants. Characterizing hundreds of pollutants in multiple receiving waterbodies neither assists in prioritizing resources nor meets the intent of integrating actions to help meet water quality through watershed management plans. We would greatly appreciate further differentiation of the Category 1 (Highest Priority) pollutants since this is the category that we will primarily be focusing to assist us in prioritizing our efforts.
3	VI.C.3.b	Selection of Watershed Control Measures	This subsection seems to indicate that the WMP should contain the TMDL measures that will actually be implemented, including securing funding as opposed to the TMDL measures that are identified in the already submitted "Implementation Plans" that are needed for compliance. If this is the case, the City will need to re-evaluate all existing TMDL Implementation Plans and reprioritize the proposed measures in consideration of the funding availability.
4	VI.C.3.b.iv.6	Legal Authority for implementation of Watershed Control Measures	This requirement suggests that a commitment is needed not just by the Bureau of Sanitation, but also for the City of Los Angeles. Because of the City's internal practices, the preparation of the Watershed Management Plan and any revisions will require more than the six month and three month periods provided respectively.
5	VI.C.6	Adaptive Management Process	Requiring this process to be repeated every two years is too often. For well thought out plans, not much changes are needed at this frequency. Once during the five year period, to accompany the duration of the permit cycle, will be more appropriate.

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

General TMDL Provisions

Additional Comment#	Document Reference:	Issue	Comments
6	Section E, Part 2.b.v.2 Page 2, Part 2.d.i.2 Page 3, and Part 2.e.i.2 Page 4	Attainment of Water Quality Objectives/Criteria should constitute TMDL compliance	<p>Section E Parts 2.b, 2.d, and 2.e present the compliance determination and allows multiple mechanisms for demonstrating compliance, which is greatly appreciated. As the ultimate end goal of the TMDL is protection of beneficial uses, attainment of water quality objectives/criteria protective of those uses should constitute compliance with the TMDL. However, Section E Parts 2.b.v.2, 2.d.i.2, and 2.e.i.2 limits this concept to applicable receiving water limitations. If water quality objectives/criteria are met in the receiving waters Permittees should be in compliance with the TMDL regardless if the receiving water limitation is explicitly incorporated into the permit.</p> <p>Additionally, the language places upstream dischargers in jeopardy if downstream dischargers cause or contribute to exceedances. The current language indicates that compliance can be demonstrated if there are no exceedances at, or downstream of, the Permittee’s outfall. For example, if a water quality objective is met in Reach 6 of the LA River but not in Reach 2 (over 20 miles downstream and a change in flow of over 80 cfs), those discharging to Reach 6 could be considered out of compliance.</p> <p>Based on these issues, please revise as follows: Section E Part 2.b.v.2 “Demonstrate that the discharge from the Permittee’s MS4 is treated to the level that does not exceed the applicable water quality-based effluent limitation <u>or water quality objective.</u>”</p> <p>Section E Parts 2.d.i.2 and 2.e.i.2 as follows: There are no exceedances of the applicable receiving water limitation <u>water quality objectives</u> for the pollutant(s) associated with the specific TMDL in the receiving water(s) at, or downstream of, the Permittee’s outfall(s).</p>
7	E.2.d.i.1	Note 1 Definition	<p>Suggested text for Note 1: ¹A municipal stormdrain outfall (or conduit) shall have a minimum pipe size of 24-inch diameter where a maintenance hole or other point of access can be built based on hydraulic engineering design standards at the Permittee’s jurisdictional boundary.</p>
8	Section E, Part 2.d.i.4.b	Design Storm for Structural BMPs	<p>This incorporation of such a design standard seems to imply that during larger storms, water quality standards may not have to be met. Also please clarify if this is a recommendation or the intent is to prohibit the implementation of BMPs that will provide partial treatment of this design storm.</p>

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
9	Section E, Part 5.	TMDLs should be individually listed as in the Ventura County MS4 Permit	It seems the TMDL provisions from the current Los Angeles County MS4 Permit (i.e., TMDL for Trash in the Los Angeles River Watershed provisions) have been applied to all the trash TMDLs in Los Angeles County with a few minor additions. However, the Los Angeles River Watershed Trash TMDL provisions do not ubiquitously apply to the other TMDLs. This results in a TMDL Provisions Section that does not address the specific intricacies of each trash TMDL. Section E, Part 5 should list the provisions for each TMDL individually as in the Ventura County MS4 Permit. Also consider placing Section E, Part 5 in a appendix for consistency with other TMDLs
10	Section E, Part 5.a.x. Page 7.	There are no trash WLAs in the Lincoln Park Lake TMDL	As stated in the Lincoln Park Lake Trash TMDL (Section 5.4.4.1 page 5-23), there are no point sources of trash to Lincoln Park Lake. As such, the TMDL does not assign WLAs for trash (Section 5.4.6.1 page 5-25). Please remove the trash effluent limitations for Lincoln Park Lake.
11	Section E, Part 5.b.i.(1)(c) Page 8.	There are no trash WLAs in the Lincoln Park Lake TMDL	As stated in the Lincoln Park Lake Trash TMDL (Section 5.4.4.1 page 5-23), there are no point sources of trash to Lincoln Park Lake. As such, the TMDL does not assign WLAs for trash (Section 5.4.6.1 page 5-25). Please remove Lincoln Park Lake from the paragraph in Section E, Part 5.b.i.(1)(c).
12	Section E, Part 5.b.i.(2)(b) Page 9.	Daily Generation Rate (DGR) calculation should not be required	As the requirement to calculate a DGR is not required for all TMDLs listed in Section E, Part 5.a., a DGR should not be required to determine compliance as stated in Section E, Part 5.b.i.(2)(b). Rather, the use of a DGR to determine compliance should be optional similar to the language in Section E, Part 5.b.i.(2)(a). Please change language in Section E, Part 5.b.i.(2)(b) to make the use of a DGR to determine compliance optional.
13	Section E, Part 5.b.i.(3) Page 10.	Partial Capture Device performance should be applicable for determining interim compliance	Section E, Part 5.b.i.(3) states: “Permittees may comply with their interim and final effluent limitations through a combination of <i>full capture systems</i> , <i>partial capture devices</i> , and <i>institutional controls</i> . 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 <i>full capture systems</i> are installed and as specified in (2)(b) in areas where <i>partial capture devices</i> and <i>institutional controls</i> are applied.” However, this language does not allow for demonstrating compliance using the demonstrated performance of specific devices as detailed in Section E, Part 5.b.i.(2)(a). Please add: “2(a) or” before (2)(b) in Section E, Part 5.b.i.(3).
14	Section E, Part 5.b.ii. Page 11.	Language regarding non-compliance of MFAC Program	Please add the following language, adapted from the Ventura County MS4 Permit, regarding non-compliance of a MFAC Program, after Section E, Part 5.b.ii.(2)(a): “(3) For a Permittee relying on a <i>MFAC/BMP Program</i> , If any WLA is exceeded at a compliance monitoring site, the Permittee shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, the Permittee would not be considered in violation of this Order, but Regional Water Board staff could evaluate the need for enforcement if the actions are not deemed to be satisfactory.”

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
15	Section E, Part 5.b.iii.c.i. Page 12.	TMDL Compliance Report	The required TMDL Compliance Report is redundant as the Regional Board-adopted TMDLs listed in Section E, Part 5.a. require an annual report detailing the information required in subsections (1), (2), (3), and (4) of Section E, Part 5.b.iii.c. Please remove the TMDL Compliance Report requirement.
Section B. TMDLs in the Santa Monica Bay Watershed Management Area			
16	Section B, TMDLs in SMB, Part 1.b Page 1.	Effluent limitations are inconsistent with assumptions of the WLAs	The WLAs in the Santa Monica Bay Beaches Bacteria (SMBBB) TMDL assigned to the MS4 are expressed as allowable exceedance days. The WLAs are not expressed as concentration based effluent limitations. Discharges from the MS4 could be greater than the proposed effluent limits but concentrations in the wave wash could be lower than the numeric target. Furthermore, the TMDL allows for a certain number of exceedances of the single sample maximum, which may also allow for exceedances of the proposed effluent limitations without violating the assumptions of the WLAs. As such, the assignment of effluent limitations as concentration-based limitations is not consistent with the requirements or assumptions of the WLAs and should be removed. Only receiving water limitations are appropriate given that both the TMDL target and the WLAs are expressed in the receiving waters. Additionally, this approach unnecessarily places MS4 permittees in a position to receive mandatory minimum penalties for the exceedance of effluent limits that are not consistent with assumptions of the WLAs. If the interest in providing effluent limitations is to allow discharges to differentiate from other comingled discharges, the interest can be addressed in Part E. Special Provisions by revising b.v, d.i, and e.i to include an additional mechanism for demonstrating compliance that states that a Permittee shall be deemed in compliance if there are no exceedances of applicable water quality objectives at the Permittee's MS4 outfall(s).
17	Section B. TMDLs in SMB (Bacteria)	Bacteria TMDL Reopener	Throughout entire document, bacteria TMDL requirements have not been updated for changes that are proposed by RB in the TMDL reopeners. This will require changes in many areas once the revised TMDLs have been adopted (responsible jurisdictions, interim reduction milestones, IWRA update, sites subject to antidegradation, geometric mean calculation). This applies to Ballona Creek, Marina del Ray and Santa Monica Bay Beaches Bacterial TMDLs. For example the final WLA Compliance date should be July 15, 2021 as approved by the RWQCB staff.
18	Section B, TMDLs in SMB, Part 2.c Page 6.	Interim effluent limits do not reflect possible site specific trash Baseline WLAs	The Santa Monica Bay Nearshore and Offshore Debris TMDL allows the responsible agencies and jurisdictions to calculate a site specific trash Baseline WLA if they elect to not use the default Baseline WLAs assigned in the TMDL. Section B, TMDLs in SMB, Part 2.c provides a compliance schedule and interim and final water quality-based effluent limitations based on the default Baseline WLA from the TMDL. However, as the responsible agencies and jurisdictions may choose to use a site specific Baseline WLA, Section B, TMDLs in SMB, Part 2.c should include language that allows the responsible agencies and jurisdictions the ability to meet the interim effluent limits derived from either the default Baseline WLA or a site specific Baseline WLA based on whichever is chosen.

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Additional Comment#	Document Reference:	Issue	Comments
19	Section B, TMDLs in SMB, Part 2.d	References to other parts of document unclear	Section B TMDLs in SMB, Part 2.d. states: “Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].” However, it appears that 3(b) and 3(c) should be 2(b) and 2(c). Please double check to make sure these references are correct.
20	Section B, TMDLs in SMB, Part 5.a.3 Table, Page 10	Trash Generation Baseline Value	Ballona Creek Watershed Trash TMDL- How was the Baseline number of 950,238 gallons per year for the City of Los Angeles derived?
21	Section B, TMDLs in SMB, Part 5.b.2 Page 11.	Effluent limitations are inconsistent with assumptions of the WLAs	The WLAs and corresponding loading capacities for the Ballona Creek Toxics TMDL represent the mass of pollutant associated with the fine-grained sediment that settles in the Estuary, which is a subset of what is discharged. However, the WLAs were incorporated into the permit without consideration that what settles is a subset of what is discharged. As such, the permit is inconsistent with the assumption of the WLAs and requires reductions of loadings well above the intent of the Toxics TMDL. For example, the WLA and corresponding WQBEL for Total DDT is 10.56 g/yr. If a Permittee were required to meet this WQBEL, the resulting fine-grained deposited load would be 1.2 g/yr, which would translate to an overall sediment concentration of 0.17 ug/kg, an order of magnitude lower than the 1.58 ug/kg numeric target for DDT [note: all calculations are based on using data and assumptions provided in the BPA]. As such, the permit should be revised to either 1) utilize the information provided in the TMDL to translate the WQBELs into an allowable mass that may be <u>discharged</u> or 2) the WQBELs should be established as receiving water limitations that clearly indicate that the WQBELs apply to what settles on the bed sediment.

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
22	Section B, TMDLs in SMB, Part 5.b.2 Page 11 and 12.	Additional mechanisms for demonstrating compliance with assumption of WLAs should be allowed	<p>The goal of the Ballona Creek Toxics TMDL is to protect aquatic life in bed sediments in the estuary. Meeting the State’s Phase I Sediment Quality Objectives or demonstrating that concentrations are met in bed sediment should be alternative methods for demonstrating compliance. These methods are consistent with the assumptions of the WLAs, which are intended to protect aquatic life in bed sediments. The following provides example language that could be included in the permit to demonstrate that a discharge is not causing an impairment or that the Estuary is attaining the Toxics TMDL:</p> <p>Compliance may be demonstrated via any one of the following means:</p> <ol style="list-style-type: none"> 1. Final sediment allocations are met. 2. The qualitative sediment condition of <i>Unimpacted</i> or <i>Likely Unimpacted</i> via the interpretation and integration of multiple lines of evidence as defined in the Phase 1 SQOs is met. 3. The sediment numeric targets are met in bed sediments. 4. Discharge concentrations meet the TMDL sediment targets. <p>The compliance options should also be applicable for meeting the interim goals specified within the Toxics TMDL.</p>
23	Section B, TMDLs in SMB, Part 5.c. Page 12.	The extended schedule for an IWRA is not included	<p>The Ballona Creek Bacteria TMDL allows for the extension of the final wet weather compliance date to 2021 if an Integrated Water Resources Approach (IWRA) is utilized similar to the Santa Monica Bay Beaches Bacteria (SMBBB) TMDL. This extension is already proposed in the revised BPA from the ongoing reopener process. Please include language similar to the SMBBB permit language indicated that the final wet weather compliance date can be extended.</p>
24	Section B, TMDLs in SMB, Part 5.c. Pages 12-14.	Effluent limitations are inconsistent with assumptions of the WLAs	<p>The WLAs in the Ballona Creek Bacteria TMDL assigned to the MS4 are expressed as allowable exceedance days. The WLAs are not expressed as concentration based effluent limitations. Discharges from the MS4 could be greater than the proposed effluent limits but concentrations in the wave wash could be lower than the numeric target. Furthermore, the TMDL allows for a certain number of exceedances of the single sample maximum, which may also allow for exceedances of the proposed effluent limitations without violating the assumptions of the WLAs. As such, the assignment of effluent limitations as concentration based limitations is not consistent with the requirements or assumptions of the WLAs and should be removed. Only receiving water limitations are appropriate given that both the TMDL target and the WLAs are expressed in the receiving waters. Additionally, this approach unnecessarily places MS4 permittees in a position to receive mandatory minimum penalties for the exceedance of effluent limits that are not consistent with assumptions of the WLAs. If the interest in providing effluent limitations is to allow discharges to differentiate from other comingled discharges, the interest can be addressed in Part E. Special Provisions by revising b.v, d.i, and e.i to include an additional mechanism for demonstrating compliance that states that a Permittee shall be deemed in compliance if there are no exceedances of applicable water quality objectives at the Permittee’s MS4 outfall(s).</p>

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Additional Comment#	Document Reference:	Issue	Comments
25	Section B, TMDLs in SMB, Part 5.d.2.ii Page 15.	Compliance determination should include meeting CTR criteria in-stream	The goal of the Ballona Creek Metals TMDL is to meet the CTR criteria in the receiving waters. As such, an additional mechanism for demonstrating compliance should be included within the permit that states “Permittees shall be determined in compliance with the water quality-based effluent limitations for discharges if CTR criteria are met instream.”
26	Section B, TMDLs in SMB, Part 5.e.2 Page 16.	An averaging period should be included in the Permit	The Ballona Creek Wetlands TMDL establishes WLAs for stormborne sediment. As stated in the TMDL (page 74), “Since the current existing discharge of sediment load is not contributing to the listed impairments or otherwise causing a negative impact to Ballona Creek Wetlands, this TMDL establishes WLAs based on existing conditions.” The existing conditions WLAs are set at the estimate of current sediment discharge based on a 10-year average of sediment discharge from Ballona Creek as calculated for the Ballona Creek Estuary Toxics TMDL. The Toxics TMDL based sediment loads and deposition to capture a wide range of storm conditions and flows in the watershed. By setting the effluent limitations on an annual basis without consideration for the natural fluctuation in annual sediment loads, the permit will result in exceedances of the effluent limitations even though Permittees are meeting the assumptions of the WLAs. As such, the City requests that compliance with the effluent limitations be evaluated over a longer averaging period (preferably 10-years to be consistent with TMDL calculations) in order to capture representative temporal variation in sediment loads consistent with the assumptions of the WLAs.
27	Section B, TMDLs in SMB, Part 6.a.2 Page 16 and 17.	Effluent limitations are inconsistent with assumptions of the WLAs	The WLAs in the Marina del Rey Bacteria TMDL assigned to the MS4 are expressed as allowable exceedance days. The WLAs are not expressed as concentration based effluent limitations. Discharges from the MS4 could be greater than the proposed effluent limits but concentrations in the wave wash could be lower than the numeric target. Furthermore, the TMDL allows for a certain number of exceedances of the single sample maximum, which may also allow for exceedances of the proposed effluent limitations without violating the assumptions of the WLAs. As such, the assignment of effluent limitations as concentration based limitations is not consistent with the requirements or assumptions of the WLAs and should be removed. Only receiving water limitations are appropriate given that both the TMDL target and the WLAs are expressed in the receiving waters. Additionally, this approach unnecessarily places MS4 permittees in a position to receive mandatory minimum penalties for the exceedance of effluent limits that are not consistent with assumptions of the WLAs. If the interest in providing effluent limitations is to allow discharges to differentiate from other comingled discharges, the interest can be addressed in Part E. Special Provisions by revising b.v, d.i, and e.i to include an additional mechanism for demonstrating compliance that states that a Permittee shall be deemed in compliance if there are no exceedances of applicable water quality objectives at the Permittee’s MS4 outfall(s).

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Additional Comment#	Document Reference:	Issue	Comments
28	Section B, TMDLs in SMB, Part 6.b.2 Page 18.	Additional mechanisms for demonstrating compliance with assumption of WLAs should be allowed	<p>The goal of the Marina del Rey Toxics TMDL is to protect aquatic life in bed sediments in the estuary. Meeting the State’s Phase I Sediment Quality Objectives or demonstrating that concentrations are met in bed sediment should be alternative methods for demonstrating compliance. These methods are consistent with the assumptions of the WLAs, which are intended to protect aquatic life in bed sediments. The following provides example language that could be included in the permit to demonstrate that a discharge is not causing an impairment or that the Estuary is attaining the Toxics TMDL:</p> <p>Compliance may be demonstrated via any one of the following means:</p> <ol style="list-style-type: none"> 1. Final sediment allocations are met. 2. The qualitative sediment condition of <i>Unimpacted</i> or <i>Likely Unimpacted</i> via the interpretation and integration of multiple lines of evidence as defined in the Phase 1 SQOs is met. 3. The sediment numeric targets are met in bed sediments. 4. Discharge concentrations meet the TMDL sediment targets. <p>The compliance options should also be applicable for meeting the interim goals specified within the Toxics TMDL.</p>
Section C. TMDLs in Dominguez Channel and Greater Harbor Watershed Management Area			
29	Section C, TMDLs in DC and Greater Harbors, Part 1. Page 1.	Effluent limitations are inconsistent with assumptions of the WLAs	<p>The WLAs in the LA Harbor Bacteria TMDL assigned to the MS4 are expressed as allowable exceedance days. The WLAs are not expressed as concentration based effluent limitations. Discharges from the MS4 could be greater than the proposed effluent limits but concentrations in the wave wash could be lower than the numeric target. Furthermore, the TMDL allows for a certain number of exceedances of the single sample maximum, which may also allow for exceedances of the proposed effluent limitations without violating the assumptions of the WLAs. As such, the assignment of effluent limitations as concentration based limitations is not consistent with the requirements or assumptions of the WLAs and should be removed. Only receiving water limitations are appropriate given that both the TMDL target and the WLAs are expressed in the receiving waters. Additionally, this approach unnecessarily places MS4 permittees in a position to receive mandatory minimum penalties for the exceedance of effluent limits that are not consistent with assumptions of the WLAs. If the interest in providing effluent limitations is to allow discharges to differentiate from other comingled discharges, the interest can be addressed in Part E. Special Provisions by revising b.v, d.i, and e.i to include an additional mechanism for demonstrating compliance that states that a Permittee shall be deemed in compliance if there are no exceedances of applicable water quality objectives at the Permittee’s MS4 outfall(s).</p>

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Additional Comment#	Document Reference:	Issue	Comments
30	Section C, TMDLs in DC and Greater Harbors, Part 1. Page 1.	Annual Allowable Exceedance Days of Single Objective(days) column	The limits for CB1 & CB2 should be the same as HW07 based on the Harbor bacteria TMDL), but instead the table just has “0” for all CB1 & CB2 limits. Please make corrections.
31	Section C, TMDLs in DC and Greater Harbors, Part 2.c Page 2.	Interim effluent limits do not reflect possible site specific trash Baseline WLAs	The Machado Lake Trash TMDL allows the responsible jurisdictions to calculate a site specific trash Baseline WLA if they elect to not use the default Baseline WLAs assigned in the TMDL. Section C, TMDLs in DC and Greater Harbors, Part 2.c provides a compliance schedule and interim and final water quality-based effluent limitations based on the default Baseline WLA from the TMDL. However, as the responsible jurisdictions may choose to use a site specific Baseline WLA, Section C, TMDLs in DC and Greater Harbors, Part 2.c should include language that allows the responsible jurisdictions the ability to meet the interim effluent limits derived from either the default Baseline WLA or a site specific Baseline WLA based on whichever is chosen.
32	Section C, TMDLs in DC and Greater Harbors, Part 2.c-Table Page 2.	Baseline Value for trash generation	Machado Lake Trash TMDL – The Baseline value for the City of Los Angeles is 12331.17 gallons, but In Appendix III of the Basin Plan, the Baseline value is 14358.39 gallons. This number is a total of trash generation per land use and is a more accurate value. The 12331.17 gallons value was derived using an average trash generation rate of 5334 gallons of uncompressed trash per square mile. This value is less accurate and should not be used. Additionally, the Los Angeles River Trash TMDL also uses a baseline value of trash generation derived using land use trash generation values. This precedent should be followed.
33	Section C, TMDLs in DC and Greater Harbors, Part 2.e Page 2.	Inappropriate trash generation rate and baseline limitation language	The Machado Lake Trash TMDL requires the responsible jurisdictions to establish trash Baseline WLAs and propose a metric (e.g., weight, volume, number of pieces) to measure the amount of trash collected to compare to the Baseline WLAs. In addition, the TMDL requires the responsible jurisdictions to prioritize the implementation of BMPs in areas with high trash generating rates. Section C, TMDLs in DC and Greater Harbors, Part 2.e states: “If a Permittee opts to derive a site specific trash generation rate through its Trash Monitoring and Reporting Plan, the baseline limitation will be calculated by multiplying the point source area(s) by the derived trash generation rate(s).” The language in this sentence does not relate to what the TMDL intends regarding site specific Baseline WLAs or areas with high trash generating rates. Furthermore, the TMDL does not specify how a high trash generating rate is determined nor does it specify how the site specific Baseline WLA should be calculated. For these reasons, Section C, TMDLs in DC and Greater Harbors, Part 2.e should be removed from MS4 Permit.

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Additional Comment#	Document Reference:	Issue	Comments
34	Section C, TMDLs in DC and Greater Harbors, Part 3.c.1. Page 3.	Attainment of the Basin Plan objectives should constitute compliance with the TMDL	The Machado Lake Nutrient TMDL is intended to address the eutrophic, algae, ammonia, and odor listings. Attainment of Basin Plan objectives for these listings should constitute compliance with the TMDL. Currently the City is implementing the Machado Lake Ecosystem Rehabilitation Prop O Project, and is spending approximately \$100 million to restore Machado Lake, including implementation of BMPs to reduce external loadings of nutrients to the lake as well as dredging of accumulated sediment from within the lake to reduce internal loadings. Furthermore, as noted in the permit, the City has entered into a Memorandum of Agreement with the Regional Board to implement a Lake Water Quality Management Plan (LWQMP) to achieve a healthy lake. Implementation of the Prop O project and the LWQMP will result in the attainment of the beneficial uses and address the eutrophic, algae, ammonia, and odor listings. However, the potential exists that although these extensive efforts may result in meeting the Basin Plan objectives the receiving water limitations may not be met. As the ultimate end goal of the TMDL is protection of beneficial uses, attainment of the Basin Plan objectives protective of those uses should constitute compliance with the TMDL.
35	Section C, TMDLs in DC and Greater Harbors, Part 3.c.2. Page 3 and 4.	Mass-based allocations may affect the ability with QBELs	The permit assigns annual mass-based QBELs to multiple dischargers. While the Bureau feels that this is a valid approach, it could affect the ability of the City to comply with the in-lake receiving water limitations. Additional language should be included in the permit that protects the City’s investment in the lake through the Machado Lake Ecosystem Rehabilitation Prop O Project and the LWQMP. It should not be the City’s responsibility to evaluate whether upstream dischargers are causing or contributing to exceedances within the lake, particularly if the Regional Board allows those discharges.
36	Section C, TMDLs in DC and Greater Harbors, Part 5.b.1.i. Page 5.	Interim Toxicity Effluent limitation is inconsistent with the TMDL	The interim freshwater toxicity effluent limitation is set as a not to exceed of a monthly median of 2 TUc. However, the BPA (pg 10) states (emphasis added): “The fresh water interim allocation <u>shall be implemented as a trigger</u> requiring initiation and implementation of the TRE/TIE process.... The fresh water interim allocation shall be implemented in accordance with US EPA, State Board and Regional Board resolutions, guidance and policy at the time of permit issuance, modification or renewal.” Currently toxicity based effluent limits are implemented as triggers in NPDES permits. The interim allocation should be revised to require the initiation of a TIE/TRE process consistent with current permitting processes consistent with the TMDL requirements.
37	Section C, TMDLs in DC and Greater Harbors, Part 5.c.1.ii. Page 5 and 6.	Final Metals Water Column Mass Based Effluent Limitations for Dominguez Channel are not consistent with the TMDL	The final metals QBELs are set at a fixed flow rate and hardness, which is inconsistent with the WLAs. The footnote associated with the mass based WLAs for the Dominguez Channel TMDL (Page 12) state that “Recalculated mass-based allocations using ambient hardness and flow rate at the time of sampling are considered consistent with the assumptions and requirements of these waste load allocations”. As such, the QBELs should be revised to be consistent with the assumptions of the WLAs as presented in the TMDL.

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
38	Section C, TMDLs in DC and Greater Harbors, Part 5.c.2.i. Page 6.	Final Metals Water Column Concentration Based Effluent Limitations for Torrance Lateral are not consistent with the TMDL	The final metals WQBELs are set at a fixed hardness, which is inconsistent with the TMDL. The footnote associated with the concentration based WLAs for the Torrance Lateral (Page 12) state that “Recalculated concentration-based allocations using ambient hardness at the time of sampling are considered consistent with the assumptions and requirements of these waste load allocations”. As such, the WQBELs should be revised to be consistent with the assumptions of the WLAs as presented in the TMDL.
39	Section C, TMDLs in DC and Greater Harbors, Part 5.c.3.i. and 5.c.4 Page 6 and 7.	Final mass based WQBELs expressed as annual loading are not consistent with the TMDL	The final mass-based sediment TMDLs for metals, PAHs, total DDT and total PCBs represent the mass of an individual pollutant that could be deposited in bed sediment and meet the calculated loading capacity. As stated in the Regional Board’s response to comments (21.3 page 69): “The assigned mass-based sediment WLAs were developed based on hydrodynamic modeling of the amount of sediment deposited.” Basing compliance with mass-based WLAs at designated discharge points is not only contradictory to the allocations, which are based on an acceptable bed sediment condition rather than a discharge condition, but also causes dischargers to reduce loadings well below a level that would cause or contribute to an impairment. Either the effluent limits should be revised to indicate an allowable discharge load consistent with the assumptions of the WLAs or the WQBELs should be expressed in a manner that indicates that the resulting concentrations in bed sediment as a result of MS4 discharges should not exceed the allowable deposited load.
Section D. TMDLs in Los Angeles River Watershed Management Area			
40	Section D, TMDLs in LA River, Part 1. Page 3.	References to other parts of document unclear	Section D TMDLs in LA River, Part 1.d. states: “Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 3(b) and 3(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].” However, it appears that 3(b) and 3(c) should be 1(b) and 1(c). Please double check to make sure these references are correct.

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
41	Section D, TMDLs in LA River, Part 2. Page 3.	Final WQBELs are not consistent with the Basin Plan Ammonia Objectives	The ammonia effluent limits are set equal to the WLAs in the Los Angeles River Nitrogen Compounds TMDL. The Nitrogen Compounds TMDL became effective in March 2004. Subsequently, the Basin Plan was updated to incorporate an ammonia SSO which became effective in March 2009. From the time the SSO became the effective Basin Plan ammonia water quality objectives for the Los Angeles River, the Bureau has been encouraging Regional Board staff to modify the TMDL targets and allocations to reflect the revised ammonia objectives. Additionally, the Bureau has provided information demonstrating that, using the new Basin Plan objectives, the Los Angeles River is no longer impaired for ammonia and could be delisted in 2012. However, to date, the TMDL revision and/or delisting decision have not been completed. As a result, the ammonia effluent limits are currently set equal to the TMDL WLAs without an adjustment for the effective Basin Plan ammonia objectives. As outlined in the response to the Bureau's comments on the LAG and DCT NPDES permits, the Bureau understands that Regional Board staff do not believe the effluent limits could be changed in the absence of addressing the TMDL. As such, the Bureau requests that Regional Board staff: 1) identify the most appropriate and expeditious approach to address this administrative issue, and 2) identify the earliest possible date that the revisions could be completed and brought before the Regional Board for consideration.
42	Section D, TMDLs in LA River, Part 3.b.1, 2 and 3 Pages 3-5.	Final WQBELs are not consistent with the 2010 BPA	The final WLAs in the 2010 BPA include a WER, currently set to a default of 1. The load based and concentration based WQBELs should be consistent with the 2010 BPA and the WER term and the current WER footnote from the BPA should be included.
43	Section D, TMDLs in LA River, Part 3.b.1, 2 and 3 Pages 3-5.	Compliance determination should include meeting CTR criteria in-stream	The goal of the LA River Metals TMDL is to meet the CTR criteria in the receiving waters. As such, an additional mechanism for demonstrating compliance should be included within the permit that states "Permittees shall be determined in compliance with the water quality based effluent limitations for discharges if CTR criteria are met instream."

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
44	Section D, TMDLs in LA River, Part 4.b.1 Page 5.	Effluent limitations are inconsistent with assumptions of the WLAs	The WLAs in the LA River Bacteria TMDL assigned to the MS4 are expressed as allowable exceedance days. The WLAs are not expressed as concentration based effluent limitations. Discharges from the MS4 could be greater than the proposed effluent limits but concentrations in the wave wash could be lower than the numeric target. Furthermore, the TMDL allows for a certain number of exceedances of the single sample maximum, which may also allow for exceedances of the proposed effluent limitations without violating the assumptions of the WLAs. As such, the assignment of effluent limitations as concentration based limitations is not consistent with the requirements or assumptions of the WLAs and should be removed. Only receiving water limitations are appropriate given that both the TMDL target and the WLAs are expressed in the receiving waters. Additionally, this approach unnecessarily places MS4 permittees in a position to receive mandatory minimum penalties for the exceedance of effluent limits that are not consistent with assumptions of the WLAs. If the interest in providing effluent limitations is to allow discharges to differentiate from other comingled discharges, the interest can be addressed in Part E. Special Provisions by revising b.v, d.i, and e.i to include an additional mechanism for demonstrating compliance that states that a Permittee shall be deemed in compliance if there are no exceedances of applicable water quality objectives at the Permittee's MS4 outfall(s).
45	Section D, TMDLs in LA River, Part 4. Page 5.	The section regarding outliers as described in the Attachment A to Resolution No. R10-007 (LA River Bacteria TMDL) was omitted.	The section included in the TMDL states: <i>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 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 outfalls is returned...</i> Please include the section that discusses outlier, and the description on addressing outlier outfalls as described in the adopted TMDL

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
46	Section D, TMDLs in LA River, Part 4.e.1 Page 12.	Compliance Determination is inconsistent with the TMDL BPA	<p>The TMDL BPA (page 6) states that:</p> <p>MS4 dischargers can demonstrate compliance with the final dry weather WLAs by demonstrating that the final WLA are met instream or by demonstrating one of the following conditions at outfalls to the receiving waters:</p> <ol style="list-style-type: none"> 1. Flow-weighted concentration of <i>E. coli</i> 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; 2. Zero discharge during dry weather; 3. Demonstration of compliance as specified in the MS4 NPDES permit which may include the use of BMPs where the permit's administrative record supports that the BMPs are expected to be sufficient to implement the WLA in the TMDL, the use of calculated loading rates such that loading of <i>E. coli</i> to the segment is less than or equal to a calculated loading rates that would not cause or contribute to exceedances based on a loading capacity representative of conditions in the River at the time of compliance or other appropriate method. <p>The third and final method, above, which provides both BMP based and load based methods for demonstrating compliance is not provided in the permit. The permit must be consistent with the WLAs as outlined in the BPA.</p>
47	Section D, TMDLs in LA River, Part 4.b.1 Page 5.	Interim, load-based WQBELs	The load-based allocations are grouped, but can be separated by jurisdiction based on drainage area, per the BPA. Footnote 11 should be revised to state that the load-based interim WQBELs can be separated into individual jurisdictions based on proportional drainage area.
48	Section D, TMDLs in LA River, Part 4.b.1 Page 5.	Interim, load-based WQBELs	The BPA for the LA River Bacteria TMDL includes language to exclude some discharges (unexpectedly high-loading outfalls) from interim compliance calculations (bottom of page 5). The interim dry weather single sample bacteria WQBELs should be revised to include this language.
49	Section D, TMDLs in LA River, Part 6. Pages 15-23.	The footnotes do not appear to match the tables	The footnotes noted in the tables presenting the WQBELs do not appear to be consistent with the footnotes provided at the bottom of the page. Please check and provide clarifications on the footnotes.

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
50	<p>Section D, TMDLs in LA River, Part 6.b.2 Page 15.</p>	<p>WQBELs are not consistent with WLAs</p>	<p>The WQBELs presented in the permit are not consistent with the language in the TMDL. Specifically, on page 6-18 of the TMDL, the following footnote in Table 6-6 is not included in the permit:</p> <ol style="list-style-type: none"> 1. Each wasteload allocation must be met at the point of discharge. A three year average will be used to evaluate compliance. However, if applicable water quality criteria for ammonia, dissolved oxygen and pH, and the chlorophyll a target are met in lake, then the total phosphorus and total nitrogen allocations are considered attained. In assessing compliance with the wasteload allocations, responsible jurisdictions assigned both northern and southern subwatershed allocations may combine allocations. <p>Furthermore, there is no reference in the TMDL requiring that the annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen as required by the permit. In fact, as stated on page 6-17, WLAs are equal to existing loading rates because no reductions in loading are required. If concentration based WQBELs are to be incorporated into the permit they should be consistent with the assumptions of the WLAs and as such, concentrations should be based on current loadings/concentrations.</p>

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
51	Section D, TMDLs in LA River, Part 6.b.2 Page 15.	6.B1 6.B2 Nutrient	<ul style="list-style-type: none"> • Text does not identify where Table D is located? • ...The annual mass-based allocation shall be equal to monthly average concentrations of 0.1 mg/l total phosphorus and 0.1 mg/l total nitrogen based.... Should read: ... The annual mass-based allocation shall be equal to 1.2 mg/L total nitrogen summer average (May – September) and annual average. 0.12 mg/L total phosphorous summer average (May – September) and annual average. • The following three bullets should follow the Table shown at the bottom of Page 15 of 24: The following concentrations based water quality based receiving water limitations apply during both wet and dry weather if: <ul style="list-style-type: none"> ▪ The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met. ▪ The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average. ▪ U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice. ▪ The concentration-based receiving water limits must be met in the lake. However, if the applicable water quality criteria for ammonia, dissolved oxygen, pH, and the chlorophyll <i>a</i> targets are met (see Table below), then the total phosphorus and total nitrogen limits are considered attained. • Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order. Should read: Where a Permittee believes that additional time to comply with the annual mass allocation is necessary, a Permittee may request a time schedule order (TSO) pursuant to Cal. Water Code section 13300 for the Regional Water Board’s consideration.

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
52	Section D, TMDLs in LA River, Part 6.c Page 16	6.C1&2 PCB	<p>... Permittees shall comply with the following water quality based effluent limitations as of the effective date of this Order:</p> <p>Should read:</p> <p>... Where a Permittee believes that additional time to comply with the water quality based effluent limitations is necessary, a Permittee may request a time schedule order (TSO) pursuant to Cal. Water Code section 13300 for the Regional Water Board’s consideration.</p>
53	16/17 of 24	6.D1&2 6.D3 Chlordane	<p>... Permittees shall comply with the following water quality based effluent limitations as of the effective date of this Order:</p> <p>Should read:</p> <p>... Where a Permittee believes that additional time to comply with the water quality based effluent limitations is necessary, a Permittee may request a time schedule order (TSO) pursuant to Cal. Water Code section 13300 for the Regional Water Board’s consideration.</p> <p>... fish tissue target of 3.6 ppb wet weight</p> <p>Should read:</p> <p>... fish tissue target of 5.6 ppb wet weight</p>
54	Section D, TMDLs in LA River, Part 6.d.3 Page 17.	Fish tissue concentration for alternative effluent limitations is not consistent with TMDL	<p>The TMDL for chlordane allows the use of alternative WLAs if the fish tissue target of 5.6 ppb wet weight has been met for the proceeding three or more years. However, the permit indicates that the tissue target is 3.6 ppb. Please revise for consistency with the TMDL.</p>
55	Section D, TMDLs in LA River, Part 6.d.3 Page 17 of 24	E1&2 E3 Dieldrin	<p>... Permittees shall comply with the following water quality based effluent limitations as of the effective date of this Order:</p> <p>Should read:</p> <p>... Where a Permittee believes that additional time to comply with the water quality based effluent limitations is necessary, a Permittee may request a time schedule order (TSO) pursuant to Cal. Water Code section 13300 for the Regional Water Board’s consideration.</p> <p>... fish tissue target of 3.6 ppb wet weight</p> <p>Should read:</p> <p>... fish tissue target of 0.46 ppb wet weight</p>

Attachment B – Detailed Comment Matrix for Watershed Management Program and TMDL Working Proposal

Additional Comment#	Document Reference:	Issue	Comments
56	Section D, TMDLs in LA River, Part 6.f Page 18.	Reference to compliance language presented in Section E.5 should be included	Section E.5 presents the WQBELs for Trash and notes the applicability to the Echo Park Lake Trash TMDL. Language should be included in Part 6.f clearly linking compliance as described in Section E.5. Similar language is included as part of the Santa Monica Bay Nearshore and Offshore Debris TMDL (see page 7 of Section B Part 2.d).

Attachment C
Suggested Revisions to Receiving Water Limitations Working Proposal

V. RECEIVING WATER LIMITATIONS¹

A. Receiving Water Limitations

1. Except as provided in Part V.A.3, Part V.A.4, and Part V.A.5 below, Discharges from the MS4 that cause or contribute to the violation of Receiving Water Limitations are prohibited.
2. Except as provided in Part V.A.3, Part V.A.4, and Part V.A.5 below, Discharges from the MS4 of storm water, or non-storm water, for which a Permittee is responsible², shall not cause or contribute to a condition of nuisance.
3. For Permittees not implementing an approved Watershed Management Program pursuant to [cross reference here], The Permittees shall be in compliance³ with Sections 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 notify³ and thereafter submit a Receiving Water Limitations (RWL) Compliance Report (as described in the Program Reporting Requirements, Section [TBD] of the Monitoring and Reporting Program) to the Regional Water Board for approval. The RWL Compliance Report shall describe the BMPs that are currently being implemented by the Permittee and additional BMPs, including modifications to current BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedances of Receiving Water Limitations. The RWL Compliance Report shall include an implementation

schedule. This RWL Compliance Report may be incorporated in the annual Storm Water Report and Assessment unless the Regional Water Board directs an earlier submittal. The Regional Water Board may require modifications to the RWL Compliance Report.

b. The Permittee shall submit any modifications to the RWL Compliance Report required by the Regional Water Board within 30 days of notification.

c. Within 30 days following the Executive Officer's approval of the RWL 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. For Permittees implementing an approved Watershed Management Program, compliance with Part V.A.1 and Part V.A.2 shall be achieved as outlined in Part VI [insert cross-reference, Watershed Management Programs]. Implementation of an approved Watershed Management Program, including Part VI.C.6 and Part VI.C.7, fulfills the requirements of Part V.A.3.

5. For Receiving Water Limitations associated with waterbody pollutant combinations addressed in an effective TMDL, the Permittees shall achieve compliance as outlined in Part VI [insert cross-reference, Total Maximum Daily Load Provisions] of this Order.

6. SoAs long as the Permittee has complied with the procedures set forth in Section ~~Part V.A.3, Part V.A.4, Part V.A.5~~ above, as applicable, 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.

From: Charlie Yu <charlie.yu@lacity.org>
To: "Renee A. Purdy" <rpurdy@waterboards.ca.gov>, Rebecca Christmann <rchr...
CC: Donna Toy Chen <donna.chen@lacity.org>
Date: 5/22/2012 9:13 AM
Subject: Information on Establishment of Bed Sediment Wasteload Allocations for the Ballona Creek and LA/LB Harbors Toxics TMDLs
Attachments: DRAFT - Information on Toxics WLAs - 05-21-12-revised.doc

Hi Renee, Rebecca and Nicholas,

The attached memo was developed as a follow up to the conversation we had last week with you about the BC Toxics and Harbors Toxics WQBELs in the Working Proposal. Specifically, the TMDLs established WLAs based on pollutants settling in bed sediment and the WQBELs in the working proposal do not take this into account. This memo provides information clarifying our understanding of the issue as well as to propose an approach.

Please contact me if you have any questions.

Charlie Yu

Information on Establishment of Bed Sediment Wasteload Allocations for the Ballona Creek and LA/LB Harbors Toxics TMDLs

5/21/2012

The Los Angeles Regional Water Quality Control Board (Regional Board) Staff Working Proposals for the Greater Los Angeles County MS4 Permit present language incorporating Total Maximum Daily Load (TMDL) requirements. The following memorandum discusses two TMDLs included in the Staff Working Proposal:

- Ballona Creek Estuary Toxic Pollutants TMDL (BC Toxics TMDL)
- Dominguez Channel and Los Angeles/Long Beach Harbors Toxics TMDL (Harbors TMDL)

Both the BC Toxics and Harbors Toxics TMDLs assign mass-based sediment wasteload allocations (WLAs) to stormwater. The WLAs were developed to address elevated levels of pollutants in bed sediment. The loading capacities and corresponding WLAs in the TMDLs represent the mass of pollutants associated with the sediments that settle on the bottom of the waterbodies, which is a subset of what is discharged. However, MS4 Permittees are typically regulated on what is discharged and the current Working Proposal assign effluent limitations set equal to the TMDL WLAs. As such, the WLAs are incorporated into the Working Proposal without consideration that what settles is a subset of what is discharged and would require reductions of loadings above the intent of the TMDL and assumptions of the WLAs.

The following discusses the approach utilized to develop loading capacities and WLAs based on bed sediments and proposes alternatives to the current Working Proposal effluent limitations based on the information presented in the TMDL Staff Report.

Ballona Creek Toxics TMDL

The BC Toxics TMDL includes targets and allocations in sediments for cadmium, copper, lead, silver, zinc, chlordane, DDT, Total PCBs and Total PAHs. As discussed in the BC Toxics TMDL Staff Report, the mass-based allocations are based on the sediments deposited in the estuary rather than what is discharged to the watershed. Section 5 Linkage Analysis (pg 32) states (emphasis added):

The loading capacity of the sediments was estimated from the **annual average net deposition** of fine-grained material at the mouth of the Ballona Creek Estuary. This was translated into pollutant specific numbers using the sediment targets and an estimate of bulk sediment density of the fine-grained **deposits**. This provides a pollutant-specific estimate of the **maximum load that can be deposited** to the sediments on an annual basis. The pollutant-specific loading capacities were then divided into load and waste load allocations using information provided in Section 4 Source Assessment.

The following information on sediment deposition is provided on page 33 of the BC Toxics TMDL and is based on data from 1991 – 2001:

- Annual average sediment discharge from Ballona Creek = 44,615 m³/year
- Estimated sedimentation rate in Area A = 31,977 m³/year
- Estimated sedimentation rate in Area G = 5,851 m³/year
- Estimated net sedimentation rate for Areas A and G = 37,828 m³/year
- Estimation of sediment discharged beyond harbor estimate = 6,787 m³/year
- Based on the composition of sediments, the estimated fine sediments deposited in Areas A and G = 5,004 m³/year

As described on page 36 of the Staff Report, pollutant specific loading capacity was calculated by multiplying the average annual deposition of fine sediments (5,004 m³/year) by the numeric targets for sediments. The TMDL assumes a bulk sediment density of 1.42 metric tons per cubic meter (mt/ m³). **Table 1** presents the discharged and deposited sediment loads in terms of both cubic meters per year and metric tons per year. Loading capacities are presented in Table 5-2 of the Staff Report and **Table 2** below.

Table 1. Sediment Load Estimates from the Ballona Creek Toxics TMDL

Sediment Category		Sediment Load (m ³ /year)	Sediment Load (mt/year) ¹
Total	Discharged	44,615	63,350
	Deposited	37,828	53,720
Fine-grained	Discharged	8,923	12,670
	Deposited	5,004	7,100

¹ Sediment load was converted from m³/year to metric tons/year using the TMDL bulk sediment density of 1.42 metric tons per cubic meter.

Table 2. Ballona Creek Toxics TMDL Loading Capacities

Metals	TMDL (kg/yr)
Cadmium	8.5
Copper	241.6
Lead	332
Silver	7.1
Zinc	1,066
Organics	TMDL (g/yr)
Chlordane	3.55
Total DDT	11.2
Total PCB	161
Total PAH	28,580

As stated previously, the WLAs and corresponding loading capacities for the BC Toxics TMDL represent the mass of pollutant associated with the fine-grained sediment that settles, which is a subset of what is discharged. **Table 3** and **Table 4** present equivalent loading capacities computed for total discharged sediment, total discharged fine-grained sediment, and total settled

(deposited) sediment based on information provided in the TMDL and presented in **Table 1** above.

Table 3. Metals Loading Capacities for Different Sediment Categories

Sediment Category		Cadmium (g/yr)	Copper (g/yr)	Lead (g/yr)	Silver (g/yr)	Zinc (g/yr)
Total	Discharged	75.8	2,154	2,960	63.3	9,505
	Deposited	64.3	1,827	2,510	53.7	8,059
Fine-grained	Discharged	15.2	430.9	592	12.7	1,901
	Deposited*	8.5	241.6	332	7.1	1,066

*Indicates loading capacity listed in the Ballona Creek Toxics TMDL

Table 4. Organics Loading Capacities for Different Sediment Categories

Sediment Category		Chlordane (g/yr)	Total DDT (g/yr)	Total PCB (g/yr)	Total PAH (g/yr)
Total	Discharged	31.7	99.9	1,435	254,850
	Deposited	26.8	84.7	1,217	216,080
Fine-grained	Discharged	6.33	20.0	287	50,970
	Deposited*	3.55	11.2	161	28,580

*Indicates loading capacity listed in the Ballona Creek Toxics TMDL

The equivalent loading capacities presented in **Table 3** and **Table 4** were calculated by computing the appropriate sediment ratio from the TMDL sediment load estimates (**Table 1**) and equating to a loading capacity ratio.

For example, to calculate the DDT loading capacity for total discharged sediment, the ratio of deposited fine-grained sediment to total discharged sediment (0.11) was equated to the ratio of loading capacity for fine-grained deposited sediment to loading capacity of total discharged sediment as follows:

$$7100 \text{ mt/yr} / 63,350 \text{ mt/yr} = 0.11$$

$$11.2 \text{ g/yr} / 0.11 = 99.9 \text{ g/yr DDT}$$

As presented in **Table 3** and **Table 4**, what could potentially be discharged is significantly higher than the current WLAs and the proposed effluent limitations in the Working Proposal. For example, the current WLA for Total DDT is 11 g/yr. If a Permittee were required to discharge at this allocation, the resulting fine-grained deposited load would be 1.2 g/yr, which would translate to an overall sediment concentration of 0.17 ug/kg, an order of magnitude lower than the 1.58 ug/kg numeric target for DDT. Thus, if the WLAs are incorporated into the MS4 permit as currently proposed, Permittees could be out of compliance with the permit while still meeting the assumptions of the WLAs and goals of the TMDL. The proposed approach to address this issue is to utilize the calculated loading capacities presented in **Table 3** and **Table 4** for total discharged sediments. The calculations are based on information provided in the TMDL used to calculate the WLAs and are therefore, consistent with the assumptions of the WLAs. Alternatively, the WLAs could be incorporated into the permit as receiving water limitations only; however, this limits the ability of MS4 Permittees to distinguish their discharges from one another as well as other permitted sources.

LA/LB Harbors Toxics TMDL

The Harbors Toxics TMDL includes targets and allocations in sediments for copper, lead, zinc, total PAHs, total DDT, and total PCBs. Similar to the BC Toxics TMDL, the mass-based allocations are based on the sediments deposited rather than what is discharged to the watershed. Section 6 of the TMDL Staff Report (TMDLs and Allocations, pg 91) states (emphasis added):

The loading capacity of the contaminated sediments within each waterbody was calculated from multiplying the sediment quality target by the **average annual sediment deposition rate** (Equation 3; See also Appendix III, Part 1).

TMDL = total sediment deposition rate x SQV or BSAF
 where sediment deposition rate = average annual mass of sediment deposited per waterbody

Furthermore, as stated in the Regional Board's response to comments (21.3 page 69): "The assigned mass-based sediment WLAs were developed based on hydrodynamic modeling of the amount of sediment deposited." As discussed in Appendix I of the Staff Report, an LSPC model was used to generate sediment and pollutant loadings from the watershed to receiving waters and then an EFDC model was used to simulate the amount of sediment and pollutants deposited within the receiving waters. However, the technical documentation submitted as part of the TMDL does not appear to present the LSPC total sediment loadings for direct comparison to EFDC sediment deposition rates used to develop the allocations.

Table 4-6 of the Staff Report (page 57) does provide an estimate of the average annual load to bed sediment based on the EFDC model. Additionally, in Appendix II, Appendix B, Tables B-1 through B-8 provide estimated loadings to a waterbody (total discharged) based on the LSPC output. Using copper in the Los Angeles River Estuary as an example, Table B-6 indicates that on average the total load of copper discharged to the Estuary is 26,749 kg/year whereas Table 4-6 indicates that on average the total load of copper that settles in bed sediment in the Estuary is 1,611 kg/year. This indicates that on average only 6% of the total load of copper discharged actually settles within the Estuary. Repeating this calculation for the remainder of the pollutants yields slightly different results in terms of the percentage of pollutant discharged that settles. As expected, the calculations suggest that what is discharged is higher than what settles and if the WLAs are to be incorporated as effluent limitations into the MS4 permit they must be adjusted.

It appears the information is available to appropriately calculate MS4 discharge limitations consistent with the allocations. However, additional analyses or processing of the model outputs is likely needed. To ensure consistency between limitations and the WLAs, we recommend working with the USEPA modeling contractor (Tetra Tech) to extract the modeling information needed to appropriately express the MS4 discharge limitations. Initial contact with Tetra Tech suggests they could turn around the necessary analyses within two weeks, though they need to confirm availability of their EFDC modeling staff.

	Total Sediment Discharged (mt/year)	TMDL Numeric Targets (mg/kg)	Loading Capacity Based on Total Discharged Sediment (kg/yr)	Percent MS4 area in WMA	MS4 WLA Based on Total Discharged Sediment (kg/yr)
Metals					
Cadmium	63,350	1.2	76	91.4%	69.5
Copper	63,350	34	2,154	91.4%	1969
Lead	63,350	46.7	2,958	91.4%	2704
Silver	63,350	1	63	91.4%	57.9
Zinc	63,350	150	9,503	91.4%	8685
	Total Sediment Discharged (mt/year)	TMDL Numeric Targets (ug/kg)	Loading Capacity Based on Total Discharged Sediment (g/yr)	Percent MS4 area in WMA	MS4 WLA Based on Total Discharged Sediment (g/yr)
DDTs	63,350	1.58	100	91.4%	91.5
PCBs	63,350	22.7	1,438	91.4%	1,314
PAHs	63,350	4022	254,794	91.4%	232,881
Chlordane	63,350	0.5	31.7	91.4%	29.0

Numbers from the TMDL (total sediment - both coarse and fine-grained material):
Average annual (1991 - 2001) sediment discharge from Ballona Creek:
Estimated fine-grained sediment discharge from Ballona Creek:
sediment deposited - Area A
sediment deposited - Area G
sediment deposited - Area A + G
sediment discharge to SMB beyond harbor
FG sediment discharge to SMB beyond harbor

Fine-grained sedimentation rate:
Area A:
Area G:
Total fine-grained sediment deposition in harbor:

Ratio of deposited FG sediment/total discharged sediment:
Ratio of deposited FG sediment/total deposited sediment:
Ratio of deposited FG sediment/discharged FG sediment:

Calculations in May 21, 2012 Memo - Based on the ratios of deposited FG sediment/total discl

DDT Loading Capacity - discharged sediment (g/yr)
DDT Loading capacity - deposited sediment (g/yr)
PCB Loading Capacity - discharged sediment (g/yr)
PCB Loading capacity - deposited sediment (g/yr)
PAH - discharged (g/yr)
PAH - deposited (g/yr)
Chlordane - discharged (g/yr)
Chlordane - deposited (g/yr)
Cadmium Loading Capacity - discharged sediment (kg/yr)
Cadmium Loading capacity - deposited sediment (kg/yr)
Copper Loading Capacity - discharged sediment (kg/yr)
Copper Loading capacity - deposited sediment (kg/yr)
Lead - discharged (kg/yr)
Lead - deposited (kg/yr)
Silver - discharged (kg/yr)
Silver - deposited (kg/yr)
Zinc - discharged (kg/yr)
Zinc - deposited (kg/yr)

Alternative Calculations - The product of Total Discharged Sediments from TMDL and the TMDL Targets

DDT Loading Capacity - discharged sediment (g/yr)
PCB Loading Capacity - discharged sediment (g/yr)
PAH - discharged (g/yr)
Chlordane - discharged (g/yr)

Cadmium Loading Capacity - discharged sediment (kg/yr)
Copper Loading Capacity - discharged sediment (kg/yr)
Lead - discharged (kg/yr)
Silver - discharged (kg/yr)
Zinc - discharged (kg/yr)

m3/yr	mt/m3	mt/yr
44615.00	1.42	63353.30
8923.00	1.42	12670.66
31977.00	1.42	45407.34
5851.00	1.42	8308.42
37828.00	1.42	53715.76
6787.00	1.42	9637.54
3919.63	1.42	5565.87

m3/yr	mt/m3	mt/yr
4476.78	1.42	6357.03
526.59	1.42	747.76
5003.37	1.42	7104.79

0.11
0.13
0.56

charged sediment, deposited FG sediment/total deposited sediment, and deposited FG sediment/discharged FG se

total sediment	fine-grained sediment	
100	19.97	
85	11.2	<== TMDL WLA
1436	287.13	
1217	161	<== TMDL WLA
254848	50969.51	
216079	28580	<== TMDL WLA
32	6.33	
27	3.55	<== TMDL WLA
76	15.16	
64	8.5	<== TMDL WLA
2154	430.87	
1827	241.6	<== TMDL WLA
2960	592.09	
2510	332	<== TMDL WLA
63	12.66	
54	7.1	<== TMDL WLA
9506	1901.10	
8059	1066	<== TMDL WLA

total sediment
100
1,438
254,807
32

76
2,154
2,959
63
9,503

	Numeric target TMDL (ug/kg)	TMDL Loading Capacity (g/yr)
DDT	1.58	11.2
PCB	22.7	161
PAH	4022	28580
Chlordane	0.5	3.55
	Numeric target TMDL (mg/kg)	TMDL Loading Capacity (kg/yr)
Cadmium	1.2	8.5
Copper	34	241.6
Lead	46.7	332
silver	1	7.1
zinc	150	1066

sediment.



City of Malibu

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May 14, 2012

Sent via email to: LAMS42012@waterboards.ca.gov

Renee Purdy, Regional Program Section Chief
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Los Angeles, CA 90013
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RE: City of Malibu Comments - Staff Working Proposal on LA County MS4 Permit - Provisions Related to Watershed Management Programs, TMDLs, and Receiving Water Limitations

Dear Ms. Purdy:

The City of Malibu thanks the Los Angeles Regional Water Quality Control Board and staff (Regional Board) for allowing an opportunity to review and comment on the proposed provisions relating to Watershed Management Programs, Total Maximum Daily Loads (TMDL) and Receiving Water Limitations (RWL) for the pending draft municipal storm water permit for the Los Angeles region. Early and ongoing communication is critical to the successful development of a protective but reasonable permit, as is providing a reasonable review and comment period. Therefore, while the ongoing dialogue, workshops and public comment periods are much appreciated, more time to review and comment on the draft language is requested.

The City of Malibu has a unique perspective as the only city in Los Angeles County that has been subject to a citizen suit based on problematic language in the 2001 MS4 permit. As a result, the City was forced to divert the City's limited resources (both monetary resources and staff time and effort) to legal defense over the past five years. Thus, Malibu knows the importance of carefully crafting the MS4 Permit language and looks forward to working with the Regional Board, staff and other stakeholders to accomplish our common goals of protecting water quality through reasonable and appropriate regulations. Given the City's unique experience, City staff would welcome the opportunity to meet with the Board and any staff to discuss language options that best meet our common goals.

The City of Malibu, as a participant in the Los Angeles Permit Group (LA Permit Group), supports the comment letter submitted by the LA Permit Group dated May 14, 2012 (also commenting on the draft RWL, Watershed Management and TMDL provisions). The comments therein are a balanced compromise of the various permittees' views and representative of the collective concerns of the permittees. The negotiations and consensus building within that group has been vital to this process and yields workable recommendations for this complex permit. The City strongly encourages the Regional Board to consider the comments in that letter and adjust the proposed permit language accordingly. The City of Malibu would also like to emphasize the following additional comments:

I. General Comments

A. Timing of this process has been unreasonably rushed

Given the short time period to comment on the proposed permit language, the City requests that the Regional Board provide an administrative draft of the full permit for review and comment with a review period of not less than 45 days. A minimum of 45 days will provide the cities a better opportunity to understand the complete permit and work with the Regional Board and other stakeholders before the Board considers the final draft.

First, it is unreasonable to expect agencies to provide technical comments in the review period provided for multiple draft MS4 permit sections. Public notice was provided April 23, 2012 at 5:11 PM, with comments originally due May 11 (18 days total). An extension of one working day was provided to allow a May 14 deadline. The City asks that that the Regional Board and staff recognize the relatively short review periods provided for these latest sections. The City appreciates the additional working day provided; however, the extra day did not provide adequate time for the level of detailed review necessary, given the other comment periods that the City was also required to respond to over the past two weeks.

This review period also coincided with the comment period for several TMDL reconsiderations,¹ and an individual Request for Information to the City of Malibu on alleged exceedances of fecal indicator bacteria (FIB) in the receiving waters.² Given the limited time and financial resources, it is becoming difficult for cities to provide simultaneous technical comments to more than one of these important topics at a time. These issues are very technical and require significant time to review and draft comments. Often these comment letters require assistance from consultants (where funding and time allows) to provide meaningful technical analysis on the issues. Small agencies may only have one staff member dedicated to the implementation of the entire water quality program. As this process moves forward, we request that comment periods be coordinated so that city staff can dedicate an appropriate amount of time to each individual request.

Even though the proposed sections of the permit have been released for limited review and comment periods, each section had to be reviewed out of context and with significant pieces of information yet to be determined (such as relevant definitions and how the sections relate to one another). Without a complete picture, it is difficult to determine the scope of the proposed requirements. Given these limitations, the City requests a minimum 45-day review period for a complete administrative draft.

¹ Public Notice was issued March 23, 2012 at 2:30 PM for a total of five TMDLs, and comments were due May 7 (45 days total), leaving little time to develop a scope of work and get City Council approval on a contract for a technical consultant to assist. The City of Malibu is subject to two different major TMDLs that are being reconsidered, but only had time to review and provide technical comments for one.

² The Regional Board's request for information was dated March 29, 2012 with a deadline of April 30 (30 days total by the time the letter was received). The City of Malibu had to respond regarding eight monitoring locations. Similar letters were sent to many other Santa Monica Bay Watershed cities.

B. The final permit language must be clear and precise, to best explain the intention of the permit provisions.

When interpreting the permit, courts will rely on plain language of the permit, *no matter what was intended*. Hearing transcripts, fact sheets or letters from the Board are not equivalent to what the permit says. Therefore, the City requests that the Regional Board carefully consider all of the permittees' concerns over the unintended consequences of unclear permit language.

C. Response to Regional Board Member questions and comments at the May 3, 2012 Board meeting

1) *The Board asked why municipalities have not been able to meet the TMDL objectives after ten years.*

- a. Municipalities cannot meet standards unless all responsible agencies in the same watershed are subject to the same mandatory regulations and enforcement imposed equally (i.e. parks and open space managers, State and Federal agencies, school districts and schools);
- b. Natural sources of constituents must be considered and standards must be adjusted where applicable; and
- c. The regulations must allow for a process to evaluate "non-compliance," evaluate site specific conditions and more accurately assign responsibility before a permittee is deemed in violation of the permit.

2) *The Board asked why non-governmental organizations (NGOs) and municipalities seem so far apart on numeric limits and adaptive management, and if there are any unifying principals that can be applied that still provide a wide margin of safety for public health and aquatic life and incorporate these divergent views.*

Board members wondered why the NGOs testified that only numeric limits should be applied while the municipalities presented arguments why adaptive management (or an iterative approach) is warranted. In concept, the Board viewed these as worlds apart but, in reality, they are not. The two paths are useful and both can be incorporated into a permit, but only if there is unambiguous language in the permit that protects the permittees from being automatically deemed out of compliance if numeric limits and/or exceedance days are exceeded. Most important, however, is the ability of a permittee to address extraordinary conditions that affect monitoring results before opening the door to a costly and time consuming citizen suit. In the real world, no agency can design for, contain or pay for a 50- or 100-year storm or extraordinary environmental conditions or the activities of agencies not under their authority. This type of protection for the permittees to account for sources of constituents outside their control is absent in the

current regulations, and this issue has not been resolved in the proposed new permit provisions (discussed in more detail below).

- 3) *The RWQCB staff and members indicated a preference for integrated watershed management solutions with prioritization based upon adopted TMDLs as the preferred path.*

Watershed management is a good solution. As the Executive Officer indicated, this is not a new concept for LA County Permittees, as the current TMDL jurisdictional groups are often organized by watershed. Participation is voluntary and, so far, only some of the agencies that are specifically named in a TMDL cooperate. The fatal flaw is that only municipalities are held responsible in the NPDES MS4 Phase I permit and TMDL regulations, so there is no incentive for other agencies to participate. Currently, only state and federal park agencies that “have jurisdiction over a beach adjacent to Santa Monica Bay are named as jointly responsible.”³ The new TMDL regulations must expand the definition of “responsible jurisdiction” to include all agencies in a watershed. Parklands are being developed, roadways and parking lots are being paved, and environmentally sensitive habitats are being compromised without oversight or being held to the same conditions and protective actions as permittees, thereby, undermining the permittees’ efforts to protect water quality.

We understand from the Board members comments that individual members believed that cooperation of all responsible agencies would be most cost effective and would help meet clean water standards sooner. However, the Board also learned that local governments have no legal authority over other agencies operating in the watershed and that these other entities are not yet subject to an equivalent NPDES permit, conditional waiver or other order to ensure compliance with the TMDL. Watershed management is most successful when all participating agencies are subject to the same regulations.

- 4) *RWQCB staff stated that the Board has the authority to adopt orders for NPDES MS4 Phase II Small Communities and Non-Traditional entities in the absence of State Water Resources Control Board action.*

The City was very pleased to hear of this possibility. Unless all agencies that control or contribute to the impairment of clean water and natural resource degradation are regulated equally, cities will be unable to achieve compliance with water quality standards.

The City of Malibu and other Malibu Creek Watershed and North Santa Monica Bay rural coastal watershed municipalities have been diligently working on integrated watershed management for the past ten years. The voluntary participation of State and Federal agencies has been minimal or completely absent to date, even when neighboring cities try to engage the agencies in the process, sometimes to the point of offering free

³ Proposed Amendment to the Water Quality Control Plan – Los Angeles Region to Revise the Santa Monica Bay Beaches Bacteria TMDL - Attachment A – Pages 4-8

professional services. We were pleased to hear RWQCB staff explain that a municipality only had to ask the Board to take the necessary steps to address this regulatory inequity.

The City of Malibu requests that NPDES MS4 Phase II Non-Traditional permit procedures be initiated so that the following agencies, which discharge to the watersheds or commingle with facilities in the City, are compelled to meet the Clean Water Act regulations through the NPDES MS4 Phase II Non-Traditional orders:

- California State Parks
- Santa Monica Mountains Conservancy
- Mountains Recreation and Conservation Authority
- Santa Monica Mountains National Recreation Area
- Santa Monica-Malibu Unified School District
- Santa Monica College
- Pepperdine University

In anticipation of a permit for these agencies, the City requests that each of the above agencies be specifically listed as responsible jurisdictions in the TMDL regulations during the reconsiderations, with the Basin Plan and the findings of the new NPDES MS4 permit being amended accordingly.

- 5) *The Board wondered if there is a procedure in place for natural source exclusion, so that municipalities would not be responsible for bacteria or nutrient contributions from environmental influences over which the cities have no control.*

The staff responded that there are new advances in microbial source tracking that make sources of pollutants easier to evaluate. The City's recent submittals⁴ to Regional Board staff provide concrete examples where an agency is held accountable for a natural and uncontrollable source of a pollutant (in this case FIB) even where there is no MS4 discharge.

The 2002 TMDL regulations delineated specific actions for State Parks to help evaluate the natural sources influencing the historically elevated levels of bacteria in Malibu Lagoon and Surfrider Beach. State Parks has not undertaken any of these activities to date. Remember, the Malibu Creek Watershed municipalities have no control over enforcement of those conditions, yet the municipalities are ultimately responsible for the water quality in the watershed. Thus, it is imperative that all responsible agencies be held to the same standard to protect against water quality degradation.

The City is very encouraged to learn that Regional Board staff and the Executive Officer will consider natural source exclusions. The City presented technical suggestions in its May 7, 2012 comment letter (previously referenced) based upon (1) other California Regional Board actions; (2) research from the past ten years; and (3) recommendations

⁴ Technical comments to the Regional Board for the Santa Monica Bay Beaches Bacteria TMDL Reconsideration submitted on May 7, 2012 and the Response to Request for Information on April 30, 2012, incorporated herein by reference.

from the U.S. Environmental Protection Agency on this subject. The City requests a meeting with the Executive Officer and staff to further discuss those suggestions and alternative pathways to compliance that properly account for Natural Sources Exclusion (NSE).

A number of recent Santa Monica Bay studies have further identified and confirmed natural (non-anthropogenic) sources of FIB – including plants, algae, decaying organic matter, beach wrack and bird feces – implicating these as potentially significant contributors to exceedances (Imamura et al 2011, Izbicki 2012b). Beach sand, sediments and beach wrack have been shown to be capable of serving as reservoirs of FIB, possibly by providing shelter from UV inactivation and predation by allowing for regrowth (Imamura et al 2011, Izbicki et al 2012b, Lee et al 2006, Ferguson et al 2005, Grant et al 2001, Griffith 2012, Litton et al 2010, Phillips et al 2011, Jiang et al 2004, Sabino et al 2011, and Weston Solutions 2010). In fact, enterococci include non-fecal or “natural” strains that live and grow in water, soil, plants and insects (Griffith, 2012). Thus, elevated levels of enterococci in water could be related to input from natural sources. Sediments in Malibu Lagoon have also been shown to serve as a reservoir for nutrients (Sutula et al 2004), which, once released, may encourage regrowth of FIB (Weisberg et al 2009 and Surbeck et al 2010).

Without a reasonable path for site-specific objectives or scientifically-based NSE, the waters adjacent to the City of Malibu will always experience “exceedances” due to natural sources. The only options available to combat natural sources would destroy the natural ecosystems that the regulations are intended to protect. No BMP can keep the kelp from dislodging from its continually expanding natural setting in Malibu. Grooming kelp and sea grass off the sand, and preventing birds from foraging in the wrack and out of lagoons, are not appropriate options, despite NGOs arguments that these are acceptable solutions. For example, beach grooming to remove stranded kelp has been shown to adversely impact the beach ecosystem (Dugan & Hubbard, 2010). Thus, a decision to remove wrack from a beach should only be undertaken after careful consideration of both water quality and ecosystem needs (Imamura, 2011). Unfortunately, wrack removal may be the only measure available for mitigating natural sources of FIB at beaches impacted by kelp wrack in Malibu (unless, of course, there is a defined natural source exclusion (NSE) process specifically outlined in the reconsideration and the new NPDES permit.

NSE-based Waste Load Allocations could be consistent with the San Diego Regional Water Quality Control Board’s (SDRWQCB) NSE Basin Plan Amendment (BPA), which was also approved by the State Water Resources Control Board (SDRWQCB 2008)⁵. According to the SDRWQCB NSE Basin Plan Amendment, application of an NSE Approach (NSEA) would require that dischargers: (1) Control anthropogenic sources of FIB to the water body; (2) demonstrate that all anthropogenic sources are

⁵ SDRWQCB, 2008. “San Diego RWQCB NSE Basin Plan Amendment and Tech Report.” http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/issue_7.shtml

controlled; and (3) demonstrate that the remaining FIB concentrations do not indicate a health risk (SDRWQCB 2008, p.13). The NSE BPA states that the first requirement, to control anthropogenic sources of FIB, “does not mean the complete ‘elimination’ of all anthropogenic sources of bacteria as this is both impractical as well as impossible” due to sources such as re-suspension of bacteria from sediments by swimmers and shedding by swimmers (SDRWQCB 2008, p.21). Rather, dischargers must demonstrate that controls have been implemented such that anthropogenic sources do not cause or contribute to exceedances of water quality objectives, and a weight of evidence approach is recommended in order to demonstrate that the control of anthropogenic sources has been achieved (SDRWQCB 2008, p.21-22). As seen in San Diego, a NSE approach is reasonable and appropriate.

- 6) *Board members wondered about the economic costs for local government to implement the NPDES MS4 and TMDL regulations for the past 10 years and whether there were grants available (in the context of the discussion about what cities can do to address the last “11%” of drains that may cost double of the first 89%).*

The City of Malibu has spent well over \$50 million on water quality, and environmental enhancement and restoration projects and programs Citywide in the past ten years. In order to meet objectives and comply with just two TMDLs,⁶ the City constructed the Civic Center Stormwater Treatment Facility and Legacy Park.⁷ The Civic Center Stormwater Treatment Facility cost \$5,800,000 for design and construction, and Legacy Park cost an additional \$35,125,996 for land acquisition, design and construction. In total, these projects’ annual maintenance costs are approximately \$100,000.

Together, these projects function as a stormwater and urban runoff diversion, treatment and storage facility, and reclaimed water source, which prevents discharge of any dry-weather runoff in the Malibu Civic Center area from any City MS4 drains. Stormwater is detained and disinfected and stored for reuse to the maximum extent feasible. Wet weather treatment exceeds bacteria TMDL limits by over 5 times. The detention pond in Legacy Park is capable of capturing up to 2,600,000 gallons of runoff from a drainage area of 330 acres prior to treatment and use for irrigation. This equates to a cost of \$124,018 per acre to capture and treat water (not counting annual maintenance). Despite the fact that Malibu has captured and treated its stormwater runoff, exceedances of FIB persist in Malibu Lagoon and near shore environment due to natural sources. Also, this is just one example of the City’s efforts to address one beach, although it is responsible for about 22 miles of shoreline impacted by natural sources of FIB.⁸

⁶ The City constructed projects to meet objectives in the Santa Monica Bay Bacteria TMDLs and Malibu Creek and Lagoon Bacteria TMDL.

⁷ Legacy Park has received at 6 awards since 2010, including: American Society of Civil Engineers’ “Project of the Year” Award for Region 9, which includes the entire state of California, and the California Stormwater Quality Association (CASQA) “Outstanding Stormwater Best Management Practice Implementation - Comprehensive Regional Project” award.

⁸ Of note, sources of FIB in the Malibu Lagoon and Surfrider Beach areas are not caused by onsite wastewater treatment systems (OWTS) either. Local microbial source tracking (MST) study results indicate that human fecal contributions are minor or non-existent. Several MST studies have been conducted within North Santa Monica Bay subwatersheds to assess the presence of human fecal contamination during dry weather. Noble et al (2005) sampled from Malibu Creek, Malibu Lagoon and from the discharge of the Lagoon to the beach. Jay et al (2011)

II. Watershed Management Program

Use of a Watershed-based regulatory scheme is a proactive step in the right direction for reasonable and appropriate permit standards. Because the sources of, and measures to control, pollutants in stormwater are complex, the permit must utilize flexible and iterative regulatory mechanisms. The Los Angeles Region MS4 Permit is already a complicated permit. The complexities increase exponentially with the inclusion of 32 different TMDLs that cover overlapping jurisdictions. Thus, prioritizing compliance actions and allocating funding to meet the highest priorities in accordance with mandated deadlines will require a tremendous amount of coordination and strategy amongst all of the watershed permittees.

The current proposal does not provide enough time to develop the watershed management plans necessary to meet the stringent water quality objectives. For example, preparation of the Integrated Implementation Plan for the Malibu Creek Watershed Bacteria TMDL within one year was extremely difficult with eight agencies collaborating on the plan for one TMDL. Other TMDLs with more challenging issues and more agencies will certainly take longer. Therefore, the City requests at least two years to develop the Watershed Management Plans. The permittees will continue to comply with all MS4 permit requirements, including minimum control measures while plans are being developed, so there is no harm in extending the deadline.

Lastly, Watershed Programs need to consider the previously mentioned need for an NSE where a watershed management plan alone will be insufficient to meet water quality objectives.

III. TMDLs

- A. All TMDLs will be incorporated into the MS4 Permit and must have reasonable and appropriate standards. The TMDL reconsiderations must not be limited in scope to the small number of issues originally listed in the TMDLs because pollutant source identification methods and technology to comply with standards have evolved since the TMDLs were developed. A similar concern is also mentioned in the LA Permit Group's letter, stating, "Additionally, the majority of the TMDLs were developed with the understanding that monitoring, special studies, and other information would be gathered during the early years of the TMDL implementation to refine the TMDLs. As such, many MS4 dischargers were told during TMDL adoption that any concerns they may have over inaccuracies in the TMDL analysis would be addressed through a TMDL reopener." Some of those exact concerns are being overlooked in the proposed language for the June 7, 2012 TMDL

collected samples from the Malibu Creek, Malibu Lagoon and Surfrider Beach, and Izbicki et al (2012b) tested Malibu Lagoon and near-shore ocean water. Two of the three studies (Noble et al 2005 and Izbicki et al 2012b) found no detection of human markers in any of the surface water samples tested, and Jay et al found no evidence of human fecal marker HF183 at Surfrider Beach; however, Jay et al did detect low levels of human marker HF183 in several samples (5 out of 80 samples, or 6%) that were collected from lower Malibu Creek and Malibu Lagoon. It was noted that the detected lagoon levels correspond to 0.00005-0.0009% sewage or greater than 5-log (>100,000 times) dilution. Potential sources for human contributions were not identified; however, the Izbicki study specifically investigated the potential for OWTS to serve as sources of human fecal contamination to Malibu Lagoon and did not find evidence linking microbial communities (based on TRFLP [terminal restriction fragment length polymorphism] community analysis) found in these systems to those found in the Lagoon or beach. Furthermore, all 25 groundwater samples were negative (non-detect) for HF183 (Izbicki, 2012a). All of these aforementioned studies were provided to the Regional Board on May 7, 2012 as part of the City's technical response for the Santa Monica Bay Beaches Bacteria TMDL Reconsideration.

Reconsiderations. It appears that staff limited the reconsideration scope to only issues identified almost a decade ago in the original Basin Plan Amendments. That is problematic in that once the TMDL are incorporated into the permit, permittees will be held to outdated objectives based on incorrect assumptions and, in some cases, outdated science.

- B. While the City supports the LA Permit Group letter, there is one point in the detailed spreadsheet of comments attached to the letter that may be understated. In the group's TMDL Working Proposal spreadsheet, Comment 2 regarding Page 5 section B.1.c. (2) of the Regional Board's proposal states, "Data collected at the reference beach since adoption of the TMDL, as tabulated in Table 3 of the staff report of the proposed revisions to the Basin Plan Amendment, demonstrate that natural conditions associated with freshwater outlets from undeveloped watersheds result in exceedances of the single sample bacteria objectives during both summer and winter dry weather on approximately 10% of the days sampled."

The Regional Board staff analysis did indeed make this finding; however, as described in the City's letter dated May 7, 2012, upon close examination, the actual monitoring results do not support the Regional Board staff conclusions. The draft TMDL staff report (top of page 12) states that the summer dry weather allowable exceedance rate of 0% is retained, despite evidence presented on page 11 (Table 2) that a 10% rate would be more appropriate. Regional Board staff rationale for this is there were no exceedances at the Leo Carrillo reference beach for 5 of the past 6 years, between 2004 and 2010, during summer dry weather. However, this is not consistent with the City's review of the data and, in fact, between 2004 (interpreted as November, per TMDL staff report Table 3) and 2010, FIB concentrations at Leo Carrillo have exceeded the single sample limits during summer dry weather in 2005, 2006 and 2008, or for 3 those 6 years.

Therefore, the City requests again (as it did in its May 7, 2012 letter) that the Regional Board account for natural water quality variability by setting the allowed rate to the 90th percentile at the reference beach. This is similar to how the Regional Board deals with setting the number of wet days to account for hydrologic variability (as discussed in Comment #8 of that letter), rather than the average. This is a more consistent approach to assessing natural conditions and variability. The 90th percentile allowable exceedance rates, based on data collected 2003 – 2011 at Leo Carrillo, would then be 20% (not 10%) during summer dry weather, 18% during winter dry weather and 46% during wet weather.

- C. Next, please explain what it means that a receiving water limitation is "group-based and shared among all MS4 permittees?" Is this another way of providing for joint liability for discharges? This group-based concept must be explained better for the permittees to know what it entails, and to assess if it is within the scope of the Clean Water Act.

Under the Federal Regulations of the Clean Water Act, a co-permittee to a system-wide permit covering all, or a portion of all, municipal separate storm sewers in adjacent or interconnected large or medium municipal separate storm sewer systems need only comply

with permit conditions relating to discharges from the MS4 for which they are operators.⁹ Thus, a co-permittee cannot be held responsible for compliance with waste load allocations from separate storm sewers for which it is not an operator. The State Water Resources Control Board also acknowledges that waste load allocations are only enforced for a discharger's own discharges.¹⁰ Permittees should not be jointly liable for bacteria exceedances in the receiving waters; exceedances must be tied to a City's own discharges and activities. It is fundamentally unfair to hold one city responsible for discharges from other jurisdictions over which it has no control just because the cities are in the same watershed.

Accordingly, any proposed permit provisions attempting to impose joint liability for all permittees within a watershed should be removed. It would be in conflict with the Federal Regulations of the Clean Water Act and the Porter-Cologne Water Quality Act, which apply liability only to a discharger's own discharges, not those of others. There is no authority for such a provision under the Federal Clean Water Act and would make it essentially a permit provision more stringent than required by federal law.

- D. Any implementation plan must separate North Santa Monica Bay from South Santa Monica Bay. There is no hydraulic connection between the North and South Santa Monica Bay, and neither the northern nor southern areas share any headwaters.¹¹ Many of the water quality management strategies of the Southern (more urban) watersheds in the Bay are not applicable to the rural coastal watersheds of the Northern Bay. The permit would benefit from dividing these provisions into two sections. To the extent that there are universal applications like FIB standards, the TMDL section can start with a universal discussion, but the tables and reports should delineate the standards for the appropriate portion of the watershed. In other words, all the charts, tables and compliance points should be divided according to the boundaries of the Greater Los Angeles Integrated Regional Water Management Plan so there is some consistency about watershed management that recognizes the geography.

The fact that these watersheds outlet to the same Bay only relates to receiving water standards and does not take into account the watershed management activities, characteristics of contributing land uses, or shared compliance and commingled drains. This may not be the case with other watersheds in the LA Region, but it is a critical point in the Santa Monica Bay TMDLs to distinguish the rural coastal watersheds in the North Santa Monica Bay from the more urban areas in the South Bay.

IV. Receiving Water Limitations Section Comments

- A. One of the biggest issues to address this time around is which entities are responsible for a discharge. The City appreciates the citation to 40 CFR 122.26(a)(3)(vi), which provides that a permittee is only responsible for discharges of stormwater and non-stormwater from the

⁹ 40 CFR 122.26(a)(3)(vi) and 40 CFR 122.26 (b)(1).

¹⁰ SWRCB Resolution No. 2002-0149, paragraph 9.

¹¹ See attached Map. North Santa Monica Bay has a green boundary and South Santa Monica Bay has a purple boundary.

MS4 for which it is an operator; however, please clarify what it means to be an operator of the MS4. Note that the word owner is not used in 40 CFR 122.26(a)(3)(vi) or 122.26(b)(1). For example, Malibu has faced allegations that it was responsible for discharges from an MS4 that it did not own or operate, but where the City may have provided maintenance service or may have stenciled the inlet with a clean water message. Therefore, it is imperative that “operate” be defined in a manner consistent with the Clean Water Act. As we have learned, the more specific the permit language, the less likely it is to unnecessarily broaden.

- B. Next, the Receiving Water Limitations language in the permit (i.e., the language that determines when a permittee is in violation) must contain better protections against unfounded and costly citizen suits and must better explain when a permittee is affirmatively in violation of the permit.

First, the RWL language must include a process that provides some limited protection against unfounded citizen suits if the permittee is acting in good faith to resolve any discharge-related issues. This suggested process is appropriate because an MS4 permittee should not automatically be in violation of the permit if there is an exceedance; the exceedance may not have been caused from an MS4 discharge.¹² The permit must acknowledge that MS4 discharges are not the only source of pollutants in the water and regulate accordingly, as discussed above. If monitoring demonstrates that a particular compliance strategy is not working, through no fault of the discharger, then the discharger must have time to identify and implement a new strategy before being held liable for natural water quality alterations that may be beyond its control.

What follows is suggested language from the Port of Stockton's permit that sets forth when a permittee is in violation and authorizes the Regional Board to initiate an investigation before a permittee is found to be in violation. The State Water Resources Control Board and the EPA have approved use of this permit language. This is also a good example of where the final compliance date is used and allows for implementation and final date modification in the permit.

Receiving water limitations are site-specific interpretations of water quality standards from applicable water quality control plans. As such, they are required to be addressed as part of the permit. However, a receiving water condition not in conformance with the limitation is not necessarily a violation of this Order. The Central Valley Water Board may require an investigation to determine cause and culpability prior to asserting a violation has occurred.

Discharges from MS4s shall not cause the following in receiving waters:

(Mercury TMDL Example RWL)

¹² The City incorporates herein by reference its May 7, 2012 comment letter on the SMBBB TMDL Reconsideration, emailed to Man Voong, and CD with supporting documents hand-delivered to Regional Board offices on the same day. This letter includes multiple examples of natural sources of bacteria (also referenced in Footnote 4 above).

Violation of the methylmercury waste load allocation for the Permittee, by Delta subregion, upon approval of the Delta Mercury Control Program by US EPA and after 2030. The wasteload allocation is:*

- *Central Delta 0.39 grams/year; and*
- *San Joaquin River 0.0036 grams/year*

** The final compliance date for the WLAs is 2030. Compliance with the methylmercury waste load allocation shall be met as soon as possible, but no later than 2030, unless the Central Valley Water Board modifies the Delta Mercury Control Program implementation schedule and final compliance date.*

The following additional suggested language from the same permit also explains what an appropriate iterative approach is for explaining what is not considered a violation:

If the Permittee is found to have discharges notwithstanding the prohibitions in Provision A, or discharges causing or contributing to an exceedance of an applicable benchmark value, water quality objective, waste/wasteload allocation, or receiving water limitation in Provision B, the Port will not be determined to be in violation of this Order unless it fails to comply with the requirement to report such discharge (Provision C.3.a.), and revise its BMPs to include additional and more effective BMPs, and to implement the same (Provision C.3.b-d). Further, the Port may demonstrate in its SWMP that the use of particular benchmark values are not appropriate (e.g., aluminum, electrical conductivity) due to local ambient conditions or other environmental studies (e.g., Water Effect Ratios).

Compliance with Discharge Prohibitions and Receiving Water Limitations

As reflected in the findings, the effect of the Port's storm water discharges on receiving water quality is highly variable. For this reason, this Order requires that, within its geographic jurisdiction, the Permittee shall design its storm water program to achieve compliance with water quality standards over time through compliance with the following, which reflects an iterative approach...

The City is also concerned that the interplay between the Ocean Plan and the MS4 Permit be appropriately explained in the permit. The permit needs to specifically state that the TMDL-based requirements in the permit also provide compliance with the Ocean Plan's similar bacteria objectives to alleviate the argument that TMDL language only covers the bacteria objectives in the Basin Plan, not the (nearly identical) Ocean Plan objectives.

Also, it is not clear if the proposed permit is consistent with the statewide ASBS Exception and Special Protections, issued by the State Water Resources Control Board on March 20, 2012. This new NPDES permit proposes that every single drain in an ASBS natural stream watershed must meet all ASBS special protections. Under that scenario, any Malibu MS4 drain in the entire watershed could be considered an ASBS drain. Only a handful of drains or inlets near the ASBS are Malibu's responsibility under the Exception, and the City can provide staff information on the location of those drains. Therefore, all the drains that

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discharge to a natural stream or gully that are separated from the beach by natural vegetation or dilution were not intended to be included. In fact, the SWRCB definition may limit these ancillary contributory drains to ones that are either seaward of Pacific Coast Highway or within 1000 feet of the high tide line. Since the Regional Board will be phased in to manage the Exception and Special Protections for the ASBS at the regional level, it is critical that the City and the Regional Board discuss how to effectively incorporate the ASBS regulations into the permit.

If the overarching considerations the City detailed in this letter are considered and appropriately incorporated in the new permit and TMDL regulations, the methods to reach clean water objectives and prevent degradation become more appropriate and reasonable. Mitigation measures will also cost less in the long run, as costs are spread out or one agency isn't trying to mitigate/overcorrect the actions of another agency. Unless these issues above are addressed, the new NPDES MS4 permit and the TMDL reconsiderations may not meet Board expectations.

Malibu is appreciative of the Regional Board's efforts to consider the comments from stakeholders and to work collaboratively on this permit reissuance, and understands the inherent challenges in drafting a permit for such a diverse geographic region. Again, the City would like to emphasize the need for flexibility and reasonableness when a one-size fits all approach is not feasible for various parts of the County. In the end, the permit must identify a method of balancing the need to protect receiving water quality in a manner that accounts for the real, practical challenges that the permittees face. The City of Malibu continues to support the interactive approach to developing this permit and iterative options for compliance, thanks the Regional Board for the opportunity to comment and urges the Regional Board to properly address the City's comments. If you have any questions regarding this letter, you may contact Jennifer Brown, Senior Environmental Programs Coordinator, at (310) 456-2489, ext. 275, or jbrown@malibucity.org.

Sincerely,



Jim Thorsen
City Manager

Enclosure

cc: Mayor Rosenthal and Honorable Members of the Malibu City Council
Christi Hogin, City Attorney
Vic Peterson, Environmental Sustainability Director
Bob Brager, Public Works Director
Jennifer Brown, Senior Environmental Programs Coordinator
Chair Mehranian and Members of the Los Angeles Regional Water Quality Control Board
Sam Unger, Executive Officer, Regional Water Quality Control Board
Ivar Ridgeway, Stormwater Permitting Chief, Regional Water Quality Control Board

References

Dugan, J.E. and D.M. Hubbard. 2010. "Loss of Coastal Strand Habitat in Southern California: The Role of Beach Grooming." *Estuaries and Coasts* 33(1): 67-77.

Ferguson, D.M., Moore, D.F., Getrich, M.A., and M.H. Zhouandai, 2005. "Enumeration and Speciation of Enterococci Found in Marine and Intertidal Sediments and Coastal Water in Southern California." *Journal of Applied Microbiology* 99(3).

Grant, S.B., Sanders, B.F., Boehm, A.B., Redman, J.A., Kim, J.H., Mrse, R.D., Chu, A.K., Gouldin, M., McGee, C.D., Gardiner, N.A., Jones, B.H., Svejkovsky, J., Leipzig, G.V., and A. Brown, 2001. "Generation of Enterococci Bacteria in a Coastal Saltwater Marsh and its Impact on Surf Zone Water Quality." *Environmental Science and Technology* 35(12).

Griffith, J.F., 2012. "San Diego County Enterococcus Regrowth Study." SCCWRP Technical Report.

Imamura, G.J., Thompson, R.S., Boehm, A.B., and J.A. Jay, 2011. "Wrack Promotes the Persistence of Fecal Indicator Bacteria in Marine Sands and Seawater." *FEMS Microbiology Ecology* 77(1).

Izbicki, J, 2012a. "RE: MS#1092: Update submitted for "Sources of Fecal Indicator Bacteria to Groundwater, Malibu Lagoon, and the Near-Shore Ocean, Malibu, California." "RE: USGS Study". Email to Barbara Cameron. May 4, 2012 11:18 am.

Izbicki, J., Swarzenski, P., Burton, C., and L.C. Van DeWerfhorst, 2012b. "Sources of Fecal Indicator Bacteria to Groundwater, Malibu Lagoon, and the Near-shore Ocean, Malibu, California." Submitted 2012

Jay, J.A., Ambrose, R.F., Thulsiraj, V., and S. Estes, 2011. "2009 Investigation of Spatial and Temporal Distribution of Human-specific *Bacteroidales* Marker in Malibu Creek, Lagoon and Surfrider Beach." DRAFT.

Jiang, S., McGee, C., Candelaria, L., and G. Brown, 2004. "Swimmer Shedding Study in Newport Dunes, California. Final Report." http://www.waterboards.ca.gov/rwqcb8/water_issues/programs/tmdl/docs/swimmerreport.pdf

Lee, C.M., Lin, T.Y., Lin, C.C., Kohbodi, G.A., Bhatt, A., Lee, R., and J.A. Jay, 2006. "Persistence of Fecal Indicator Bacteria in Santa Monica Bay Beach Sediments." *Water Research* 40(14).

Litton, R.M., Ahn, J.H., Sercu, B., Holden, P.A., Sedlak, D.L., and S.B. Grant, 2010. "Evaluation of Chemical, Molecular, and Traditional Markers of Fecal Contamination in an Effluent Dominated Urban Stream." *Environmental Science and Technology* 44(19).

Noble, R.T., Griffith, J.F., Blackwood, A.D., Fuhrman, J.A., Gregory, J.B., Hernandez, X., Liang, X., Bera, A.A., and K. Schiff, 2005. "Multi-Tiered Approach Using Quantitative Polymerase Chain

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Reaction for Tracking Sources of Fecal Pollution to Santa Monica Bay, California.” SCCWRP Technical Report #446.

Phillips, M.C., Solo-Gabriele, H.M., Piggot, A.M., Klaus, J.S., and Y. Zhang, 2011. “Relationships between Sand and Water Quality at Recreational Beaches”, *Water Resources* 45(20).

Sabino, R., Verissimo, C., Cunha, M.A., Wergikowski, B., Ferreira, F.C., Rodrigues, R., Parada, H., Falcao, L., Rosado, L., Pinheiro, C., Paixao, E., and J. Brandao, 2011. “Pathogenic Fungi: An Unacknowledged Risk at Coastal Resorts? New Insights on Microbiological Sand Quality in Portugal.” *Marine Pollution Bulletin* 62: 1506-1511.

SDRWQCB, 2008. “San Diego RWQCB NSE Basin Plan Amendment and Tech Report.” http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/issue_7.shtml

Surbeck, C.Q., Jiang, S.C, and S.B. Grant, 2010. “Ecological Control of Fecal Indicator Bacteria in an Urban Stream.” *Environmental Science and Technology* 44 (2).

Sutula, M., Kamer, K., and J. Cable, 2004. “Sediments as a Non-Point Source of Nutrients to Malibu Lagoon, California (USA).” SCCWRP Technical Report #441.

Weisberg, S.B., and D.M. Ferguson, 2009. “North Santa Monica Bay Source Investigation Study, Ramirez Creek and Escondido Creek, Malibu, 2009 Summary and Recommended Studies.” SCCWRP.

Weston Solutions, 2010. “Tecolote Creek Microbial Source Tracking Summary – Phases I, II, and III.”

From: Heather Maloney <hmaloney@ci.monrovia.ca.us>
To: "LAMS42012@waterboards.ca.gov" <LAMS42012@waterboards.ca.gov>
Date: 5/14/2012 4:01 PM
Subject: Monrovia Comments re RWL, TMDLs, WMP
Attachments: LA Permit Group - Comments re RWL, TMDLs, WMP 5-14-12.pdf

On behalf of the City of Monrovia, we concur with the statements in the LA Permit Group's Letter dated 5-14-12. Thank you for the opportunity to comment.

Sincerely,

Heather M. Maloney
Senior Management Analyst
City of Monrovia - Department of Public Works - Administration & Environmental Services
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CITY OF SIGNAL HILL

2175 Cherry Avenue • Signal Hill, California 90755-3799

May 14, 2012

VIA EMAIL

Renee Purdy
Los Angeles Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90023

LAMS42012@waterboards.ca.gov

Subject: Comments on Receiving Water Limitations, TMDL Provisions, and Watershed Management Program Being Considered for Reissued Los Angeles County MS4 Permit

Dear Ms. Purdy:

I am writing on behalf of the City of Signal Hill to provide comments on the Receiving Water Limitations, TMDL Provisions, and Watershed Management Program being considered by Regional Board staff for inclusion in the Reissued Los Angeles County MS4 Permit. Thank you for the time extension, which allowed us to more thoroughly review the language in these proposed components. We appreciate the opportunity to provide these comments.

General Comments

The City of Signal Hill appreciates the Board's program of staff workshops and Board workshops to present and discuss staff's current thinking about permit provisions. However, we agree with the LA Permit Group that it would be helpful to permittees and other interested parties to have a complete Administrative Draft available for review and comment before the Tentative Order is released to begin the formal comment period. It also would be helpful to have either a staff or Board workshop on an Administrative Draft in order to examine the interrelationships among the various sections of this critical permit. Issuing an Administrative Draft and conducting a workshop should not delay the permit hearing more than one month since staff is currently proposing to release the Tentative Order by the end of this month or the first week of June. Instead, staff could issue an Administrative Draft for review and comment.

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We also agree with the Permit Group that more flexibility is needed in the proposed permit because of the complexity introduced by the incorporation of 32 sets of total maximum daily load (TMDL) requirements into the permit. In reality, these TMDL requirements include waste load allocations (WLAs) for approximately 500 waterbody/pollutant combinations, and expanded permit activities during the next MS4 permit cycle are going to be driven largely by (TMDL) requirements.

One general issue that impacts municipalities' ability to address both the sources of non-stormwater discharges and the quality of stormwater discharges is their inability to regulate schools. Since the State Water Board has decided to not automatically include schools in the reissued Phase II MS4 Permit, the Regional Board should determine how it could encourage or require school districts to cooperate with municipalities to control non-stormwater discharges and improve the quality of stormwater discharges from school sites. Both the existing Phase II MS4 Permit and the draft next generation permit allow the Regional Board to designate K-12 school districts on a case-by-case basis. If schools are identified as concerns in Watershed Management Programs, municipalities will need the Regional Board's assistance to secure cooperation from schools.

One other general concern is that the elements of the permit that we have seen to date do not acknowledge the opportunity for municipalities to have their own permits. The opportunity for individual municipalities to "develop and submit for approval by the Executive Officer a Watershed Management Program that addresses all water quality-based effluent limitations and receiving water limitations to which the Permittees is subject pursuant to established TMDLs" is welcome. However, we do not understand why municipalities that are willing to bear the extra costs of having their own permits are not allowed to do so. Without a Principal Permittee, it appears that each municipality will have to submit its own Annual Report. Therefore, an annual report for a municipality with its own permit will not put an extra burden on Regional Board staff, especially if the separate permits contain the same basic requirements as the area-wide permit.

The City has requested on numerous occasions that the Board issue an individual permit to the City of Signal Hill. The City would prefer to be responsible for its own actions or inactions, and not those of other jurisdictions. It will continue to participate in watershed activities through current and future MOAs, and is willing to implement a comprehensive monitoring program to measure the effectiveness of its water quality improvement efforts.

We also will continue to work with the City of Long Beach, which was granted a separate permit in 1992. The City has a long, productive working relationship with the City of Long Beach, since our drainage flows through that community to receiving

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waters. Specifically, we will continue to work with the City of Long Beach on implementation of the Los Angeles River Metals TMDLs, the Los Angeles River Bacteria TMDL, the Los Angeles River Estuary TMDL, the Los Cerritos Channel Metals TMDLs, and the Harbor Toxics TMDLs.

Receiving Water Limitation Provision

The City of Signal Hill agrees with the LA Permit Group's concern that the receiving water limitation (RWL) language currently in the working proposal creates an unnecessary and counter-productive liability for municipalities. The situation is compounded by the joint and several liability language in TMDLs that assigns joint responsibility to groups of permittees when discharges are or may be comingled in the MS4 prior to discharge to the receiving waters subject to the TMDLs.

With the exception of section references, the language in the working proposal is virtually identical to the receiving water limitation language in the 2001 MS4 Permit that the United States Court of Appeals for the Ninth Circuit interpreted differently than the State Water Board has since Order 99-05 was adopted on June 17, 1999. In this precedential order, the State Water Board substituted receiving water limitation language used by EPA in two EPA-issued permits for language that the State Water Board had included in Order 98-01, to which EPA objected when the language was used in permits issued by the San Francisco Bay and San Diego Regional Water Boards.

Staff has stated that the language in the working proposal has not been changed because the current language was mandated by the State Water Board's precedential order. However, the language in the MS4 permit was not totally consistent with the precedential order issued by the State Water Board. Order 99-05 clearly states that "The Permittees shall comply with Discharge Prohibitions []³ and Receiving Water Limitations [] through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWMP and other requirements of this permit including any modifications." Footnote 3 directed that appropriate numbers for prohibitions and limitations that implement water quality objectives and water quality standards be inserted in the []. The Order goes on to say that "If exceedances of water quality objectives and water quality standards (collectively, WQS) persist notwithstanding implementation of the SWMP and other requirements of this permit, the permittees shall assure compliance with Discharge Prohibitions [] and Receiving Water Limitations by complying with the following procedure: "... The specified procedure is the procedure that has become known as the iterative process.

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The working proposal and the 2001 MS4 Permit are both inconsistent with Order 99-05 in that the iterative process is only included in the Receiving Water Limitations part of the permit instead of being included in both the Discharge Prohibition and the Receiving Water Limitations parts of the permit. The Regional Water Board may correct this deficiency by adding iterative process language similar to the language in PART V of the working proposal in Part III of the permit. This correction will make the permit consistent with Order 99-05 and should not require any action by the State Water Board because of the consistency with 99-05. The Regional Board should also specifically reference Watershed Management Programs in Parts III and V in order to better integrate the Watershed Management Program provisions with the iterative process in the Discharge Prohibition Provisions and the Receiving Water Limitation Provisions. In addition to achieving compliance with Order 99-05, such modifications to the proposed permit will foster implementation of the adaptive management process described in the Watershed Management Program provisions and reduce the vulnerability of the permittees to enforcement actions and third-party lawsuits when they are engaged in an iterative (adaptive management) process through an integrated approach and/or a watershed based program to address exceedances of water quality objectives and water quality standards in a prioritized, systematic manner, as the Regional Board is encouraging with the incorporation of the Watershed Management Program provisions into the permit.

Further, the Regional Water Board should work with the State Water Board to consider other ways to strengthen the iterative process mandated by Order 99-05. The magnitude of changes resulting from incorporating the waterbody/pollutant requirements from 32 TMDL documents into the permit will place permittees in almost instant non-compliance with the permit if they do not have the ability to respond to exceedances of water quality standards, including WQBELs, through an orderly adaptive management process.

TMDL Provisions

The issue of how to express water quality-based effluent limitations in NPDES permits has long been debated. On August 26, 1996, EPA gave notice in the Federal Register (61 Fed. Reg. 43761) that it had issued a policy outlining an intensive approach for incorporating water quality-based effluent limitations into stormwater permits. The policy states that stormwater permits do not need to include water quality-based effluent limitations. Instead, the policy focuses on the use of best management practices (BMPs) followed by "expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards." The policy only applies to EPA, but EPA encouraged states to adopt similar policies for stormwater

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permits. California did so as explained in SWQCB Order 91-03. This policy formed the basis for what was later articulated by the State Water Board in Order 99-05.

In Order 98-01, the State Water Board explained that it has “determined that for municipal separate storm water permits, BMPs constitute valid effluent limitations to comply with both the technology-based and water quality-based effluent limitation requirements.” The State Board also noted that, “In fact, narrative effluent limitations requiring implementation of BMPs are generally the most appropriate form of effluent limitations when designed to satisfy technology requirements, including reduction of pollutants to the maximum extent practicable, and water quality-based requirements of the CWA.” The State Water Board also concluded that “storm water permits must achieve compliance with water quality standards, but they may do so by requiring implementation of BMPs in lieu of numeric water quality-based effluent limitations,” and that “Given the unique nature of storm water discharges, it is reasonable that implementation take place, where appropriate, on a phased basis.” Based on these and other conclusions and as a precedent decision, the State Water Board approved receiving water limitation language to be included in future municipal storm water permits. As explained above, this language was not acceptable to EPA and the State Water Board adopted more rigorous language in Order 99-05.

EPA affirmed the appropriateness of an iterative adaptive management BMP approach for improving water quality over time in its November 22, 2002 Memorandum “Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs.” This memorandum clarified EPA’s regulatory requirements for, and provided guidance on, establishing waste load allocations for stormwater discharges in TMDLs approved or established by EPA. It also provided guidance on the establishment of water quality-based effluent limits in NPDES permits based on WLAs for stormwater discharges in TMDLs. A key point presented in the memorandum was that “EPA expects that most WQBELs for NPDES-regulated municipal and small construction storm water discharges will be in the form of BMPs, and that numeric limits will be used only in rare instances.”

On November 12, 2010, EPA issued a revised guidance memorandum that indicated a preference for numeric WQBELs and recommended that permitting authorities use numeric effluent limitations in permits for MS4s and/or small construction stormwater discharges, where feasible. However, EPA continued to acknowledge permitting authority discretion concerning whether to use numeric WQBELs or to express WQBELs in the form of BMPs.

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The 2010 EPA Guidance memo states that when WQBELs are expressed in the form of BMPs, “the permit should contain objectives and measurable elements (e.g., schedule for BMP installation or level of BMP performance).” The City of Signal Hill strongly urges the Regional Water Board to direct staff to follow this approach and incorporate narrative WQBELs in the permit consistent with the WLAs in applicable TMDLs. This would facilitate the creation and use of a deemed compliant approach as was used in the Los Angeles River and Ballona Creek Trash TMDLs with approved full-capture devices. It would also allow a credit toward a compliance approach in which credit could be given for pollution prevention programs, such as SB 346, which target the true sources of pollutants over which permittees have little or no control. Integrating WQBELs into the next generation of MS4 permits in the form of BMPs will encourage experimentation and strong pollution prevention efforts that could lead to achievement of water quality standards in a cost-effective manner. One example of how this could be done is from the Los Angeles River Metals TMDL, which states:

“Each jurisdictional group shall demonstrate that 75% of the group’s total drainage area served by the storm drain system is effectively meeting the dry weather WLAs.”

This requirement could be expressed in the permit as a WQBEL in the form of BMPs, as follows:

Permittees shall demonstrate that source control measures and treatment controls designed to effectively meet dry weather WLAs are being implemented and maintained in 75% of the total area served by the storm drain system.

In most cases, converting waste load allocations to WQBELs expressed as BMPs should not be time consuming, and having BMP implementation targets is an understandable and manageable task if money is available. On the other hand, meeting numeric WQBEL targets can be frustrating and potentially paralyzing and could cause more money to be spent on lawyers than on best management practices and control measures. We urge you to direct staff to use the WQBELs as BMPs approach both in this section and in the TMDL Provisions section of the permit.

The City of Signal Hill supports the premise behind Provision VI.E.1 that provisions of this part of the permit must be 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.” This statement is consistent with the

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requirement in 40CFR 122.44(d)(1)(vii)(B) which requires that when developing water quality-based effluent limits, the permitting authority shall ensure that:

(B) Effluent limits developed to protect a narrative water quality criteria, a numeric water quality criteria, or both, are consistent with the assumptions and requirements of any available waste load allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7

However, the regulations do not require that WQBELs have to be numeric in order to be consistent with the assumptions and requirements of waste load allocations. In fact, as noted above, 2002 and 2010 EPA guidance memos both clearly allow the WQBELs in permits to be expressed either numerically or in the form of BMPs. It is a decision left to the permitting authority.

The statement to Vice Chair Stringer that permittees think the BMP approach gives more certainty about being in compliance because of the variability in rainfall was an accurate summation of the situation. In the absence of a uniform design storm for TMDL compliance, permittees fear the potential for third-party litigation, especially after a large, high intensity rain event. The situation is compounded by the incorporation of 32 TMDL documents, including requirements for an estimated 500 waterbody/pollutant combinations. Even though permittees are already addressing many of these TMDL requirements on an *ad hoc* basis, the requirements are now going to be grouped together in the permit, and permittees will be exposed to third-party litigation due to the TMDLs now being permit requirements.

The City of Signal Hill requests that the Board recognize the fears of permittees and encourage expedient efforts to address the water quality impairments by including WQBELs expressed in the form of BMPs in the MS4 permits, at least during this permit cycle. Ideally, we would prefer that WQBELs always be expressed in the form of BMPs. However, we acknowledge that both the Board and the environmental community have concerns about the commitment of municipalities to effectively address water quality impairments. We believe that municipalities are more committed to improving water quality than either the Board or environmental groups believe we are. In order to give us a chance to demonstrate our commitment, we ask that you express WQBELs in the MS4 permits for at least the next permit term in the form of BMPs, with the provision that you will review this decision during the development of the next cycle of permits.

The City of Signal Hill also requests that the Board reconsider the use of time schedule orders (TSOs) to provide time to develop implementation plans for EPA-established

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TMDLs. The working proposal specifies that a Permittee that is in compliance with the requirements of a Regional Board-issued TSO is not considered in violation of the final receiving water limitations and/or water quality-based effluent limitations for pollutants subject to the EPA-established TMDLs being incorporated into the permit. However, we are concerned that the TSO approach does not provide protection against third-party lawsuits while implementation plans and schedules are being developed and approved. Instead, we recommend that the Board develop permit language related to development of implementation plans and schedules to be incorporated into the Basin Plan through Basin Plan Amendments. The schedule should be sufficiently long to allow full compliance with TMDL waste load allocations in a cost effective manner. One possible permit provision to allow preparation of implementation plans and schedules for EPA-established TMDLs is as follows.

A [] TMDL Implementation Plan that will fulfill the applicable requirements of the [] TMDL must be submitted by the [] jurisdictions covered by this order within 18 months of adoption of this order. This Implementation Plan must be implemented upon Regional Board approval. As long as the Implementation Plan is submitted in a timely manner and the Watershed jurisdiction(s) are participating in and implementing the approved Implementation Plan, they will not be in violation of this order with respect to implementing the [] TMDL. In the event that any Watershed jurisdiction does not participate, or if the collaborative approach is not approved or fails to achieve the TMDLs, the Regional Board will exercise its option to issue individual waste discharge requirements.

We would be pleased to work with staff and other interested parties to develop workable language.

Watershed Management Planning

The City of Signal Hill is vitally interested in watershed planning. In fact, the City took a leadership role in organizing 40 cities, Los Angeles County, and Caltrans in the Los Angeles River Watershed to address the monitoring requirements for the Los Angeles River Metals TMDLs. Signal Hill convinced 35 of the cities, the County, and Caltrans to fund critical special studies related to the TMDLs.

The City also organized Jurisdictional Group 1 for the Los Angeles River Metals TMDLs. Upon the withdrawal of the City of Los Angeles and the County of Los Angeles, Signal Hill organized the remaining cities pursuant to MOAs with the Gateway Council of Governments. In addition, the City of Signal Hill organized cities within the Los Cerritos

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Channel Watershed to work with EPA and with the Regional Water Board. The Los Cerritos Channel work began informally in late 2008 – first on negotiating elements of a Metals TMDL established by EPA. In 2010, the watershed cities formalized this watershed cooperation through a series of MOAs with the Los Angeles Gateway Region Integrated Regional Water Management Joint Powers Authority (Gateway Authority) to develop an implementation plan, work with Regional Board staff on a Basin Plan Amendment to appropriately incorporate the TMDLs into the Basin Plan, conduct special studies, and implement measures to achieve compliance with the Los Cerritos Channel Metals TMDLs.

We are encouraged by the staff's draft provisions in the working proposal that would allow individual cities to customize their strategies, control measures and BMPs to address these customized measures either individually and/or with a larger group of permittees in the Watershed Management Plans. However, we still believe that the proposed permit needs clarification on the joint and several liability issue. We are suggesting that the staff consider inserting language in the permit that would clarify that a permittee would be relieved of the joint and several liability provisions of the permit, if they are implementing both an approved Watershed Management Program and a Jurisdictional Stormwater Management Program Adaptive Management Process.

The City trusts that customization will foster creativity and allow experimentation. For instance, with Metals TMDLs, we believe that to be successful in meeting water quality standards over the long-term, we will need to address the sources of metals deposited on the watershed through atmospheric deposition and get the help of various State and Regional agencies to control these sources.

We agree with the goal of the Watershed Management Program provisions to ensure that discharges from the MS4 achieve applicable water quality-based effluent limitations and do not cause or contribute to exceedances of receiving water limitations. We also recognize that Programs cannot guarantee that either effluent limitations or receiving water limitations are met at all times because of variations in rainfall and the absence of a water quality design storm above which water quality standards would not be enforced on discharges. Requiring achievement of effluent limitations and receiving water limitations for large, rare storms exceeds the maximum extent practicable (MEP) standard for MS4 discharges. The draft permit does specify that structural BMPs should be sized to treat the volume of stormwater runoff from the 85th percentile, 24-hour storm specific to the watershed in question, but the components of the permit currently available do not clearly state that this design storm is also the design storm for permit compliance.

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The City of Signal Hill requests that the permit be structured to use the runoff from the 85th percentile, 24-hour storm event as a consistent design storm for both BMP design and enforcement of water quality standards. We have seen the Power Point presentation given by Dr. Youn Sim on the development of a water quality design storm at the 2011 CASQA Annual Conference. It builds on the work done by the Regional Board's design storm task force and presents a compelling argument for the 85th percentile, 24-hour design storm for both design and enforcement. Such an action by the Regional Board would help convince municipalities that they are not wasting money by investing in BMPs and other control measures in the absence of a physical limit on the storm size for which they have to meet water quality standards.

The City agrees with the requirement in Provision VI.C.1.c. that, within a Watershed Management Program, customized strategies and BMPs can be implemented through each permittee's stormwater program, and/or collectively by all participating permittees through the Watershed Management Program. We further agree with the requirement in Provision VI.C.1.b.i that permittees identify strategies, control measures, and BMPs to be implemented through their individual stormwater programs, and collectively on a watershed scale, and Provision VI.C.1.b.iv.(4)(f) that the plan clearly identify the responsibilities of each participating permittee for implementation of watershed control measures. This measure should protect conscientious permittees from being held liable for the actions of other permittees. We would appreciate confirmation of our interpretation that the provision provides protection against joint and several liability related to the actions or inactions of "bad actors." Making this clear in the permit will help convince every permittee that it will be held responsible for its own actions or inactions, and that it will not be possible to hide and depend on the actions of other entities for protection.

The City strongly supports the requirements in Provisions VI.C.1.f.ii and VII.C.3.b.i that each Watershed Management Program identify and implement strategies, control measures, and BMPs to achieve applicable water quality-based effluent limitations, receiving water limitations, and/or non-stormwater action levels. It is imperative that permittees and the Regional Board think beyond traditional treatment control BMPs in order to cost-effectively achieve compliance with water quality standards. However, we question the language of Provision VI.C.1.f.iii related to executing a monitoring and assessment program to determine progress toward achieving applicable limitations and/or action levels. We understand that the Regional Board would prefer to have a numeric indicator to monitor progress toward achievement of applicable water quality standards, but we are concerned with the wording of the requirement.

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Specifically, we believe that the proposed wording is insufficient to prevent diversion due to third-party lawsuits based on temporary exceedances. The wording of the Provision should be modified to state that the monitoring and assessment program should be based on true benchmarks – indicators, rather than compliance points – designed to promote an adaptive management process during the implementation period.

The City is concerned that Provision VI.C.3.b.iii does not sufficiently recognize pollution prevention, including what the California Stormwater Quality Association (CASQA) has described as true source control. Signal Hill, other cities within the region, and the Coalition for Practical Regulation contributed financial support, lobbyist services, and support letters for CASQA's efforts to address the major source of copper brake pad dust through a State legislation control measure, SB 346. The WMP section of the Permit should be re-written to recognize and encourage true source control as a pollution prevention measure that will ensure long-term compliance with water quality standards.

We acknowledge that Provision VI.C.3.b.IV (3) does recognize pollution prevention as a non-structural best management practice that can be included in Watershed Management Plans. However, we believe that true source control, including product substitution and materials substitution, as well as product take-back, needs more emphasis in regional and statewide efforts to improve water quality.

The City also appreciates the fact that watershed management areas may be subdivided into subwatersheds to focus efforts on particular receiving waters, as well as the opportunity for individual municipalities to establish their own watershed management programs for watershed sub-drainages.

Further, the City appreciates the provision on page 9 [Provision VI.C.3.b.iv.(4)(f)] that specifies that the Water Management Program “plans shall clearly identify the responsibilities of each participating Permittee for implementation of watershed control measures.” We trust that this provision, in combination with a provision in the Code of Federal Regulations [40 CFR 122.26(a)(3)(vi)] that states, “co-permittees need only comply with permit conditions related to discharge from municipal storm sewers for which they are operators,” will protect conscientious permittees from being held liable for actions or inactions of other permittees participating in the same Watershed Management Program.

One major area of concern, however, is the Compliance Schedules section on page 10 [Section VI.C.3.c.]. Although the WMP provisions allow a BMP approach for interim

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TMDL milestones, this section appears to assume that the permit needs to incorporate numeric water quality-based effluent limitations (WQBELs) on waste load allocations in TMDLs. This is not the case. Federal regulations and the 2002 and 2010 EPA guidance memos clearly require that permits contain WQBELs consistent with the assumptions and requirements of waste load allocations in applicable TMDLs and also clearly allow the WQBELs in permits to be expressed numerically or in the form of BMPs, as discussed above.

The City of Signal Hill strongly supports the adaptive management process. A formal adaptive management process is specified in the Watershed Management Program section of the working proposal, but we regard the process as an integral element of the entire water quality improvement program. It was incorporated by the State Water Board into the receiving water limitation language adopted in State Board Order 99-05 as what has become known as the "iterative process." It was also recommended in the 2001 National Research Council report, *Assessing the TMDL Approach to Water Quality Management*. The Council's Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction strongly recommended that "TMDL plans should employ adaptive implementation." The Committee defined adaptive implementation as "a cyclical process in which TMDL plans are periodically assessed for their achievement of water quality standards including beneficial uses."

Although adaptive management is a continuous process, having a requirement in the permit to report twice during the permit term could be valuable in focusing on continuous evaluation and improvement of a watershed management program, and on progress toward achieving water quality-based effluent limitations and receiving water limitations. The requirement in Provision III.C.6.iii.b that individual permittees revise their stormwater plans annually will also foster continuous evaluation and adaptation of program elements.

Thank you again for the opportunity to provide these comments.

Sincerely,

CITY OF SIGNAL HILL

A handwritten signature in black ink, appearing to read "Steve Myrter", written over a horizontal line.

Steve Myrter, P.E.
Director of Public Works



HEALTH & ENVIRONMENTAL CONTROL DEPARTMENT

Leonard Grossberg, Interim Director / Health Officer

4305 Santa Fe Avenue, Vernon, California 90058

Telephone (323) 583-8811

May 14, 2012

California Regional Water Quality Control Board

Los Angeles Region

320 West 4th Street, Suite 200

Los Angeles, California 90013

Attn: Renee A. Purdy, Regional Programs Section Chief

Ivar Ridgeway, Stormwater Permitting Section Chief

ELECTRONIC MAIL

Subject: Comments to Working Proposal for Watershed Management Programs, TMDLs, and Receiving Water Limitations Related to the Los Angeles County Municipal Separate Storm Sewer System Permit

Dear Ms. Purdy and Mr. Ridgeway:

The City of Vernon appreciates this opportunity to provide comments on the subject Watershed Management Programs, Total Maximum Daily Loads (TMDLs), and Receiving Water Limitations working proposals for the draft Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit. We recognize and support the Los Angeles Regional Water Quality Control Board (LARWQCB) staff's continued collaborative efforts with the Permittees in developing this next iteration of the MS4.

As we continue through this process of collaboration and review the working proposals, we have the following general requests for the LARWQCB to consider;

- A. The working proposals suggest the next MS4 permit is likely to be impossible for Permittees to comply with. We request the LARWQCB develop a permit that provides Permittees a fair opportunity to achieve compliance.
- B. The working proposals suggest the next MS4 permit will be exponentially more complicated, especially when compared to the current MS4 Permit. We request the LARWQCB develop a permit that is not overly complex or practically impossible for the general public to interpret.
- C. The working proposals suggest the requirements for the next MS4 permit will neglect economic feasibility. We request that the LARWQCB acknowledge the realistic challenge that all public agencies must be accountable for managing limited public funds. The permit requirements should be economically feasible and sustainable.

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- D. The revised anticipated schedule (September 2012) for adoption of the next MS4 Permit, occurs during the annual reporting period for the current MS4 Permit. We request that the LARWQCB postpone the MS4 adoption process until after MS4 annual reporting period to allow Permittees ample opportunity to review and comment on the draft MS4 Permit.
- E. We request that Waste Load Allocations (WLA) be translated to Water Quality Based Effluent Limitations, expressed as best management practices (BMPs). Additionally, implementation of the BMPs will place the Permittees into compliance with WLA.
- F. We request the LARWQCB establish a compliance standard in the next MS4 Permit that is consistent with (not more stringent than) other current National Pollutant Discharge Elimination System (NPDES) permits located within Los Angeles County.

Additionally, based on our review of the subject working proposals, we have several more specific concerns and would like to express the following comments:

Receiving Water Limitations

1. Part V.A.1 indicates the following;

Discharges from the MS4 that cause or contribute to the violation of Receiving Water Limitations are prohibited.

Concern- The City of Vernon understands this provision is written verbatim from Part 2. of the current MS4; however, based on the United States Ninth Circuit Court of Appeals decision in the case involving National Resource Defense Council (NRDC) vs. County of Los Angeles, this provision was the primary point of contention. As a result of this provision, the plaintiffs in the case were successful at proving an exceedance of water-quality limits is non-compliance with the Clean Water Act. Subsequently, the court ruled in favor of the plaintiffs. This provision is problematic in that it has now been established that numeric limits can be used as evidence under the "citizen litigation" provisions of the federal Clean Water Act to file suit against government agencies for damages. This provision is especially troublesome if you consider that in the five square mile City of Vernon, there are approximately 150 NPDES permitted facilities/entities that discharge to the City's and County storm drain system. Inspection and enforcement, by the LARWQCB, of these permits has been infrequent at best. The subject current provision, along with the LARWQCB's relaxed enforcement of the non-municipal permits exposes the City to unmerited liability. If you expand the scope of the liability to the Los Angeles River Watershed level where there are at least 1,344 industrial, 488 construction, three wastewater treatment plants, and 42 separate incorporated city dischargers (NRDC vs. Los Angeles County) and we will have created a litigation nightmare that will financially debilitate each city including the County of Los Angeles. Depleted public funds will be used for legal defense and not for water quality.

The combination of the proposed Monitoring Program and numeric effluent limits with this subject provision will establish a permit that is impossible for Permittees to comply with. The next MS4 permit must establish a realistic opportunity for a Permittee to achieve and sustain compliance.

This provision fails to establish, consider, or reference a compliance storm intensity. Although Part VI.C.3.b.iv.(4)(c) describes structural controls “shall be sized to treat the volume of stormwater runoff from the 85th percentile, 24-hour storm specific to the watershed”, this part does not clearly translate into an established compliance storm intensity or establish that if storm events that are beyond the capacity of the structural controls will not cause the Permittee to be in violation of this MS4 Permit.

We also would like to reiterate the conclusions of the blue ribbon panel convened in 2005 by the State Water Resources Control Board (SWRCB) which stated “it is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban discharges”.

In addition, although the proposed Part III. Discharge Prohibitions and the current Illicit Discharge/Connection Elimination Program conceptually appears prudent, it is unrealistic to assume that all sources of illicit discharges will be identified and enforcement will take place in a timely manner. The MS4 Permittees will be held liable for intermittent discharges and exceedances that are caused by the recalcitrant public and NPDES permitted operations that have historically been unchecked by the LARWQCB. If the LARWQCB insists on imposing ultimate liability on municipal permittees and ignore NPDES permittees that discharge to the MS4, then those NPDES permits within a municipal permittee’s geographic area serve no purpose.

This provision does not appear to take into consideration the effects of aerial deposition and the “air scrubbing affect” rain has on air pollutants. As you understand, permittees have no control over aerial deposition or authority over air quality.

In terms of compliance with the Bacteria TMDL, this provision does not take into consideration the natural sources of bacteria and the potential of bacteria regrowth.

Furthermore, development of an adequate draft Watershed Management Program may take two years, let alone have it approved by the LARWQCB. This provision would severely hamper efforts to develop an effective Watershed Management Program prior to its approval and implementation.

Proposed solution- We request that the LARWQCB revise this provision to fully consider the complexity and dynamics of the stormwater and non-stormwater discharges and acknowledge the limited authority and resources of the Permittees. This provision should acknowledge there are conditions well beyond a Permittees ability or authority to control. This single permit should not place the ultimate burden of all NPDES permittees on the shoulders of the Municipal Permittees.

2. Part V.A.2 specifies the following;

Discharges from the MS4 of storm water, or non-storm water, for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance.

Concern- Although this provision is written verbatim from Part 2. titled Receiving Water Limitations of the current MS4 permit, it lacks the language that would support a Permittee

in its efforts to identify illicit discharges/connections and perform enforcement. As it is written, if a Permittee successfully identifies and prosecutes an illegal discharger, the MS4 Permittee would still be held legally responsible for the nuisance.

Proposed solution- Consider revising provision V.A.2 to also include, "If the Permittee determines that the nuisance is caused or contributed by a NPDES permitted entity or from an authorized discharge, the MS4 Permittee shall not be in violation of this permit condition."

Special Provisions: Watershed Management Programs

1. Part VI.C.2.a. describes timelines for implementation and requiring permittees to notify the Regional Water Board within six months after Order adoption, of their intent to develop a Watershed Management Program and subsequently submit a draft Watershed Management Program plan no later than 12 months after adoption.

Concern- The proposed compliance schedule does not provide ample time to develop an effective Watershed Management Program plan that would be substantial and agreeable to all permittees in the watershed. In addition, Part VI.3.a. dictates a Watershed Management Plan shall include Water Quality Characterization, Waterbody-Pollutant Classification, Source Assessment, Prioritization, identify strategies/control measures/BMPs to implement, Minimum Control Measures, etc. All elements and data required to be included in the Watershed Management Program will demand substantial time to collect.

Proposed solution- We request that the LARWQCB extend the timelines for the development of the Watershed Management Program plan a minimum of one year to allow collaboration between watershed permittees in the development of a meaningful Watershed Management Program plan.

2. Part VI.C.1.f specifies that each Watershed Management Program shall:

Prioritize water quality issues resulting from storm water and non-storm water discharges from the MS4 to receiving waters within each Watershed Management Area,

Concern- This provision appears to be in conflict with the working proposal for Part III. Discharge Prohibitions, and more specifically, Section A.2. of Part III which states;

Each Permittee shall, within its respective jurisdiction, effectively prohibit non-storm water discharges into the MS4 and from the MS4 to receiving waters except where such discharges are either specifically authorized by a separate individual or general National Pollutant Discharge Elimination System (NPDES) permit or conditionally authorized in accordance with sections A.3 through A.6 below.

In addition, Part V.A1. under Receiving Water Limitations indicates the following;

Discharges from the MS4 that cause or contribute to the violation of Receiving Water Limitations is prohibited.

Based on these proposed provisions, each Permittee is ultimately responsible for their own discharge from their MS4; therefore, why would there be a need for the Watershed Management Program to prioritize and rectify water quality issues from non-stormwater discharges of another Permittee?

Proposed solution- We request that the Discharge Prohibitions and Receiving Water Limitations be revised to provide consistent provisions with the Watershed Management Program and provide Permittees a fair opportunity to comply with the MS4 Permit.

3. Part VI.C.2.d. indicates the following;

Permittees that do not elect to develop a Watershed Management Program shall be subject to the baseline requirements in Part VI.D [MCMs] and shall demonstrate compliance with applicable water quality based effluent limitations in Part VI.E [TMDL] pursuant to subparts VI.E.4 or VI.E.5.

Concern- This provision, conversely, implies that Permittees that elect to develop a Watershed Management Program shall not be subject to Part VI.D [MCMs] and shall not be required to demonstrate compliance with applicable water quality based effluent limitations in Part VI.E [TMDL] pursuant to subparts VI.E.4 or VI.E.5.

Proposed solution- Clarify if permittees elect to develop a Watershed Management Program, they shall not be required to demonstrate compliance with TMDL Provisions described in Part VI.E of this working proposal.

4. Part VI.C.3.a.iii.(1) directs Permittees to perform the following;

Identify known and suspected stormwater and non-stormwater pollutant sources in discharges to the MS4 and from the MS4 to receiving waters by reviewing available data from (ii) commercial/industrial facilities and (iii) development construction programs.

Concern- Water quality data related to stormwater and non-stormwater runoff from industrial and construction facilities are required through the State's General Industrial and Construction Activity Stormwater Permits. The permit dictates that the water quality data be submitted to the SWRCB.

Proposed solution- Allow the LARWQCB to review the data collected through these State General Permits to help them identify and enforce the conditions of the permits. If the LARWQCB has an effective inspection and enforcement program for these General Permits, these dischargers should not be contributing to a violation of Receiving Water Limitations.

Special Provisions: Total Maximum Daily Load Provisions

Will be sent under separate letter.

May 14, 2012

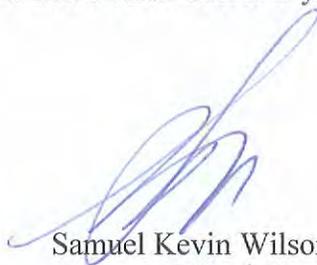
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The City of Vernon is one of 62 voting members of the Los Angeles Permit Group (LAPG). We agree with, and strongly support, the LAPG comment letter in reference to the subject working proposals.

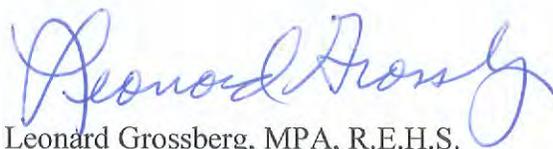
We appreciate the LARWQCB staff's efforts in developing, and providing Permittees the opportunity to comment on the subject working proposals. The City will continue to cooperate with the LARWQCB for the preservation of the environment.

Please call (323) 583-8811 extension 258 to speak to Mrs. Claudia Arellano or extension 204 to speak to Mr. Jerrick Torres if you have any questions or comments.

Sincerely,



Samuel Kevin Wilson, P.E.
Director
Community Services & Water Department



Leonard Grossberg, MPA, R.E.H.S.
Interim Director / Health Officer
Health & Environmental Control Department

Cc: Sam Unger, Executive Officer, Los Angeles Regional Water Quality Control Board
Mark Whitworth, Administrator, City of Vernon



COMMUNITY SERVICES & WATER DEPARTMENT
 Samuel Kevin Wilson, Director of Community Services & Water
 4305 Santa Fe Avenue, Vernon, California 90058
 Telephone (323) 583-8811 Fax (323) 826-1435

May 14, 2012

N-1

Via Electronic Mail – LAMS42012@waterboards.ca.gov

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

Attn: Renee A. Purdy, Regional Programs Section Chief
 Ivar Ridgeway, Stormwater Permitting Section Chief

**RE: COMMENTS ON WORKING PROPOSALS FOR LOS ANGELES COUNTY MS4
 PERMIT PROVISIONS RELATED TO TMDL PROVISIONS**

Dear Ms. Purdy and Mr. Ridgeway:

The City of Vernon appreciates the opportunity to provide comments on the subject matter referenced above. The City of Vernon is committed to protecting the environment and appreciates the cooperative efforts of the Regional Water Quality Control Board (RWQCB) and its staff in developing the updated Los Angeles County Municipal Stormwater Permit (MS4).

The City of Vernon has concerns with the proposed Total Maximum Daily Loads (TMDL) Provisions as described in the Working Proposal dated April 23, 2012, and respectfully provides the following comments for your consideration:

1. Attachment I. Permittees and TMDL Matrix Table H Los Angeles River Watershed Management Area Metals TMDLs by Reach specifies that the City of Vernon is a participating jurisdiction of Reach 1 and Compton Creek and Reach 2, Rio Hondo, Arroyo Seco, and all contributing subwatersheds.

Concern – Please note that the City of Vernon corresponded with the Regional Water Quality Control Board and the Executive Officer concurred that the City of Vernon does not drain into Reach 1. This same concern was relayed to Ms. Purdy via email on February 21, 2012. Copies of the correspondence are attached herewith.

Proposed Solution – Please correct Table H and remove the City of Vernon as a participating jurisdiction of Reach 1 and Compton Creek.

2. Attachment I. Permittees and TMDL Matrix Table H Los Angeles River Watershed Management Area Bacteria TMDL by Reach specifies that the City of Vernon is a participating jurisdiction of Jurisdiction 2 and Compton Creek

Exclusively Industrial

Concern – Please note that the City of Vernon does not drain into Compton Creek. Also note comment #1.

Proposed Solution – Please correct Table H and remove the City of Vernon as a participating jurisdiction of Compton Creek.

3. Page 1, Part E.2. Compliance Determination

Concern – Compliance determination must take into account pollutant sources outside of the Permittees control. This would include aerial deposition, natural sources, etc.

Proposed Solution – Language to be included that clearly does not place the Permittees out of compliance if there is an exceedance(s) due to aerial deposition, natural sources, etc.

4. Page 2, Part E.2.b.iv – Commingled Discharges, states as follows:

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.

Concern – If TMDLs are given a WLA for a sub-watershed how can each Permittee conceivably demonstrate that its discharge did not cause or contribute to an exceedance of an applicable WQBEL at the outfall or RWL in the receiving water? Also, need clarification on what exactly the meaning of “its discharge” and “did not cause or **contribute**”.

Proposed Solution – We request clarification.

5. Page 3, Part E.2.c.iii – RWLs Addressed by a TMDL, states as follows:

A Permittee shall not be considered in violation of a Receiving Water Limitation in Part V.A., if it is in compliance with the applicable TMDL requirements contained in a time schedule order.

Concern – What is the timetable of the TSO application process?

Proposed Solution – A definitive timetable detailing the application process for a Time Schedule Order is requested.

6. Page 3, Part E.2.d.i.1 specifies as follows:

There are no violations of the interim water quality-based effluent limitation for the pollutant(s) associated with a specific TMDL at the Permittee’s applicable MS4 outfall(s),¹ including an outfall to the receiving water that collects discharges from multiple Permittees’ jurisdictions.

¹ An outfall may include a manhole or other point of access to the MS4 at the Permittee’s jurisdictional boundary.

Concern – Need to clearly explain the requirement(s).

Proposed Solution – Re-word and include footnote into the requirement.

7. Page 4, Part E.2.e.i. 1-3. Final Water Quality Based Effluent Limitations and/or Receiving Water Limitations, states as follows:

A Permittee shall be deemed in compliance with an applicable final water quality-based effluent limitation and/or final receiving water limitation for the pollutant(s) associated with a specific TMDL if any of the following is demonstrated:
There are no violations of the final water quality-based effluent limitation for the specific pollutant at the Permittee's applicable MS4 outfall(s)²; ...

Concern – Need to clearly explain the requirement(s). Also, language is confusing and it is implied that numeric WQBELs will be inserted into the permit. Opportunity must be provided to Permittees by inserting BMP-based WQBELs along with providing opportunities for source control and research and development.

Proposed Solution – Language should be inserted into the permit that concentrates on the opportunity to Permittees to develop monitoring plans.

8. Page 5, Part E. 4.a. State Adopted TMDLs where Final Compliance Deadlines have Passed, states as follows:

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.

Concern – The reference made here to comply **immediately** is arbitrary. Opportunity is not provided for a strategic plan that will focus on BMP implementation. This requirement will automatically result in permit violation in addition to fruitless expenditures and resources.

Proposed Solution – Revise language to provide Permittees the opportunity to produce a plan, perform pilot projects and implement BMPs to ensure valuable resources and funds are not being wasted on programs that may not provide the benefits that were initially perceived.

9. Page 6, Part E.4.b. states as follows:

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 (insert timeframe) request a time schedule order (TSO) pursuant to Cal. Water Code section 13300 for the Regional Water Board's consideration.

Concern – A TSO is an enforcement action and requires that the Board make findings of a discharge or threat of a discharge that will violate prescribed requirements. The language implies that the Permittee is admitting guilt. Additionally, TSO's do not protect Permittees from third-party litigation.

Proposed Solution – TSO's need to be interchanged with reopeners and reconsiderations of TMDLs are absolutely necessary so as to re-set the compliance schedules to align with the Watershed Management Plans. This would minimize from any third-party litigation and loss of limited resources by the cities.

10. Page 8, Part E.5.b.(2). WQBELs for Trash Partial Capture Devices and Institutional Controls states as follows:

Permittees may comply with their interim and final effluent limitations through the installation of partial capture devices and the application of institutional controls

Concern – Need clarification of language.

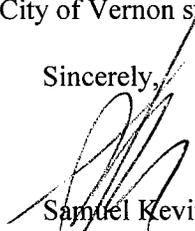
Proposed Solution – Please provide clear definitions of Partial Capture Devices and institutional controls.

Notwithstanding the above, the City of Vernon contends that reopeners and reconsiderations of TMDLs are absolutely necessary so as to re-set the compliance schedules to align with the Watershed Management Plans. This would minimize from any third-party litigation and loss of limited resources by the cities. We recognize that reopeners and reconsiderations will require Basin Plan amendments.

Please note that the City of Vernon is also a voting agency in the Los Angeles Permit Group and is supportive of the Los Angeles Permit Group's comments on the subject matters, submitted to you under separate cover.

The City of Vernon appreciates your efforts and will continue to work with the RWQCB staff to protect the environment. Please contact Claudia Arellano at 323-583-8811 extension 258 or Jerrick Torres at 323-583-8811 extension 204 of the City of Vernon staff if you have any questions or comments.

Sincerely,



Samuel Kevin Wilson, P.E.
Director of Community Services & Water

SKW/ca/jt
Enclosures

c: City of Vernon Council
Los Angeles Regional Water Quality Control Board members



California Regional Water Quality Control Board

Los Angeles Region

RB-AR2751



Linda S. Adams
Cal/EPA Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

RECEIVED

FEB 18 2010

February 16, 2010 Community Services

Samuel Kevin Wilson, P.E., Director
Community Services and Water Department
City of Vernon
4305 Santa Fe Avenue, Vernon, CA 90058

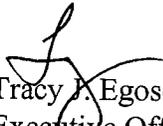
LOS ANGELES RIVER METALS TOTAL MAXIMUM DAILY LOAD (TMDL) REACH 1 IMPLEMENTATION PLAN

Dear Mr. Wilson:

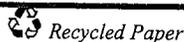
The Los Angeles Regional Water Quality Control Board (Regional Board) received your letter dated December 7, 2009, requesting that the City of Vernon be exempt from preparing a Metals TMDL implementation plan for Reach 1 of the Los Angeles River. In your letter, you provided detailed storm drain maps that demonstrate that the portion of the City of Vernon identified by the TMDL as draining to the Los Angeles River Reach 1 actually drains to Reach 2. Regional Board staff has reviewed the storm drain maps and has determined that the City of Vernon does not drain to Reach 1. Therefore, the City of Vernon's request to be exempt from preparing a Reach 1 implementation plan is approved.

Thank you for your commitment to develop an implementation plan for Reach 2 and we look forward to receiving a final implementation plan for Reach 2 by July 11, 2010. If you have any questions, please contact Jenny Newman of my staff at (213) 576-6691 or jnewman@waterboards.ca.gov.

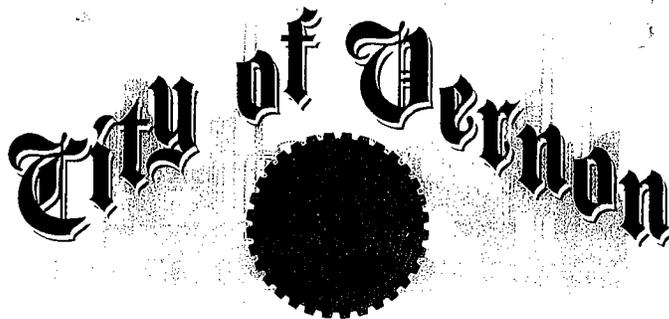
Sincerely,


Tracy J. Egoscue
Executive Officer

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

**COMMUNITY SERVICES & WATER DEPARTMENT**

Samuel Kevin Wilson, Director of Community Services & Water
4305 Santa Fe Avenue, Vernon, California 90058
Telephone (323) 583-8811 Fax (323) 826-1435

December 7, 2009

Ms. Tracy Escogue, Executive Director
California Regional Water Quality Control Board
Los Angeles Region
320 W. Fourth Street, Suite 200
Los Angeles, CA 90013

Subject: Los Angeles River Metals TMDL – Implementation Plan - Reach 1

Dear Ms. Escogue:

The City of Vernon has been mistakenly included in Reach 1 for the Los Angeles River Metals TMDL Implementation Plan. The City of Vernon has rechecked the plan from the Regional Board that shows the boundaries of the various reaches and found that the inclusion of the City of Vernon in Reach 1 is incorrect. All drainage systems in the City of Vernon drain to the Los Angeles River. The portion of the City of Vernon that was erroneously shown to drain to Compton Creek, actually drains directly to the Los Angeles River via the East Compton Creek No. 1 storm drain which drains due east to discharge into the Los Angeles River at Southern Avenue in South Gate, just north of the confluence of the Rio Hondo Channel. I have enclosed the County of Los Angeles plans of the East Compton Creek No. 1 storm drain that details the drainage from the City of Vernon to the discharge point on the Los Angeles River. The City of Vernon hereby requests that the Regional Board delete the City of Vernon from Reach 1. Please provide written approval of the request. If you have any questions, please contact me at (323) 583-8811, Ext. 245.

Sincerely,

Samuel Kevin Wilson, P. E.
Director of Community Services and Water

SKW/sn
Enclosure

Exclusively Industrial



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

May 14, 2012

IN REPLY PLEASE

REFER TO FILE: **WM-9**

Ms. Renee Purdy, Chief
California Regional Water Quality
Control Board – Los Angeles Region
Regional Programs Section
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Dear Ms. Purdy:

**LOS ANGELES COUNTY FLOOD CONTROL DISTRICT AND
COUNTY OF LOS ANGELES – COMMENTS ON STAFF WORKING PROPOSALS
ON WATERSHED MANAGEMENT PROGRAM AND GENERAL TOTAL MAXIMUM
DAILY LOADS AND RECEIVING WATER LIMITATION PROVISIONS**

On behalf of the Los Angeles County Flood Control District and the County of Los Angeles, thank you for the opportunity to comment on the draft Staff Working Proposals on the Watershed Management Program and General Total Maximum Daily Load and Receiving Water Limitation provisions released on April 23, 2012. Enclosed are our comments for your review and consideration.

If you have any questions, please contact me at (626) 458-4300 or ghildeb@dpw.lacounty.gov or your staff may contact Ms. Angela George at (626) 458-4325 or ageorge@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works

GARY HILDEBRAND
Assistant Deputy Director
Watershed Management Division

ACL:jtz

P:\wmpubl\Secretarial\2012 Documents\Letter\RB TMDL RWL WMP.doc\C12123

Enc.

cc: Chief Executive Office (Dorothea Park)
County Counsel (Judith Fries)

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Receiving Water Limitations**

Receiving Water Limitations			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1	Compliance with Receiving Water Limitations	V.A. [Pages 1 & 2]	<p>The County and the LACFCD are very concerned about staff’s proposal to keep the Receiving Water Limitations language essentially unchanged from the current permit. This approach would not only render compliance with the permit very difficult if not impossible, it would also inappropriately establish two different compliance standards in the permit.</p> <p>Based on the interpretation of the Regional Board and the Ninth Circuit Court of Appeals, this language essentially requires that stormwater discharges to receiving waters must meet water quality standards at the point of discharge if the receiving water exceeds water quality standard (unless, as discussed below, the receiving waters is being addressed by a TMDL with an implementation schedule). In other words, where a pollutant is not being addressed by a TMDL with an implementation schedule, there is in fact a de facto never-to-be-exceeded Numeric Effluent Limit (NEL) in the permit.</p> <p>The State Water Board’s Blue Ribbon Panel found in 2006 that “[I]t is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban discharges.” In fact, in its response to public comments dated April 27, 2012, regarding the Draft Tentative Order for the renewal of the MS4 permit for the California Department of Transportation (Caltrans), State Water Board staff cited the Blue Ribbon Panel’s findings in defending its decision to not incorporate NELs in the Caltrans permit. State Water Board staff stated, “Consistent with the findings of the Blue Ribbon Panel and precedential State Water Board orders (State Water Board Orders Nos. WQ 91-03 and WQ 91-04), this Order allows the Department [Caltrans] to implement BMPs to comply with the requirements of this Order.” (Page 2 of 110).</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Receiving Water Limitations**

Receiving Water Limitations			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1 (cont.)	Compliance with Receiving Water Limitations	V.A. [Pages 1 & 2]	Based on discussion with Regional Board staff, staff appears to believe that the “de facto NEL” issue is moot because exceedances will be addressed by TMDLs, and that staff is already proposing language to find permittees not in violation of the Receiving Water Limitation if they are “in compliance with the applicable TMDL requirement(s), including compliance schedules...” (Page 3, Staff Working Proposal for General TMDL Provisions). Based on our analysis, however, not all exceedances will be addressed by TMDLs. For example, our review of 2010-11 water quality data found wet weather exceedances of the fecal coliform water quality objective in Dominguez Channel. Because currently there is no bacterial TMDL for Dominguez Channel, permittees discharging into Dominguez Channel potentially could have been found in violation of the Receiving Water Limitations unless they have evidence that their MS4 discharges did not cause or contribute to the receiving water exceedances. On the other hand, because there is a bacterial TMDL for Malibu Creek, permittees in that watershed would not have been in jeopardy if they were implementing BMPs to address the TMDL. During the May 3 workshop, Board Member Glickfeld asked how permittees could be in immediate violation of the Receiving Water Limitation; the Dominguez Channel exceedances would be one such example.

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Receiving Water Limitations**

Receiving Water Limitations			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1 (cont.)	Compliance with Receiving Water Limitations	V.A. [Pages 1 & 2]	<p>This apparent double standard is not appropriate. Congress intended for TMDLs to be a mechanism by which dischargers can prioritize and address the worst water quality problems. The proposed RWL language would have the unintended consequence of nullifying the prioritization process and put permittees in a position of having more legal liability for lower priority (i.e. non-TMDL) water quality issues.</p> <p>It is also inconsistent with the watershed management program that is meant to assist in prioritizing resources in order to devote them to the high priority water quality issues. If a permittee is in violation of the receiving water limitation even though it is implementing a watershed management program or is otherwise in compliance with the iterative process, resources will be directed to addressing those exceedances of receiving water limitations that are not otherwise addressed by the plan, which would be those pollutants that would have been designated as being of lower priority, rather than those of higher priority. This is the opposite of how an effective program should be designed.</p> <p><u>Recommendation</u> Add Section V.A.5 as follows: "If a Permittee is found to have discharges from its MS4 that cause an exceedance of any applicable water quality standard or water quality objective, or has created a condition of nuisance, the Permittee will not be in violation of this Order if the Permittee has complied with the requirements set forth in Part V.A.3 above or is in compliance with a watershed management program that covers the receiving water at issue."</p>
2		V. (footnote 1)	<p>The definition of Receiving Water Limitation in footnote 1 includes any applicable numeric or narrative water quality standard contained in the "<i>Water Quality Control Plan for the Los Angeles Region (Basin Plan)</i>, water quality control plans or policies adopted by the State Water Resources Control Board, or federal regulations . . ." The reference to "policies" adopted by the State Water Resources Control Board is ambiguous. The State Board adopts water quality objectives in water quality control plans not in policy resolutions. See Water Code § 13170. It is not clear what is meant by "policies." It should be noted that the definition of water quality standards under the current permit does not include a reference to "policies."</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Receiving Water Limitations**

Receiving Water Limitations			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
2 (cont.)		V. (footnote 1)	<u>Recommendation</u> Strike the words "or policies" from footnote 1.
3		V. (footnote 1)	The definition of Receiving Water Limitation includes any applicable numeric or narrative water quality standard, "or limitation to implement the applicable water quality standard," for the receiving water. Applicable water quality standards are set forth in the Basin Plan. The phrase "or limitation to implement the applicable water quality standard" is undefined and ambiguous. The Basin Plan contains water quality standards, not "limitations" to implement those standards. See Water Code § 13241. It should be noted that the definition of water quality standards under the current permit does not include a reference to a "limitation to implement the applicable water quality standard." <u>Recommendation</u> Strike the words "or limitation to implement the applicable water quality standard," from footnote 1.

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1	Incorporating previous comments	General	To the extent that they have not been incorporated, the LACFCD and the County reiterate and incorporate by reference our comments submitted on February 9, 2012.
2	Commingled Discharges	VI.E.2.b [Page 2] VI.E.2.b.ii. & iii. [Page 2]	<p>40 CFR section 122.26(a)(3)(vi) provides that “Co-permittees need only comply with permit conditions relating to discharges for which they are operators.” This section was adopted in anticipation of intra-system, multi- or co-permittee approaches to storm water management, <i>See In re City of Irving, Texas Municipal Separate Storm Sewer System</i>, Environmental Administrative Decisions 111, 128 (EAB 2001), and thus this section applies to commingled discharges. Accordingly, the section on commingled discharges should make clear that where there is a commingled discharge to a receiving water, the permittees who contribute to the commingled discharge are required to work together to assure that the waste load allocation is met, but no one permittee is responsible for meeting the waste load allocation itself or is responsible for addressing pollutants that come from another permittee’s MS4. The section on commingled discharges needs to be clarified to make this principle clear.</p> <p>Subparagraph iii states compliance shall be determined for the group as a whole. This contradicts subparagraph ii and 40 CFR section 122.26(a)(3)(vi) which provide that each Permittee is only responsible for discharges from the MS4 for which they are owners and/or operators. Subparagraph iii needs to be clarified to make clear that it is not intended to conflict with subparagraph ii.</p> <p><u>Recommendation</u> Add the following sentence at the end of subparagraph iii: A determination that the discharge of the group as a whole exceeds a waste load allocation or water quality standard shall not be construed to mean that the discharge of any one permittee is not in compliance with the waste load allocation or water quality standard.</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
3	Comingled Discharges	VI.E.2.b.iv [Page 2]	<p>This section states that each Permittee is responsible for demonstrating that its discharge did not cause or contribute to an exceedance. For clarification, this section should be modified to provide that where a commingled discharge exceeds an applicable water quality standard, all Permittees that have contributed to the commingled discharge are responsible for determining the source(s) of the pollutants.</p> <p><u>Recommendation</u> For clarification, subparagraph iv should be replaced with, “For purposes of compliance determination all permittees that have contributed to the commingled discharge are responsible for determining the source of the pollutants.</p>
4	Comingled Discharges	VI.E.2.b.v [Page 2]	<p>This subparagraph addresses how a permittee can demonstrate that its discharge did not cause or contribute to an exceedance. Where a permittee, like the Flood Control District, receives commingled discharges from upstream permitted and non permitted sources, the permittee should be allowed to show that its discharge contains pollutants, the sources over which the permittee does not have control.</p> <p><u>Recommendation</u> Add a subparagraph 4 that says, “Demonstrate that its discharge contains contributions from other sources, including but not limited to discharges of other permittees, which have the potential to have caused or contributed to the exceedance at issue.</p>
5	Compliance by Demonstration of No Discharge	VI.E.2.b.v.1. [Page 2]	<p>Item (1) states that compliance may be demonstrated if there is no discharge from the Permittee’s MS4 into the applicable receiving water. This language is not consistent with the sections for Interim WQBELs and/or RWLs or for Final WQBELs and/or RWLs.</p> <p><u>Recommendation</u> Revise to read: “Demonstrate that there is no <u>direct or indirect</u> discharge from the Permittee’s MS4 into the applicable receiving water <u>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;</u>”</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
6	Receiving Water Limitations Addressed by TMDL	VI.E.2.c.iii [Page 3]	<p>This section provides that a permittee shall not be considered in violation of a Receiving Water Limitation if it is in compliance with applicable TMDL requirements in a time schedule order. It should also provide that a permittee is not in violation if it is in compliance with an applicable watershed management program.</p> <p><u>Recommendation</u> Add the words “watershed management program or” before the words “time schedule order.”</p>
7	Final WQBELs and/or Receiving Water Limitations	VI.E.2.e [Page 4]	<p>The County and the LACFCD are very concerned with staff’s proposal to express final TMDL WLAs as strict numeric WQBELs and/or Receiving Water Limitations in the permit. The State Water Board's Blue Ribbon Panel found in 2006 that "it is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban discharges." As mentioned in our comment regarding the proposed RWL language, in its response to public comments dated April 27, 2012, regarding the Draft Tentative Order for the renewal of the Caltrans MS4 permit, State Water Board staff cited the Blue Ribbon Panel’s findings in defending its decision to not incorporate NELs in that permit. State Water Board staff stated, “Consistent with the findings of the Blue Ribbon Panel and precedential State Water Board orders (State Water Board Orders Nos. WQ 91-03 and WQ 91-04), this Order allows the Department [Caltrans] to implement BMPs to comply with the requirements of this Order.” (SWRCB Comment Response Report, for Caltrans MS4 Permit, April 27, 2012, Page 2 of 110).</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
7 (cont.)	Final WQBELs and/or Receiving Water Limitations	VI.E.2.e [Page 4]	<p>State Water Board staff further noted that “in November 12, 2010, USEPA issued a revision to a November 22, 2002 memorandum in which the USEPA had ‘affirm[ed] the appropriateness of an iterative, adaptive management best management practice (BMP) approach’ for improving stormwater management over time. In the revisions, USEPA recommended that, in the case the permitting authority determines that MS4 discharges have the reasonable potential to cause or contribute to a water quality excursion, the permitting authority, <u>where feasible</u> (<i>emphasis added</i>), include numeric effluent limitations as necessary to meet water quality standards. However, the revisions recognized that the permitting authority’s decision as to how to express water quality based effluent limitations (WQBELs), i.e. as numeric effluent limitations or BMPs, would be based on an analysis of the specific facts and circumstances surrounding the permit. Moreover, USEPA has since invited comment on the revisions to the memorandum and will be making a determination as to whether to ‘either retain the memorandum without change, to reissue it with revisions, or to withdraw it.’” (<i>ibid</i>).</p> <p>The Regional Board is not required to reflect the final WQBELs as numeric effluent limits. 40 CFR 122.44(k)(2) and (3) specifically authorizes the use of BMPs. The State Water Board, in its response to comments on the proposed Caltrans permit, specifically said that it may “impose BMPs for control of storm water discharges in lieu of numeric effluent limitations,” citing section 122.44(k)(2) and (3).</p> <p>It has not been demonstrated that it is feasible to reflect the final WQBELs as numeric effluent limits. In addition, it has not been proven that these final WQBELs can currently be met.</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
7 (cont.)	Final WQBELs and/or Receiving Water Limitations	VI.E.2.e [Page 4]	<p>In this regard, although Regional Board staff stated during the May 3 workshop that it is feasible to incorporate NELs at this time, staff did not provide evidence to substantiate the feasibility of NELs. In assessing the feasibility of NELs in stormwater permits, the Blue Ribbon Panel based its evaluation on four criteria: (1) The ability of the State Water Board to establish appropriate objective limitations or criteria; (2) how compliance determinations would be made; (3) the ability of dischargers and inspectors to monitor for compliance; and (4) <u>the technical and financial ability of dischargers to comply with the limitations or criteria</u> (<i>emphasis added</i>). In response to a Regional Board member question regarding the cost to comply with TMDLs, staff responded that cost analyses were completed as part of TMDL development. Significantly, the analysis of costs in the TMDLs did not address the question of the financial ability of dischargers to comply with the limitations or criteria. Nor did the analysis include a cost-benefit analysis or address whether the means to comply with the TMDL was cost effective. The analyses in the TMDLs specifically did not include a cost benefit analysis or a determination of whether it was cost effective. It is also important to note that staff's cost analyses were not held to the "reasonable assurance" standard, and no quantitative analyses were done to demonstrate that the BMPs assumptions used by staff would have a reasonable assurance of meeting TMDL standards. In fact, during TMDL development, many permittees made comments to this end regarding staff's cost analyses for TMDLs. The County and the LACFCD agree with State Water Board staff that NELs, numeric WQBELs and/or Receiving Water Limitations currently are not feasible in stormwater permits. Los Angeles Region MS4 dischargers should not be held to enforceable NELs when discharges into the MS4, such as from Caltrans and construction sites, are not being held to the same standard.</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
7 (cont.)	Final WQBELs and/or Receiving Water Limitations	VI.E.2.e [Page 4]	<p><u>Recommendation</u></p> <p>Add “or” to the end of section E.2.e.i.3, and add section E.2.e.i.4 as follows: “The Permittee has submitted and is fully implementing an approved, revised Watershed Management Program.”</p> <p>Alternatively, insert new section E.2.e.ii, “Two years before the compliance deadline for an applicable final water quality-based effluent limitation and/or final receiving water limitation, Regional Board shall evaluate progress made by Permittees toward compliance with the standard, including review of the results from Permittees’ adaptive management process (VI.C.6.), to determine whether the compliance timeline should remain unchanged, or if the Order should be revised to incorporate a new compliance timeline.”</p>
8	TSOs for USEPA Established TMDLs and State Adopted TMDLs where Compliance Deadlines have Passed	VI.E.3. & 4. [Pages 4-6]	<p>The Time Schedule Order (TSO) is being proposed as a mechanism to address USEPA established TMDLs which do not have implementation schedules. A TSO is an enforcement action and should only be used as a last resort, if at all, to address such TMDLs.</p> <p>It is our understanding that Regional Board staff has been informed that Permittees must immediately comply with USEPA TMDLs that do not have implementation schedules and State TMDLs where compliance dates have passed. This is incorrect. In fact, in the proposed Caltrans MS4 permit the State Board staff addresses the incorporation of TMDLs into that permit by providing that the permit shall be reopened in one year to include TMDL provisions, including allowing the use of BMPs. See proposed Caltrans permit, sections E.4.a and b. No TSO is required. Regional Board staff should follow the same approach here.</p> <p><u>Recommendation</u></p> <p>Permittees can meet the requirements of USEPA TMDLs and State TMDLs where compliance dates have passed through implementation of BMPs or through compliance with BMPs set forth in watershed management programs. Alternatively, follow State Board staff’s lead and incorporate some TMDLs (ie. EPA TMDLs) through a reopener of the permit at a later time.</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
8 (cont.)	TSOs for USEPA Established TMDLs and State Adopted TMDLs where Compliance Deadlines have Passed	VI.E.3. & 4. [Pages 4-6]	The permit should also clearly state the Regional Board's intent to adopt appropriate implementation schedules for USEPA established TMDLs through reopeners.
9	Timeframe for Submittal of Request for TSO	VI.E.3. & 4.b. [Pages 5 & 6]	Should the TSO option remain, allow Permittees at least 12 months from the date of the permit adoption to request a TSO. <u>Recommendation</u> Revise to read: "...may <u>within 12 months</u> request a time schedule order (TSO)..."
10	Compliance Status during TSO Application Process	VI.E.3.c [Page 5] & VI.E.4.e [Page 6]	The process to request a TSO and its approval by the Regional Board can potentially last a long time. Permittees should be considered in compliance with the applicable receiving water limitations and/or water quality based effluent limitations from the initiation of the application process to its final approval. <u>Recommendation</u> Please revise to read: "A Permittee that <u>has applied for a TSO or is in compliance with the requirements of a Regional Water Board issued TSO</u> is not considered in violation of..."
11	Permittees and TMDLs Matrix	Attachment I Table A [Page 1]	As previously commented, for the Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL, the Los Angeles County Flood Control District (LACFCD) should not be listed as a responsible agency because these waterbodies are located outside of the LACFCD's service area and the TMDLs themselves do not identify the LACFCD as a responsible agency. <u>Recommendation</u> Remove the LACFCD as a Permittee under the Lake Elizabeth, Munz Lake, and Lake Hughes Trash TMDL.
12	TMDL Reopeners	TMDL Provisions	Several TMDLs, such as the Machado lake Nutrients TMDL, provide for reconsideration prior to final compliance deadlines. The working proposal does not reflect this.

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
12 (cont.)	TMDL Reopeners	TMDL Provisions	<u>Recommendation</u> For consistency, statements should be added to the TMDL provisions to reflect that the Regional Board will reconsider those TMDLs prior to their final compliance deadlines.
13	Machado Lake Trash TMDL	TMDL Provisions for the Dominguez Channel C.2.c. [Page 2 of 8]	The working proposal assigns a numerical value for trash generation rate of 5,334 gallons of uncompressed trash per square mile per year. Therefore the LACFCD is to reduce 16.41 gallons of uncompressed trash to zero by 3/6/2016. This is inconsistent with the method used in the Basin Plan Amendment. <u>Recommendation</u> The LACFCD should not be assigned a trash generation rate since the LACFCD property does not generate trash.
14	Machado Lake Trash TMDL	TMDL Provisions for the Dominguez Channel C.2.c. [Page 2 of 8]	The working proposal assigns a numerical value for trash generation rate of 5334 gallons of uncompressed trash per square mile per year. The Basin Plan Amendment does not use this method. <u>Recommendation</u> The WQBELs should be consistent with those in the adopted TMDL that are expressed as a percent reduction from baseline and not assigned as individual baselines to each City and the County. As discussed in its approved Trash Monitoring and Reporting Plan, the County of Los Angeles intends to comply with this TMDL by installing full capture devices consistent with Part VI.E.5.b. of the working proposal.
15	San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL	TMDL Provisions for the San Gabriel River WMA E.1.b. [Page 1 of 9]	It is unclear where the values in the table under Section E.1.b for wet weather water quality based effluent limitations come from. They do not match the approved TMDL in units or values. <u>Recommendation</u> Clearly explain why there is a difference in the values. If it is merely a conversion, then explain such. If it is not a conversion, then please provide the justification for adjusting the values.

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on General TMDL Provisions**

Total Maximum Daily Loads			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
16	Los Angeles Area Lakes TMDL	TMDL Provisions for the San Gabriel River WMA E.3.b)(2) [Page 4 of 9]	<p>The values in the working proposal are not the same as shown in the approved LA Area Lakes TMDL. The WLAs for Total Nitrogen for Claremont should be 829, not 745, and for the County of Los Angeles should be 3,390, not 829.</p> <p><u>Recommendation</u> Correct the table to match the values in the LA Area Lakes TMDL. If the values are not adjusted to match those in the TMDL, provide justification for not matching a TMDL that was adopted less than two months ago by the EPA.</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Watershed Management Program**

Watershed Management Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
1	Definitions of Terms	VI.C.1.d. [Page 1]	<p>The staff working proposal has not provided definitions for Water Quality Based Effluent Limitations and Numeric Action Levels. There are various terms used throughout the documents that are unclear or vague and need to be clearly defined.</p> <p><u>Recommendation</u> Include definitions for terms used throughout the Permit. Specifically, include definitions for "Water Quality Based Effluent Limitations" and "Numeric Action Levels."</p>
2	General	General	<p>Receiving Water Limitations have been repeatedly described as targets for which Minimum Control Measures and other BMPs should be designed. However, receiving water quality is the result of many other concurrent discharges besides MS4s, including nonpoint and instream sources. Receiving water limitations should not be considered as effluent targets.</p>
3	General	VI.C.1.d. [Page 1]	<p><u>Recommendation</u> Revise to read: "The goal of the Watershed Management Programs is to ensure that discharges from the Los Angeles County Permittees' MS4..."</p>
4	Non-stormwater Discharges from the MS4 into Receiving Water	VI.C.1.f.i. [Page 1] VI.C.3.a.iii.(1) [Page 4]	<p>The staff working proposal refers to "non-stormwater discharges from the MS4 to receiving waters..."</p> <p><u>Recommendation</u> As previously commented, we recommend removing "from the MS4 into receiving waters" throughout the document.</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Watershed Management Program**

Watershed Management Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
5	Timelines for Implementation	VI.C.2.a.i Table [TBD] [Pages 2-3]	<p>The staff working proposal provides for one year for Permittees to submit a draft Watershed Management Program Plan.</p> <p>The preparation of a plan will require extensive research, data collection and monitoring. Such an integrated monitoring effort must be given sufficient time (at least a year to develop and initiate) in order to provide the necessary water quality information for the preparation of a draft WMP Plan that includes a Reasonable Assurance Analysis.</p> <p>In addition, coordination amongst many Permittees to develop such a plan on a watershed basis will require agreements and memorandums of understanding to determine each Permittee’s responsibilities and financial contributions. Such agreements and MOUs will require at least 6 months to a year to prepare and adopt.</p> <p><u>Recommendation</u> Synchronize the preparation of the draft WMP Plan with the integrated monitoring plan. Provide sufficient time for data/information gathering and analyses to prepare the draft WMP Plan, which could be 2 years after Permit adoption date.</p>
6	Due Date for Implementation of WMP	VI.C.2.a.i Table [TBD] [Page 2]	<p>The proposed due date for start of implementation of the Watershed Management Program as listed in Table [TBD] is not consistent with the narrative in VI.C.4.</p> <p><u>Recommendation</u> Revise Table [TBD] to state that the due date for beginning implementation of the WMP is "<u>Upon submittal approval of final plan by the Regional Board Executive Officer</u>"</p>
7	Due date for First Evaluation of WMP	VI.C.2.a.i. Table [TBD] [Page 2]	<p>The proposed due date for the submittal of revisions to the Watershed Management Plan is 1½ years after submittal of the final plan. The due date should be based on the date the plan was approved by the Executive Officer.</p> <p><u>Recommendation</u> Revise Table [TBD] to state the plan is due “1½years after <u>submittal approval of final plan by the Executive Officer</u>”</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Watershed Management Program**

Watershed Management Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
8	Source Assessment and Control Measures	VI.C.3.a. & b. [Pages 4-6]	<p>The staff working proposal requires identification of potential sources of pollutants categorized as Highest and High Priority, or pollutants covered under a TMDL, and pollutants on the State 303(d) Listing. Furthermore, Permittees must prioritize these issues and propose/implement control measures to address them.</p> <p>The TMDL program is designed to allow for prioritization of pollutants and impairments, and to provide timelines to address these pollutants. Requiring Permittees to also address 303(d) listing pollutants outside of a TMDL process forces Permittees to further spread their limited resources. The focus should be on TMDL pollutants.</p> <p><u>Recommendation</u> Focus the WMP efforts on TMDL pollutants (Category 1), and designate State (303(d)) Listing pollutants (Category 2) optional for source assessment, selection and implementation of control measures, etc.</p>
9	Interim milestones and dates for TMDLs	VI.C.3.b.iv.(5).(b) [Page 9]	<p>The staff working proposal requires interim milestones and dates for TMDLs that do not include interim or final WQBELs and/or RWL with compliance deadlines during the permit term.</p> <p>Clarification is needed whether these proposed interim milestones and dates are enforceable if they are not met.</p> <p><u>Recommendation</u> Add "The interim milestones and dates will not be used as an enforceable provision."</p>
10	Sizing of Structural Controls	VI.C.3.b.iv.(4)(c) [Page 9]	<p>The staff working proposal requires that structural controls be sized <i>at a minimum</i> to treat the volume of stormwater runoff from the 85th percentile, 24-hour storm.</p> <p><u>Recommendation</u> Delete "At minimum"</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Watershed Management Program**

Watershed Management Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
11	Legal Authority to Compel	VI.C.3.b.iv.(6) [Page 10]	<p>The staff working proposal requires Permittees to have legal authority implement or to compel implementation of the Watershed Control Measures identified in the plan.</p> <p>The requirement is problematic since Permittees do not have the authority to compel each other to implement permit requirements. Permittees are not responsible for each others' implementation or compliance.</p> <p><u>Recommendation</u> Remove "or compel implementation of."</p>
12	Integrated Watershed Monitoring and Assessment	VI.C.5. [Page 11]	<p>It is difficult to provide meaningful comments when the staff working proposal refers to monitoring and assessment requirements that have not been provided.</p> <p><u>Recommendation</u> At minimum, the integrated monitoring program should be synchronized with the Watershed Management Program Plan to provide sufficient time for development and implementation of both components.</p>
13	Adaptive Management Process	VI.C.6.a. & b. [Page 11]	<p>The staff working proposal requires Permittees to base their adaptive management process on several factors. Clarity should be added to indicate Permittees must consider the factors, but it is not a requirement to include all of them.</p> <p><u>Recommendation</u> Revise to read: "Permittees in each Watershed Management Area shall 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 <u>by considering</u> the following:</p>

**Los Angeles County Flood Control District and County of Los Angeles Comments
Staff Working Proposal on Watershed Management Program**

Watershed Management Program			
Comment #	Identify Permit Element/Issue/Concern	Location in Working Proposal	Comment/Recommendation
14	Receiving Water Limitations exceedances addressed by the adaptive management process	VI.C.6.a.ii.(1) & 6.b.ii.(1) [Pages 12 & 13]	<p>The intent of these items are to state that by implementing the adaptive management process in conjunction with the Watershed Management Program (Part VI.C) a Permittee has satisfied the requirements in Part V.A.4 to address continuing exceedances of Receiving Water Limitations.</p> <p><u>Recommendation</u> Add "The Permittee shall not be considered in violation of a Receiving Water Limitation (Part V.A.) or a Water Quality Based Effluent Limitation if it is implementing the adaptive management process."</p>



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May 14, 2012

VIA E-MAIL

Renee Purdy
Section Chief of Regional Programs
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Re: City of Claremont's Written Comments on Working Proposal for the TMDL Provisions of the Los Angeles County MS4 Permit

Dear Ms. Purdy:

This letter is submitted on behalf of the City of Claremont ("City") in connection with the Los Angeles Regional Board's working proposal for the TMDL provisions of the Los Angeles County MS4 Permit. The focus of the City's written comments is on the manner in which the working proposal seeks to incorporate the Middle Santa Ana River Watershed Bacteria Indicator TMDL ("MSAR TMDL") as an enforceable requirement of the MS4 Permit. The City appreciates the opportunity to submit these written comments and looks forward to working with you to develop a mutually acceptable approach to the MSAR TMDL.

Before providing specific comments on the working proposal, it is important for the Regional Board to understand the City's position regarding the MSAR TMDL. As you know, the MSAR TMDL was adopted by the Santa Ana Regional Board in February of 2005. The City is not located within the jurisdiction of the Santa Ana Regional Board, and, therefore, the Basin Plan adopted by the Santa Ana Regional Board, including the MSAR TMDL, has no application to the City. (See Water Code § 13240 (providing that regional boards "shall formulate and adopt water quality control plans for all areas within the region.") (Emphasis added).)

Because the MSAR TMDL is not applicable to the City, significant legal concerns exist regarding the ability of the Los Angeles Regional Board to include the MSAR TMDL in the MS4 Permit without first going through the legally required Basin Plan amendment process to develop a bacteria TMDL that applies to the City. Since the Los Angeles Regional Board has not so amended its Basin Plan, the Board's legal authority to include the TMDL in the MS4 Permit is suspect. In making these comments, the City does not waive its legal objections to the application of the MSAR TMDL to it.



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Although the City preserves its legal options regarding the MSAR TMDL, the City recognizes that either the Los Angeles or Santa Ana Boards may have the authority, after following all legally required procedures, to extend the MSAR TMDL or similar requirements to the City in a legally enforceable way. For this reason, the City has been participating in the MSAR TMDL Task Force and might be willing to continue to participate in achieving the goals of the MSAR TMDL through the MS4 Permit under acceptable terms and conditions, as expressed in the comments below.

Subject to these caveats, the City has the following three comments on the TMDL provisions of the working proposal related to the MSAR TMDL:

1. The Regional Board should delete the final fecal coliform effluent limitations and receiving water limitations for both dry and wet weather. It is our understanding that the Los Angeles Regional Board's Basin Plan no longer uses fecal coliform as a fresh water Rec-1 objective. Therefore, the Board cannot include such an objective in the MS4 Permit. In addition, as noted in the working proposal, the Santa Ana Board is in the process of replacing the Rec-1 fecal coliform objective with an E. coli objective. Therefore, the final fecal coliform effluent limitations and receiving water limitations should be deleted.
2. The Regional Board should revise the provisions of Section G.1.d of the working proposal to allow the City to use the Comprehensive Bacteria Reduction Plans ("CBRPs") that have already been prepared for the MSAR TMDL and which have already been tentatively approved by staff at the Santa Ana Board. It makes little sense to require the City to "reinvent the wheel" on this issue. For this reason, the City recommends that Section G.1.d of the working proposal be revised to read as follows:

Permittees may demonstrate compliance with the effluent limitations and receiving water limitations by complying with the Comprehensive Bacterial Reduction Plans prepared for the MSAR TMDL.

3. The City would like the proposed Permit language to better reflect how the City's compliance will be measured. This is particularly important to the City because information prepared by the MSAR TMDL Task Force demonstrates that the City does not discharge stormwater or dry weather flows directly to the Chino Basin, including the San Antonio Channel. The City's contribution to flows occurs, if at all, only at the limited points where the City's MS4 connects with the City of Pomona's MS4. For this reason, the City would like to understand (and have the



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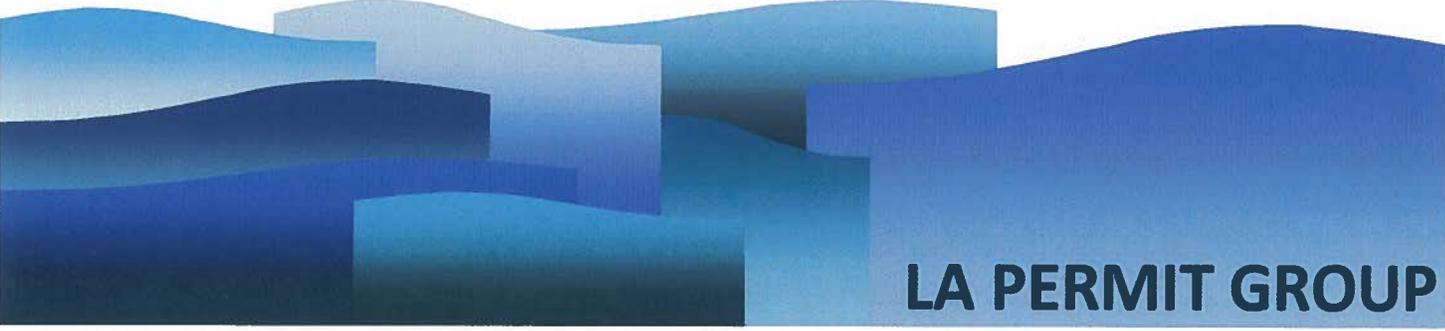
permit document) how the City's compliance will be measured. In the City's view, it would be in compliance with the effluent limitations if either (1) compliance existed at the outfall of any MS4 to which the City contributes; or (2) compliance existed at the point at which the City's MS4 connects to the City of Pomona's MS4. If either of these conditions existed, compliance would be obtained. Moreover, the City does not agree with the incorporation of the MSAR TMDL's Waste Load Allocation ("WLA") as a numeric effluent limitations. Particularly as applied to the City, the better approach would be to use a BMP-based approach to achieving compliance with the WLA.

The City appreciates the opportunity to submit these comments. We request the opportunity to discuss them with you and your team by phone or in person.

Very truly yours,

Shawn Hagerty
of BEST BEST & KRIEGER LLP

cc: Tony Ramos, City Manager (via e-mail)
Colin Tutor, Interim Assistant City Manager (via e-mail)
Brian Desatnik, Director of Community Development (via e-mail)
Craig Bradshaw, City Engineer (via e-mail)

The logo for the LA Permit Group features a stylized, layered blue mountain range on the left side. To the right of the mountains, the text "LA PERMIT GROUP" is written in a bold, dark blue, sans-serif font.

LA PERMIT GROUP

May 14, 2012

Renee Purdy
Regional Program Section Chief
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SUBJECT: Technical Comments on Los Angeles Regional Water Quality Control Board Staff Working Proposals for the Greater Los Angeles County MS4 Permit (Permit) – Watershed Management Programs, TMDLs and Receiving Water Limitations

Dear Ms. Purdy and Mr. Ridgeway:

The Los Angeles Permit Group would like to take this opportunity to provide comments on the working proposals for Watershed Management Programs, Total Maximum Daily Loads, and Receiving Water Limitations. These documents were posted on the Regional Board website on April 23, 2012. The LA Permit Group appreciates the Regional Board staff's effort to develop the next NPDES stormwater permit and their commitment to meet with various stakeholders including our group. We look forward to continuing the dialogue with the Board staff on this very important permit. Our highest priorities on the Watershed Management Program, TMDLs and Receiving Water Limitations are:

- Provide additional time to develop the Watershed Management Program to integrate the 32 TMDLs and prioritize efforts.
- Prior to adopting the Los Angeles MS4 NPDES Permit, reopen TMDLs for reconsideration where final compliance periods have passed and initiate the Basin Plan Amendment process to extend compliance deadlines to coordinate with the Watershed Management Program and consider substantial amounts of new information available. While the TMDL reopeners are pending, an affected Permittee would be in compliance through the implementation of core programs and implementation plans.
- Initiate TMDL reopeners/reconsideration where compliance with a waste load allocation (WLA) is exclusively set in the receiving water to also include compliance at the outfall, or other end-of-pipe; while the TMDL reopener is pending, an affected Permittee would be in compliance with the receiving water WLA through the implementation of core programs and implementation plans.
- Develop Receiving Water Limitation language that supports implementing the Watershed Management Programs without unnecessary vulnerability.

- All compliance points (interim WLA, milestones, and final WLA) for all TMDLs should allow for compliance timelines and actions consistent with the Watershed Management Programs that will be developed, rather than with strict numeric limits to determine compliance.

As noted in discussions with you, the LA Permit Group requested additional time to review the working proposals presented at the May 3, 2012 Regional Board Workshop. Given the brief comment deadline, there are significant, additional concerns that could not be fully explored or analyzed. Prior to issuing a tentative order, a complete administrative draft is needed to provided stakeholders (with a minimum 30 day review period) to allow the permittees to fully see how the various provisions of the permit will work together in order to gain a holistic view of the permit. This is essential in order to address the unprecedented policies and actions anticipated in the Los Angeles MS4 NPDES Permit.

These topics are further highlighted below. Detailed comments are attached for each Watershed Management Program, Receiving Water Limitations and TMDLs.

Watershed Management Programs

Overall, the LA Permit Group supports the Regional Board's proposed approach to address high priority water quality issues through the development and implementation of a watershed management program. We believe the working proposal provides sufficient detail to guide the development of the programs without being overly prescriptive and constraining. However, one of our biggest concerns with the working proposal is the proposed timeline for developing the watershed management programs. As noted in the working proposals and the workshop, municipalities would have only one year to develop a comprehensive watershed management program. This is insufficient time to organize the watershed cities and other agencies, develop cooperative agreements, initiate the studies, calibrate the data, draft the plans, and obtain necessary approvals from political bodies. As a comparison, the City of Torrance required two years to prepare a comprehensive water quality plan that addressed a suite of TMDLs, similar to what is being considered in the watershed management program. The permit should provide that the time schedule for submittal of the Draft Plan be 24 months after permit adoption.

We also offer the following comments regarding the watershed management program (our line item by line item review and comments are attached):

- The working proposal seems to be silent on the critical issue of sources of pollutants outside the authority of MS4 permittees (e. g. aerial deposition, upstream contributions, discharges allowed by another NPDES permit, etc.). We request that permittees be allowed to demonstrate that some sources are outside the permittee's control.
- Reasonable assurance necessitates closer integration with TMDL and storm water monitoring programs. Currently the working proposal does not provide a sufficient tie-in between the monitoring and the watershed program. This lack of tie-in was acknowledged in the workshop by Board staff. It is expected that this tie-in will be addressed once the monitoring provisions are drafted.
- The watershed plan is obviously tied closely with the TMDLs which is reasonable and constructive. But we would suggest that staff broaden the definition of water quality issues to consider protection of and impacts to existing ecosystems in the analysis.
- More careful consideration should be given to the frequency and extent of the reporting and adaptive management assessments. The current proposal results in a significant annual effort and the LA Permit Group members question the value of such an effort. Current reporting appears to overwhelm state staff resources without providing the state with usable feedback on the significant efforts about our programs. We believe that the reporting can be streamlined and that the jurisdictional and watershed reporting should be combined.

- It is unclear how program implementation and TMDL compliance will be handled during the interim period before development of the watershed management program. For those entities that choose to develop a watershed management program, the LA Permit Group requests that current, significant efforts in our existing programs and implementation plans be allowed to continue while we evaluate new MCMs as part of the watershed management program.
- Consideration of the technical and financial feasibility of complying with water quality standards should be included in the watershed management program.

Total Maximum Daily Loads

Of critical importance to this permit and to water quality is the incorporation of TMDLs into the NPDES permit. This NPDES permit proposes to incorporate more TMDLs than any other permit in California issued to date. As a result, the manner in which the TMDLs are incorporated into the permit is a critical issue for the LA Permit Group and will likely set a significant precedent for all future MS4 permits.

The rate of development of TMDLs in the Los Angeles Region was unparalleled in California, and likely the nation. A settlement agreement necessitated the much accelerated time schedule for these TMDLs. The TMDLs were developed based on the information available at the time, not the best information to identify or solve the problem. As a result, the sophistication of the TMDLs vary widely, meaning that not all TMDLs are created equal regarding knowledge of the pollutant sources, confidence in the technical analysis, availability of control measures sufficient to address the pollutant targets, etc. Additionally, the majority of the TMDLs were developed with the understanding that monitoring, special studies, and other information would be gathered during the early years of the TMDL implementation to refine the TMDLs. As such, many MS4 dischargers were told during TMDL adoption that any concerns they may have over inaccuracies in the TMDL analysis would be addressed through a TMDL reopener. The proposed method of incorporating TMDL WLAs, as outlined in the working proposal, does not effectively allow for addressing this phased method of implementing TMDLs, nor does it recognize the time, effort and complexities involved in addressing MS4 discharges, and it places municipalities into immediate compliance risk for permit requirements that have never been incorporated into the MS4 permit previously.

We recognize and appreciate that TMDLs must be incorporated in such a way as to require action to improve water quality. However, the permit should recognize the articulated goal of many of the TMDLs to be adaptive management documents and consider the challenges of trying to address the non-point nature of stormwater. As such, it is imperative to have flexibility in selecting an approach to address the TMDLs and the time frame by which to implement the approach.

Regional Board staff is making three significant policy decisions with regards to incorporating TMDLs into this permit that the LA Permit Group would like staff to reconsider:

1. The inclusion of numeric effluent limitations for final TMDL WLAs.
2. The use of time schedule orders to address Regional Board adopted TMDLs for which the compliance points have passed.
3. The use of time schedule orders for EPA adopted TMDLs with no implementation plans.

The first policy decision of concern is the incorporation of final WLAs solely as numeric effluent limitations in the proposed permit language. Although staff has discretion to include numeric limits, it is not required and the use of numeric limits results in contradictions and compliance inconsistencies with the rest of the permit requirements. Court decisions (See *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1166-1167 (9th Cir. 1999)¹), State Board orders (Order

¹ See also California Regional Water Quality Control Board San Diego Region - Fact Sheet / Technical Report For Order No. R9-2010-0016 / NPDES NO. CAS0108766.

WQ 2009-0008, In the Matter of the Petition of County of Los Angeles and Los Angeles County Flood Control District, at p. 10)² have affirmed that WLAs can be incorporated as non-numeric effluent limitations. Under 40 CFR Section 122.44 (k), the Regional Board may impose BMPs for control of storm water discharges in lieu of numeric effluent limitations when numeric limits are infeasible. It states that best management practices may be used to control or abate the discharge of pollutants when numeric effluent limitations are infeasible. In 2006, the Blue Ribbon Panel made recommendations to the State Water Resources Control Board concluding that it was not feasible to incorporate numeric limits into permits to regulate storm water, and at best there could be some action level, but not numeric waste load allocations. Very little has changed in the technology and the feasibility of controlling storm water pollutants since 2006. What has changed is that a legally compelled, long list of TMDLs has been adopted in the LA Region in a very short time period.

Additionally, during the May 3, 2012 MS4 Permit workshop, Regional Board staff seemed to indicate that the basis for incorporating the final WLAs as numeric effluent limitations is EPA's 2010 memorandum pertaining to the incorporation of TMDL WLAs in NPDES permits³. This memorandum (which is currently being reconsidered by U.S. EPA) states that "EPA recommends that, *where feasible*, the NPDES permitting authority *exercise its discretion* to include numeric effluent limitations as necessary to meet water quality standards" (emphasis added). This statement highlights the basic principle that the Regional Board has **discretion** in how the WLAs are incorporated into the MS4 Permit. Regional Board staff commented during the workshop that staff have evaluated data and have determined numeric effluent limitations are now feasible. However, no information refuting the Blue Ribbon Panel report recommendations has been provided that demonstrates how the appropriateness of using strict numeric limits was determined and why these limits are considered feasible now even though historically both EPA and the State have made findings that developing numeric limits was likely to be infeasible⁴.

Given the discretion available to Regional Board staff and the variability among the TMDLs with respect to understanding of the pollutant sources, confidence in the technical analysis, and availability of control measures sufficient to address the pollutant targets, **it is critical to use non-numeric water quality based effluent limitations for both interim and final WLAs in this permit.** The proposed Watershed Management Program will require quantitative analysis to select actions that will be taken to achieve TMDL WLAs. For the entire length of the TMDL compliance schedule, permittees will be required to demonstrate compliance with interim WLAs by implementing actions that they have estimated to the best of their knowledge will result in achieving the WLAs and water quality standards. Additionally, permittees will be held responsible for compliance with actions to meet the core program requirements of the permit. However, unless final WLAs are also expressed in this permit as action-based water quality based effluent limitations, and if instead strict numeric limits are required for final WLAs, then, at the specified final compliance date, no matter how much the permittee has done, no matter how much money has been spent, no matter how close to complying with the numeric values, and no matter what other information has been developed and submitted to the Regional Board, the permittee will be considered out of compliance with the permit requirements. And because of the structure established in this permit, the Regional Board staff will have to consider all permittees in this situation as being out of compliance with the permit provisions if the strict numeric limits have not been met, regardless of the actions

² "[i]t is our intent that federally mandated TMDLs be given substantive effect. Doing so can improve the efficacy of California's NPDES storm water permits. This is not to say that a wasteload allocation will result in numeric effluent limitations for municipal storm water dischargers. Whether future municipal storm water permit requirement appropriately implements a storm water wasteload allocation will need to be decided on the regional water quality control board's findings *supporting either the numeric or non-numeric* effluent limitations contained in the permit." (Order WQ 2009-0008, In the Matter of the Petition of County of Los Angeles and Los Angeles County Flood Control District, at p. 10 (emphasis added).)

³ U.S. EPA, *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*, Memorandum from U.S. EPA Director, Office of Wastewater Management James A. Hanlon and U.S. EPA Director, Office of Wetlands, Oceans, and Watershed Denise Keehner (Nov. 10, 2010).

⁴ Storm Water Panel Recommendations to the California State Water Resources Control Board "The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities. June 19, 2006.

taken previously. This approach is inconsistent with the goals of good public policy, fair enforcement and fiscal responsibility.

To address this issue, the LA Permit Group recommends that:

- WLAs be translated into WQBELs, expressed as BMPs and that implementation of the BMPs will place the permittee into compliance with the MS4 Permit
- The WLAs be included as specific actions (BMPs) that will be designed to achieve the WLAs
- Include language that states that compliance with the TMDLs can be achieved through implementing BMPs defined in the watershed management plan

The second major policy decision of concern is the use of Time Schedule Orders for Regional Board adopted TMDLs for which the compliance date has already occurred prior to the approval of the NPDES permit. The ideal phased TMDL implementation process whereby dischargers can collect information, submit it to the Regional Board, and obtain revisions to the TMDL requirements to address data gaps and uncertainties has not occurred. As evidenced by the number of overdue permits, the workload commitments of Regional Board staff are significant and TMDL reopeners seldom occur. Because the majority of the TMDLs have not been incorporated into permit requirements until now, MS4 permittees have been put in the position of trying to comply with TMDL requirements without knowing how compliance with those TMDLs would be determined and without knowing when or if promised considerations of modifications to the TMDL would occur. And now, they are expected to be in immediate compliance with new permit provisions which differ from most precedent and guidance regarding incorporation of TMDLs into MS4 permits, regardless of what actions they have taken to try and meet the TMDL requirements. This is neither fair nor consistent.

The LA Permit Group strongly believes that the adaptive management approach envisioned during TMDL development, whereby TMDL reopeners are used to consider new monitoring data and other technical information to modify the TMDLs, including TMDL schedules as appropriate, is the most straightforward way to address past due TMDLs. Some of the past due TMDLs are currently being considered for modifications and Regional Board staff should use this opportunity to adjust the implementation timelines to reflect the practical and financial reality faced by municipalities. There is no reason why the reopeners cannot reflect information gathered during the implementation period, including information that may be considered in developing the Time Schedule Orders in the future, to selectively modify time schedules in the TMDLs. Additionally, the permit should reflect any modifications to the TMDL schedules made through the reopener process, either through a delay in the issuance of the permit until the modified TMDLs become effective, or by using your discretion to establish a specific compliance process for these TMDLs in the permit. Providing for compliance with these TMDLs through implementation of BMPs defined in the watershed management plans as we have requested for all other TMDLs is a feasible, fair and consistent way to achieve this goal.

The third policy decision of concern is the manner in which EPA adopted TMDLs are being incorporated into the permit. The draft proposal requires immediate compliance with EPA TMDL targets. The effect of this approach is to put MS4 dischargers immediately out of compliance for TMDLs that may have only been adopted in March 2012. However, the Regional Board has the discretion to include a compliance schedule in the permit for EPA adopted TMDLs should they so choose. Federal law does not prohibit the use of an implementation schedule when incorporating EPA adopted TMDLs into MS4 permits. Additionally, State law may be interpreted to require the development of an implementation plan prior to incorporation of EPA adopted TMDLs into permits. Accordingly, the LA Permit Group recommends that the working proposal be modified to include compliance schedules for EPA adopted TMDLs in the permit.

Receiving Water Limitations

The proposed Receiving Water Limitations (RWL) language creates a liability to the municipalities that we believe is unnecessary and counterproductive. The proposed language for the receiving water limitations provision is almost identical to the language that was litigated in the 2001 permit. On July 13, 2011, the United States Court of Appeals for the Ninth Circuit issued an opinion in *Natural Resources Defense Council, Inc., et al., v. County of Los Angeles, Los Angeles County Flood Control District, et al.*⁵ (NRDC v. County of LA) that determined that a municipality is liable for permit violations if its discharges cause or contribute to an exceedance of a water quality standard.

In light of the 9th Circuit's decision and based on the significant monitoring efforts being conducted by other municipal stormwater entities, municipal stormwater permittees will now be considered to be in non-compliance with their NPDES permits. Accordingly, municipal stormwater permittees will be exposed to considerable vulnerability, even though municipalities have little control over the sources of pollutants that create the vulnerability. Fundamentally, the proposed language again exposes the municipalities to enforcement action (and third party law suits) even when the municipality is engaged in an adaptive management approach to address the exceedance.

The LA Permit Group would like to more fully address Board Member Glickfeld's question raised at the May 3rd workshop about how RWL language as currently written puts cities in immediate non compliance, either individually or collectively. As written, TMDLs as well as water quality standards in the basin plan would have to be specifically met as soon as this permit is adopted. Many of the adopted TMDLs include language that cities are jointly and severably liable for compliance.

While the Regional Board staff has noted that enforcement action is unlikely if the permittees are implementing the iterative process, the reality is that municipalities are immediately vulnerable to third party lawsuits as well as enforcement action by Regional Board staff. In the Santa Monica Bay, cities were sent Notices of Violation that, in essence, stated that all cities in the watershed were guilty until they proved their innocence when receiving water violations were found, in some cases miles away. The "cause and contribute" language was quoted prominently in those NOV's as justification for why the Regional Board could take such action. As another case in point the City of Stockton was sued by a third party for violations of the cause/contribute prohibition even though the City was implementing a comprehensive iterative process with specific pollutant load reduction plans. Cities will have no warning or time to react to any water quality exceedances, but still be vulnerable to third party lawsuits even when cities are diligently working to address the pollutants of concern. This will be disastrous public policy, creating a chilling affect on productive storm water programs.

It is not fair and consistent enforcement to put cities in a vulnerable situation to be determined out of compliance with water quality standards in the basin plan without time to develop a plan of action, develop source identification, and implement a plan to address the concern. With the very recent legal interpretation that fundamentally changes how these permits have been traditionally implemented, please understand that adjusting the Receiving Water Limitations language is a critical issue. Again, the receiving water limitation language must be modified to allow for the integrated approach to address numerous TMDLs within the watershed based program to solve prioritized water quality problems in a systematic way. This is a fair and focused method to enforce water quality standards.

The receiving water limitation provision as crafted in the contested 2001 Los Angeles permit is unique to California. Recent USEPA developed permits (e.g. Washington D.C.) do not contain similar limitations. Thus, we would submit that the decision to include such a provision and the structure of the provision is a State defined requirement and therefore an opportunity exists for the Regional and State Boards to reaffirm the iterative process as the preferred approach for long term water quality improvement.

⁵ No. 10-56017, 2011 U.S. App. LEXIS 14443, at *1 (9th Cir., July 13, 2011).

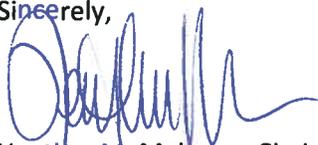
Beyond the legal/liability aspect of the receiving water limitations we would submit that in a practical sense the RWL works against the Watershed Management Program proposal. On the one hand the municipalities will develop watershed management programs that are based on the high priority water quality issues within the watershed. Consistent with the working proposal for the watershed management programs we would expect the focus to be on TMDLs and the pollutants associated with those TMDLs. However, under the current RWL working proposal the municipality will need to direct their resources to any and all pollutants that may cause or contribute to exceedances of water quality standards. Based on a review of other municipal outfall monitoring results in the State there may be occasional exceedances of other non-TMDL pollutants (e.g. aluminum, iron, etc.). These exceedances may only occur once every 10 storms but according to the current RWL proposal, the municipalities must also address these exceedances with the same priority as the TMDL pollutants. The LA Permit Group views this as unreasonable and ineffective use of limited municipal resources.

The RWL language is a critical issue for municipalities statewide and has been highlighted to the State Water Resources Control Board for consideration. Currently the State Board is considering a range of alternatives to create a basis for compliance that provides sufficient rigor in the iterative process to ensure diligent progress in complying with water quality standards but at the same time allows the municipality to operate in good faith with the iterative process without fear of unwarranted third party action. It is imperative that the Regional Board works with the State Board on this very important issue.

As previously discussed at the May 3rd workshop, and requested by many Board Members, the economic implications of the many proposed permit requirements are of critical importance. The LA Permit Group will be providing the requested information in a subsequent submittal shortly. However, the short timeframe for commenting on these working proposals has precluded us from assembling the information before the comment deadline on May 14, 2012.

In closing, we thank you for the opportunity to comment on the working proposals and we look forward to meeting with you to discuss our comments and to explore alternative approaches. Furthermore we respectfully request that that the Board provide a complete administrative draft of the Permit to stakeholders prior to the public issuance of the Tentative Order. Overall, the comment deadline was too short to address all the potential issues and concerns with the Watershed Management Program, TMDLs, and Receiving Water Limitation sections and that there are significant, additional concerns that could not be fully explored or analyzed given the comment deadline. Thus it important to review the entire draft permit to better understand the relationship among the various provisions; this is especially true for the monitoring provision and its relationship to the watershed management program. We strongly encourage you to use your discretion on these matters to make the adjustments requested. Please feel free to contact me at (626) 932-5577 if you have any questions regarding our comments.

Sincerely,



Heather M. Maloney, Chair
LA Permit Group

Attachment A: Detailed Comments on the Regional Board Staff Working Proposal for the Greater Los Angeles County MS4 Permit RWL, Watershed Management Program and TMDLs

cc: Sam Unger, LARWQCB
Deb Smith, LARWQCB
Board Member Maria Mehranian (Chair), LARWQCB

Board Member Charles Stringer (Vice Chair) LARWQCB

Board Member Francine Diamond LARWQCB

Board Member Mary Ann Lutz LARWQCB

Board Member Madelyn Glickfeld LARWQCB

Board Member Maria Camacho LARWQCB

Board Member Irma Munoz LARWQCB

Board Member Lawrence Yee LARWQCB

Senator Hernandez

Senator Huff

Document Name: TMDL Working Proposal - April 23 2012

Agency/Reviewer: LA Stormwater Permit Group

Comment No.	Doc. Reference Page	Section	Comments	Rvwr (optional)	Author Response
1	5	B.1.c.(2)	Santa Monica Bay Beaches Bacteria TMDL (SMBBB TMDL) is currently being reconsidered. As part of that reconsideration the summer dry weather targets must be revised to be consistent with the reference beach/anti-degradation approach established for the SMBBB TMDL and with the extensive data collected over that past seven years since original adoption of the SMBBB TMDL. This data clearly shows that natural and non-point sources result in 10% exceedances during dry weather. Data collected at the reference beach since adoption of the TMDL, as tabulated in Table 3 of the staff report of the proposed revisions to the Basin Plan Amendment, demonstrate that natural conditions associated with freshwater outlets from undeveloped watersheds result in exceedances of the single sample bacteria objectives during both summer and winter dry weather on approximately 10% of the days sampled.		
1	5	B.1.c.(2)	Thus the previous Source Analysis in the Basin Plan Amendment adopted by Resolution No. 02-004 which stated that "historical monitoring data from the reference beach indicate no exceedances of the single sample targets during summer dry weather and on average only three percent exceedance during winter dry weather" was incorrect and based on a data set not located at the point zero compliance location. Continued allocation of zero summer dry weather exceedances in the proposed Basin Plan Amendment is in direct conflict with the stated intent to utilize the reference beach/anti-degradation approach and ignores the scientifically demonstrated reality of natural causes and non-point sources of indicator bacteria exceedances.		
1	5	B.1.c.(2)	Continued use of the zero summer dry weather exceedance level will make compliance the SMBBB TMDL impossible for the Jurisdictional agencies. This is also in conflict with the intent of the Regional board as expressed in finding 21 of Resolution 2002-022 "that it is not the intent of the Regional Board to require treatment or diversion of natural coastal creeks or to require treatment of natural sources of bacteria from undeveloped areas".		

2		B.1.	<p>The SMBBB TMDL Coordinated Shoreline Monitoring Plan (CSMP) was approved by the Regional Board staff and that CSMP should be incorporated into the TMDL monitoring requirements of the next MS4 Permit. The CSMP established that compliance monitoring would be conducted on a weekly basis, and although some monitoring sites are being monitored on additional days of the week, none of the sites are monitored seven days per week, thus it is highly confusing and misleading to refer to "daily monitoring". The CSMP established that compliance monitoring would be conducted on a weekly basis, and although some monitoring sites are being monitored on additional days of the week, none of the sites are monitored seven days per week.</p>		
3		B.1.	<p>The SMBBB TMDL is currently being reconsidered at a hearing scheduled for June 7, 2012. The 4th term MS4 Permit should incorporate the revised waste load allocations which are to be adopted at that hearing, rather than the previous basin plan amendments.</p>		
4	5	B.1.c.(3)	<p>Description of SMB 5-5 under Beach Monitoring Location is incorrect (and seems to have been switched with the description of SMB 5-3). SMB 5-5 is a historic monitoring location "50 yards south of the Hermosa Pier" as described in the adopted basin plan amendment and in the Regional Board approved Coordinated Shoreline Monitoring Plan. Whereas SMB 5-3 has been relocated from the historic location 50 yards south of the Manhattan Beach Pier to the zero point of the southern storm drain outfall against the strand wall under the Pier, thus an apt description of that location would be: "Manhattan Beach Pier, southern drain".</p>		
5	1-6	B.1 throughout	<p>This discussion in this section devoted to the SMBBB TMDL seems to create confusion regarding the meaning of the terms "water quality objectives or standards, and "receiving water limitations" and "water quality-based effluent limitations". Water quality objectives or water quality standards are those that apply in the receiving water. Water Quality Effluent Based Limits apply to the MS4. So the "allowable exceedance days" for the various conditions of summer dry weather, winter dry weather and wet weather should be referred to as "water quality-based effluent limitations" since those are the number of days of allowable exceedances of the water quality objectives that are being allowed for the MS4 discharge under this permit. While the first table that appears under this section at B.1 (b) should have the heading "water quality standards" or "water quality objectives" rather than the term "effluent limitations".</p>		

6	5	B.1.c(3)	While it makes sense for the Jurisdictional Groups previously identified in the TMDLs to work jointly to carry out implementation plans to meet the interim reductions, only the responsible agencies with land use or MS4 tributary to a specific shoreline monitoring location can be held responsible for the final implementation targets to be achieved at each individual compliance location. An additional table is needed showing the responsible agencies for each individual shoreline monitoring location.		
7	6-7	B.2.	Santa Monica Bay Nearshore and Offshore Debris TMDL: An alternate compliance schedule is needed for responsible agencies that adopt local ordinances banning plastic bags, smoking in public places, and single-use expanded polystyrene by three years from the adoption date, or by November 4, 2013. Those agencies are to have a three year extension of the final compliance date, until March 20, 2023 to meet the final waste load allocations.		
8	7	B.3.	The Santa Monica Bay DDT and PCB TMDL issued by USEPA assigns the waste load allocation as a mass-based waste load allocation to the entire area of the Los Angeles County MS4 based on estimates from limited data on existing stormwater discharges which resulted in a waste load allocation for stormwater that is lower than necessary to meet the TMDL targets, in the case of DDT far lower than necessary. EPA stated that "If additional data indicates that existing stormwater loadings differ from the stormwater waste load allocations defined in the TMDL, the Los Angeles Regional Water Quality Control Board should consider reopening the TMDL to better reflect actual loadings." [USEPA Region IX, SMB TMDL for DDTs and PCBs, 3/26/2012]		
8	7	B.3.	In order to avoid a situation where the MS4 permittees would be out of compliance with the MS4 Permit if monitoring data indicate that the actual loading is higher than estimated and to allow time to re-open the TMDL if necessary, recommend as an interim compliance objective WQBELs based on the TMDL numeric targets for the sediment fraction in stormwater of 2.3 ug DDT/g of sediment on an organic carbon basis, and 0.7 ug PCB/g sediment on an organic carbon basis.		

9	7	B.3	<p>Although the Santa Monica Bay DDT and PCB TMDL issued by USEPA assigns the waste load allocation as a mass-based waste load allocation to the entire area of the Los Angeles County MS4, they should be translated as WQBELs in a manner such that watershed management areas, subwatersheds and individual permittees have a means to demonstrate attainment of the WQBEL. Recommend that the final WLAs be expressed as an annual mass loading per unit area, e.g., per square mile. This in combination with the preceding recommendation for an interim WQBEL will still serve to protect the Santa Monica Bay beneficial uses for fishing while giving the MS4 Permittees time to collect robust monitoring data and utilize it to evaluate and identify controllable sources of DDT and PCBs.</p>		
10	3	C.2.c)	<p>The Machado Lake Trash WQBELs listed in the table at C.2.c) in the staff working proposal appear to have been calculated from preliminary baseline waste load allocations discussed in the July 11, 2007 staff report for the Machado Lake Trash TMDL, rather than from the basin plan amendment. In some cases the point source land area for responsible jurisdictions used in the calculation are incorrect because they were preliminary estimates and subsequent GIS work on the part of responsible agencies has corrected those tributary areas. In other cases some of the jurisdictions may have conducted studies to develop a jurisdiction-specific baseline generation rate. The WQBELs should be expressed as they were in the adopted TMDL WLAs, that is as a percent reduction from baseline and not assign individual baselines to each city but leave that to the individual city's trash reporting and monitoring plan to clarify.</p>		

11	3	C.2.c)	<p>The WLAs in the adopted Machado Lake Trash TMDL were expressed in terms of percent reduction of trash from Baseline WLA with the note that percent reductions from the Baseline WLA will be assumed whenever full capture systems are installed in corresponding percentages of the conveyance discharging to Machado Lake. As discussed in subsequent city-specific comments, there are errors in the tributary areas originally used in the staff report, but in general, tributary areas are available only to about three significant figures when expressed in square miles. Thus the working draft should not be carrying seven significant figures in expressing the WQBELs as annual discharge rates in uncompressed gallons per year. The convention when multiplying two measured values is that the number of significant figures expressed in the product can be no greater than the minimum number of significant figures in the two underlying values. Thus if the tributary area is known to only three or four significant figures, and the estimated trash generation rate is known to four significant figures, the product can only be expressed to three or four significant figures. Thus there should be no values to the right of the decimal place and the whole numbers should be rounded to the correct number of significant figures.</p>		
12	3	C.2.c)	<p>The Regional Board's preliminary baseline trash generation rate for the City of Rolling Hills Estates was based on an assumed area of 1.22 square miles multiplied by the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year. However as explained in the City's Trash Monitoring and Reporting Plan, subsequent GIS work performed by City and County of Los Angeles and confirmed by the City of Rolling Hills Estates' consultant identified a 2.76 square mile drainage area tributary to Machado Lake from the City of Rolling Hills Estates. Using this corrected area and the default trash generation rate of 5334 gallons of uncompressed trash per square mile per year would result in a corrected baseline of 14,700 gallons per year.</p>		
13	3	C.2.c)	<p>The Regional Board's preliminary baseline trash generation rate for the City of Rolling Hills was based on an assumed area of 0.56 square miles multiplied by the estimated trash generation rate of 5334 gallons of uncompressed trash per square mile per year. However as explained in the City's Trash Monitoring and Reporting Plan, subsequent GIS work performed by City and County of Los Angeles and confirmed by the City of Rolling Hills' consultant identified a 1.313 square miles drainage area tributary to Machado Lake from the City of Rolling Hills. Using this corrected area and the default trash generation rate of 5334 gallons of uncompressed trash per square mile per year would result in a corrected baseline of 7004 gallons per year.</p>		

14	3	C.3	The Machado Lake Nutrient TMDL provides for a reconsideration of the TMDL 7.5 years from the effective date prior to the final compliance deadline. Please include an additional statement as item: 3.c)(3)"By September 11, 2016 Regional Board will reconsider the TMDL to include results of optional special studies and water quality monitoring data completed by the responsible jurisdictions and revise numeric targets, WLAs, LAs and the implementation schedule as needed."		
15	4	C.5.a)	Table C is not provided in the section on TMDLs for Dominguez Channel and Greater LA and Long Beach Harbors Toxic Pollutants. Please clarify and reference that Attachment D Responsible Parties Table RB4 Jan 27, 12 which was provided to the State Board and responsible agencies during the SWRCB review of this TMDL, and is posted on the Regional Board website in the technical documents for this TMDL, is the correct table describing which agencies are responsible for complying with which waste load allocations, load allocations and monitoring requirements in this VERY complex TMDL. Attachment D should be included as a table in this section of the MS4 Permit.		
16	4-8	C.5.	The Dominguez Channel and Greater LA and Long Beach Harbor Waters Toxic Pollutants TMDL provides for a reconsideration of the TMDL targets and WLAs. Please include an additional statement as item: 4.e) "By March 23, 2018 Regional Board will reconsider targets, WLAs and LAs based on new policies, data or special studies. Regional Board will consider requirements for additional implementation or TMDLs for Los Angeles and San Gabriel Rivers and interim targets and allocations for the end of Phase II."		
17	1, 3, 15	Attach I	City of Hermosa Beach is only within one watershed, the Santa Monica Bay Watershed, and so should not be shown in italics as a multi-watershed permittee		
18	2	E.2.b.v.1.	Recommend using the same language from E.2.d.i.3 to describe the demonstration. Therefore substitute this for the current language at E.2.b.v.1: "Demonstrate that 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."		

19	3	E.2.d.i.1.	Recommend clarifying this item by incorporating the footnote into the text and modifying this item to read as follows: "There are no violations of the interim water quality-based effluent limitation for the pollutant(s) associated with a specific TMDL at the Permittee's applicable MS4 outfall(s) which may include: a manhole or other point of access to the MS4 at the Permittee's jurisdictional boundary, a manhole or other point of access to the MS4 at a subwatershed boundary that collects runoff from more than one Permittee's jurisdiction, or may be an outfall at the point of discharge to the receiving water that collects runoff from one or more Permittee's jurisdictions."		
20	4	E.2.d.i.4.b.	Is this in effect setting a design storm for the design of structural BMPs to address attainment of TMDLs, or is it simply referring to SUSMP/LID type structural BMPs? If it is in effect setting a design storm, there needs to be some sort of exception for TMDLs in which a separate design storm is defined, e.g., for trash TMDLs where the 1-year, 1-hour storm is used.		
21	8	E.5.b.(c)	Recommend not listing specific water bodies in E.5.b.(c) because then it risks becoming obsolete if new TMDLs are established for trash, or if they are reconsidered. Furthermore, it is not clear why Santa Monica Bay was left out of this list since the Marine Debris TMDL allows for compliance via the installation of full capture devices.		
22	7	E.5.a.i-x	Recommend not listing specific waterbody/trash TMDLs here, but simply leave the reference to Attachments X through X to identify the Trash TMDLs. Otherwise this may have to be revised in the future. Again, Santa Monica Bay Marine Debris TMDL was not included in this list, not sure whether it was an oversight or intentional?		
23	2	E.2.b.ii	Not clear on what "discharges from the MS4 for which they are owners and/or operators" means.		
24	2	E.2.b.iii	For the "group of Permittees" having compliance determined as a whole, this should only be the case if the group of Permittees have moved forward with shared responsibilities (MOAs, cost sharing, a Watershed Management Program). It would not be fair to have one entity not be a part of the "group" and be the main cause of exceedances/violations.		

26	3	E.2.c.iii	For time schedule orders, the Burbank Water Reclamation Plant required a TSO since its interim permit limits expired, with the TSO bridging the gap between the time when the interim limits expired and when the new BWRP NPDES permit became effective. It should be noted that the Water-Effects-Ratio study was submitted in 2008 and it took the Regional Board nearly 2 years to complete its review of the study, which as a result required Burbank to request 2 1-year TSOs. Our concern with TSOs in the MS4 permit is that various efforts will be made to comply with the permit provisions and permit limits, including special studies for reopener purposes, and yet the TSO requests can either be delayed, or be limited to 1-year TSOs, placing extra burden on MS4 permittees to apply each year for the TSO, which requires a Regional Board hearing for adoption/approval.		
28	5	E.4.a	This provision states "A Permittee shall comply immediately ... for which final compliance deadlines have passed pursuant to the TMDL implementation schedule." This provision is unreasonable. First, various brownfields/abandoned toxic sites exists, some of which were permitted to operate by State/Federal agencies - nothing has or will likely be done with these sites that contribute various pollutants to surface and sub-surface areas. Additionally, this permit is going to require a regional monitoring program - this program will yield results on what areas are especially prone to particular pollutants. Until these results are made known, MS4 Permittees will have a hard time knowing where to focus its resources and particularly, the placement of BMPs to capture, treat, and remove pollutants. For these reasons, this provision should be revised to first assess pollutant sources and then focus on compliance with BMP implementation.		
29	12-13	E.5.c.i(1)	For reporting compliance based on Full Capture Systems, what is the significance of needing to know "the drainage areas addressed by these installations?" Unfortunately, record keeping in Burbank is limited to the location and size of City-owned catch basins. A drainage study would need to be done to define these drainage areas. As such, we do not believe this requirement serves a purpose in regards to full capture system installations and their intended function.		
30	7	E.5	Please clarify that cities are not responsible for retrofitting.		
31	4	E. 2. e	Please add the language from interim limits E.2.d.4 a - c to the Final Water Quality Based Effluent Limitations and/or Receiving Water Limitations to ensure sufficient coordination between all TMDLs and the timelines and milestones that will be implemented in the Watershed Management Program.		

32	4	E.3	Instead of TSO, please include mechanisms that allow for time to complete Basin Plan Amendments for EPA Established TMDLs. This will protect cities from unnecessary vulnerability and allow for these TMDLs to be incorporated into the Watershed Management Programs. Incorporate permit language that will reopen the LA MS4 upon completion of the Basin Plan Amendments necessary for coordination with these programs.		
33	Santa Clara River	A. 4 c)	Please change the Receiving Water Limitations for interim and final limits to the TMDL approved table. There should be no interpretation of the number of exceedance days based on daily for weekly sampling with, especially with no explanation of the ratio or calculations, and no discussion of averaging. Please revert to the original TMDL document.		
34		1 E.2	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		
35			Santa Ana River TMDLs should be removed; this TMDL is eliminated		
36	9	5.b.ii.2	Define "partial capture devices", define "institutional controls". Permittees need to have clear direction of how to attain the "zero" discharges which will have varying degrees of calculations regardless of which compliance method is followed. Explain the Regional Board's approval process for determining how institutional controls will supplement full and partial capture to attain a determination of "zero" discharge.		
37	10	5.b.ii.(4)	MFAC and TMRP should be an option available to the Los Angeles River.		
38	1 of 19	B	Substantial comments have been submitted for the Reopener of the SMBBB. Rather than restate these comments, please address these comments in the MS4.		
39	3 of 24	3.a)1	For the LA River metals. Some permittees have opted out of the grouped effort. This section needs to detail how these mass-based daily limitations will be reapportioned.		
40	6 of 24	4.d	Why are "receiving Water Limitations" being inserted here? None of the other TMDLs seem to follow that format.		
41	1 of 9	1.b	It is the permittees understanding that the lead impairment of Reach 2 of the San Gabriel River has been removed. It should be removed from the MS4 permit.		
42	1 of 9	1.c	Permittees under the new MS4 permit (those in LA County) need to be able to separate themselves from Orange County cities. Since the 0.941 kg/day is a total mass limit, it needs to be apportioned between the two counties. Also, The MS4 permit needs to contain language allowing permittees to convert grouped-base limitations to individual permittee based limitations.		

43	1	G	Please remove, in its entirety, the Santa Ana River TMDLs		
44	general	general	Any TMDL, for which compliance with a waste load allocation (WLA) is exclusively set in the receiving water, shall be amended by a re-opener to also include compliance at the outfall, or other end-of-pipe, that shall be determined by translating the WLA into non-numeric WQBELs, expressed as best management practices (BMPs). While the TMDL re-opener is pending, an affected Permittee shall be in compliance with the receiving water WLA through the implementation of core programs.		
45	4 of 8	C.5.b.1	For the Freshwater portion of the Dominguez Channel: There are no provisions for BMP implementation to comply with the interim goals. The wording appears to contradict Section E.2.d.i.4 which allows permittees submit a Watershed Management Plan or otherwise demonstrate that BMPs being implemented will have a reasonable expectation of achieving the interim goals.		
46	4 of 8	C.5.b.2	For Greater LA Harbor: Similar to the previous comment regarding this section. The Table establishing Interim Effluent Limitations, Daily Maximum (mg/kg sediment), does not provide for natural variations that will occur from time to time in samples collected from the field. Given the current wording for the proposed Receiving Waters Limitations, even one exceedance could potentially place permittees in violation regardless of the permittees level of effort. Reference should be made in this section to Section E.2.d.i.4 which will provide the opportunity for Permittee to develop BMP-based compliance efforts to meet interim goals.		
47	4 of 8	C.5.b.2	For the freshwater portion of the Dominguez Channel: the wording should be clarified. Section 5.a states that "Permittees subject to this TMDL are listed in Table C." Then the Table in Section C.5.b.2 Table "Interim Effluent Limitations-- Sediment", lists all permittees except the Fresh water portion of the Dominguez Channel. For clarification purposes, we request adding the phase to the first row: "Dominguez Channel Estuary (below Vermont)"		

Document Name: Watershed Management Program Working Proposal - April 23 2012

Agency/Reviewer: LA Stormwater Permit Group

Comment		Doc. Reference		Comments	Rvwr (optional)	Author Response
No.	Page	Section				
1	4	(4)		Pollutants in category 4 should not be included in this permit term, request elimination of any evaluation of category 4. Request elimination of category 3, as work should focus on the first two categories at this point		
2	2, 11, 13	various		The Table (TBD) on page 2 states implementation of the Watershed Program will begin upon submittal of final plan. Page 11, section 4 Watershed Management Program Implementation states each Permittee shall implement the Watershed Management Program upon approval by the Executive Officer. Page 13 section iii says the Permittee shall implement modifications to the storm water management program upon acceptance by the Executive Officer. All three of these elements should be consistent and state upon approval by the Executive Officer. The item on page 13 should be changed to reflect the Watershed Management Program, or clarify that the Watershed Management Program is the storm water management program.		
3	2, 3	Table and C.2.a - d		Please allow 24 months for development of the Watershed Management Program to provide sufficient time for calibration and the political process to adopt these programs		
4	4	C.3.a.iii		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		
5	9	(5)		Reasonable assurance analysis and the prioritization elements should also include factors for technical and economic feasibility		
6	2	C.2		Please clarify that Permittees will only be responsible for continuing existing programs and TMDL implementation plans during the interim 18 month period while developing the Watershed Management Program and securing approval of those programs		

7	9	(4)(c)	<p>While it may be appropriate to have an overall design storm for the NPDES Permit and TMDL compliance, this element seems to address individual sites. Recommend developing more prominently in the areas of the Permit that deals with compliance that the overall Watershed Management Program should deal with the 85th percentile storm and that beyond that, Permittees are not held responsible for the water quality from the much larger storms. However, requiring individual projects to meet this standard is limiting as there may be smaller projects implemented that individually would not meet 85th percentile, but collectively would work together to meet that standard. Please clearly indicate cities are only responsible for the 85th percentile storm for compliance and that individual projects may treat more of less than than number.</p>		
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Document Name: RWL Working Proposal - April 23 2012

Agency/Reviewer: LA Stormwater Permit Group

Comment No.	Doc. Reference		Comments	Rvwr (optional)	Author Response
	Page	Section			
1	1 - 2	all	Currently the State Board is considering a range of alternatives to create a basis for compliance that provides sufficient rigor in the iterative process to ensure diligent progress in complying with water quality standards but at the same time allows the municipality to operate in good faith with the iterative process without fear of unwarranted third party action. It is imperative that the Regional Board works with the State Board on this very important issue		



May 14, 2012

Via electronic mail

Mr. Sam Unger
 Executive Officer and Members of the Board
 California Regional Water Quality Control Board, Los Angeles Region
 320 West 4th Street, Suite 200
 Los Angeles, CA 90013
 Email: LAMS42012@waterboards.ca.gov

RE: *Los Angeles County Municipal Separate Storm Sewer System (“MS4”) Permit – Staff Working Proposal on Total Daily Maximum Loads, Receiving Water Limitations, Watershed Management*

Dear Mr. Unger,

On behalf of the Natural Resources Defense Council (“NRDC”), Santa Monica Baykeeper (“Baykeeper”), and Heal the Bay (collectively, “Environmental Groups”), we are writing with regard to the April 23, 2012, Staff Working Proposal for the Los Angeles County MS4 Permit Watershed Management Programs, Total Maximum Daily Loads (“TMDLs”), and Receiving Water Limitations sections (“Working Proposal”). We appreciate the opportunity to comment on the Working Proposal. We are concerned that the Working Proposal, as currently drafted, fails to properly implement both state and federal law, and is otherwise insufficiently protective of water quality in the region. In this regard, we appreciate the willingness of Regional Board staff to engage in discussion of the Working Proposal’s terms, and look forward to working with staff to revise the permit sections discussed herein.

I. TMDL Working Proposal—Background Information

The Clean Water Act mandates that states and the U.S. Environmental Protection Agency (“U.S. EPA”) establish water quality standards for all waters within their boundaries which set the level of water quality to be attained or maintained. (33 U.S.C. § 1313.) In setting the standards, states and U.S. EPA must meet or exceed minimum federal requirements and abide by federally-mandated procedures and obligations. The standards contain three required elements: (1) designated uses, such as “contact recreation” and “commercial and sport fishing”; (2) water quality criteria to protect the established designated uses; and (3) a state antidegradation policy consistent with federal standards. (40 C.F.R. §§ 131.6, 131.10, 131.11, 131.12.) Dischargers are then required to comply with effluent limitations, which restrict the quantities, rates, and

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concentrations of discharged pollutants, in order to meet water quality standards. (33 U.S.C. § 1362(11).)

When a water body does not attain established water quality standards, the state must identify the water as impaired and establish a TMDL for the pollutants impairing the water body, to be submitted for approval to the U.S. EPA. (33 U.S.C. § 1313(d); 40 C.F.R. §§ 130.2, 130.7.) Waste load allocations in existing TMDLs must be incorporated into National Pollutant Discharge Elimination System (“NPDES”) permits, and thus become enforceable water-quality based effluent limitations. (*See, City of Arcadia v. U.S. EPA* (N.D. Cal. 2003) 265 F. Supp. 2d 1142, 1144 (*aff’d*, 411 F.3d 1103 (9th Cir. 2005)).)

The Los Angeles Regional Water Quality Control Board (“Regional Board”) and U.S. EPA have adopted TMDLs for 175 waterways in the Los Angeles area over the past thirteen years, more than in any other region in the State of California. These TMDLs are due in large part to a 1998 Clean Water Act citizen action by Heal the Bay, NRDC and Santa Monica Baykeeper, which resulted in a consent decree with U.S. EPA setting the deadlines for the adoption of specified TMDLs. TMDLs are in effect for many different types of pollutants, including bacteria, metals, toxics, trash, and nutrients, that still impair Los Angeles waterways. Many additional waterbody-pollutant combinations remain on the state’s 303(d) list of impaired waterbodies, with no TMDL yet in effect.

Of the numerous TMDLs established to protect our rivers, creek and ocean in the last 10 years, one group merits special attention because of the significant public health risks it addresses—bacteria TMDLs—adopted specifically to protect swimmers, surfers, waders and beachgoers from the proven harmful impacts of waterborne fecal bacteria. Perhaps the most important of these, both in terms of its territorial reach and the magnitude of public health protection it provides, is the Santa Monica Bay Beaches Bacteria TMDL for dry weather.

Epidemiological studies, such as the 1995 Santa Monica Bay Epidemiological study conducted at Santa Monica Bay beaches, demonstrate that recreating in polluted runoff causes an increased health risk to swimmers.¹ The most commonly observed health impact associated with recreation in water contaminated with fecal bacteria is gastroenteritis or stomach flu. Santa Monica Bay beaches are among the most heavily used beaches in the world, with 55 million visitors annually. One of the first sets of TMDLs to be developed in the Region was the Santa Monica Bay beaches dry weather and wet weather bacteria TMDLs. These TMDLs went into effect on July 15, 2003, with a three-year compliance deadline for meeting the summer dry-weather TMDL (July 15, 2006). The final winter dry-weather TMDL compliance deadline followed three years later (July 15, 2009). Some notable efforts, such as the installation of low flow diversion projects, have been made by some responsible parties. Of note, the environmental community helped municipalities secure funding for many of these projects.

¹ *See, 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.*

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However, data show that exceedances of water quality standards and TMDL violations are still occurring. (Table 1.) The Regional Board sent Notices of Violation to 20 responsible parties under the current MS4 Permit in 2009 but, despite continuing threats to public health, no further enforcement action has been taken to date.

II. Permit Conditions and Compliance Schedules Must Comply with State and Federal Requirements

Environmental Groups support the Working Proposal's inclusion of final numeric waste load allocations. This is critical to ensure that the water quality objectives for each impaired waterbody are eventually achieved. Federal regulations also require the terms of the renewed MS4 Permit to be consistent with the assumptions and requirements of each TMDL's waste load allocations. (40 C.F.R. 122.44(d)(1)(vii)(B).) Thus, the MS4-related waste load allocations for TMDLs adopted in the Los Angeles Region *must* be properly reflected in the MS4 Permit.

Further, any compliance schedules included in the MS4 Permit must also be consistent with all applicable federal and state requirements,² including those regulations applicable to NPDES permits and compliance schedules. (*See, Communities for a Better Environment v. State Water Resources Control Board* (2005) 132 Cal.App.4th 1313, 1334-36 (NPDES compliance schedule based on development of a TMDL was proper because the schedule met the federal requirements).) Otherwise, the compliance schedules cannot legally be included in the permit. (*See, Citizens for a Better Environment v. Union Oil Co. of Cal.* (9th Cir. 1996) 83 F.3d 1111, 1120 (extension of compliance deadline would have been improper if included in the NPDES permit because the extension would have violated federal regulations).)

Moreover, any compliance schedules incorporated into the MS4 Permit must lead to compliance "as soon as possible," (40 C.F.R. § 122.47(a)(1)), and must comply with specific requirements including: (1) if the compliance schedule exceeds one year, it must include interim compliance deadlines; (2) interim deadlines must be no more than one year apart; and (3) if the time necessary for completion of any interim requirement is more than one year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date. (40 C.F.R. § 122.47(a)(3); *see also*, discussion in Section IV, below.)

Waste load allocations and compliance schedules in the MS4 Permit must also be consistent with other state water quality control plans and statutory deadlines. For example, waste load allocations in metals TMDLs in Los Angeles are based on the California Toxics Rule ("CTR") criteria and compliance schedules for CTR-based limits are authorized through the

² State Water Resources Control Board ("State Board") Final Staff Report, Resolution No. 2008-0025 at 9; *see also* February 10, 2004 Letter from EPA Approving Los Angeles Regional Board Compliance Schedule Policy at 3, n.1 ("when granting compliance schedules . . . the federal regulations at 40 C.F.R. 122.47 . . . continue to apply as well.").

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Inland Surface Water Plan (“ISWP”). The ISWP only authorized compliance schedules for a maximum of 10 years from the time CTR criteria were promulgated and stated that no discharger can be given a compliance schedule to meet CTR criteria after May 6, 2010.³

III. The TMDL Sections of the Renewed MS4 Permit Cannot Include Time Schedule Order Provisions

Over the last decade, the Regional Board, EPA and the environmental community have systematically attempted to address our region’s impaired waters through the adoption of TMDLs, a necessary regulatory mechanism to help achieve water quality standards in Los Angeles’ waters. Through this process, the Regional Board was successful in establishing some of our region’s most important water quality protections for public health and ecological integrity at our beaches and in our waterways. Despite the Regional Board’s successes in approving TMDLs, however, the Working Proposal for TMDLs suggests that permittees, through Time Schedule Orders (“TSOs”), can request additional time to reach compliance with past due TMDLs and TMDLs issued by EPA. The Working Proposal’s inclusion of provisions related to Time Schedule Orders, however, is misplaced, illegal, and confusing.

First, the MS4 Permit cannot include options for additional time where compliance deadlines set forth in the TMDL implementation plan have passed. TSOs are enforcement actions within the prosecutorial discretion of the Board pursuant to the California Water Code. (Cal. Water Code § 13300). TSOs are issued, after public notice and comment and Regional Board approval, to impose a strict schedule to quickly comply with permit requirements; a TSO is an action to enforce permit requirements—it is not a permit provision itself.

Second, including TSOs as an “option” for permittees is redundant with California Water Code provisions that clearly describe the TSO process. (*See*, Cal. Water Code § 13300.) The Working Proposal terms inappropriately suggest that permittees failing to comply with five to ten year old requirements are eligible for an extension of deadlines set to protect public health at our beaches and in our waterways. Specifically, many of the past due TMDLs relate to bacteria limits at beaches during summer dry weather—when millions of Los Angeles residents and visitors are swimming, surfing, and enjoying our world famous coastline. The renewed MS4 Permit must reflect the Regional Board’s charge and intention to achieve water quality standards meant to prevent the public from getting sick in our waters. Provisions that encourage a process to grant time extensions do not do so.

The Working Proposal also illegally attempts to include a “safe harbor” from permit requirements where a Time Schedule Order has been issued. (Working Proposal at §§ E(2)(c)(iii); E(3)(c); E(4)(e).) A TSO is, by definition, a response to *violations* of regulatory requirements. (Cal. Water Code § 13300). Under a TSO, a discharger “shall take [specific actions] in order to correct or prevent a violation of requirements.” (*Id.*) However, a TSO

³ Inland Surface Water Plan, at 19.

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cannot excuse a violation of the permit. Instead, it is an enforcement action within the prosecutorial discretion of the Regional Board that mandates a specific set of actions intended to reach compliance with provisions the permittee is currently violating.

The Working Proposal's provisions related to TSOs also unnecessarily complicate the permit. The process of demonstrating a Permittee's eligibility for a time extension is vague and unsupported by the California Water Code and federal regulations. For example, the lists of criteria in Sec. E(3)(b) and Sec. E(4)(d) make an arbitrary distinction between past due Regional Board TMDLs and past due EPA TMDLs. The agency responsible for a TMDL's approval is irrelevant to evaluating a permittee's compliance with pollution limits. This is especially true for TMDLs approved five to ten years ago, where permittees have long been on notice that compliance would be required through a renewed MS4 Permit. In fact, many permittees under the existing MS4 Permit were subject to bacteria TMDL requirements for several years under the Santa Monica Bay Beaches Bacteria TMDL, or currently under the Marina Del Rey/Mothers Beach Bacteria TMDL.⁴ Thus, there is no room to argue that permittees are unprepared or unaware of past due pollution limits.

Six Regional Board TMDLs related to bacteria and nutrients were established between 2003 and 2006.⁵ Each of these TMDLs has at least one compliance date that has passed—many as long ago as 2004, 2006, and 2007. Awarding more time to permittees for reaching compliance with pollution limits set this long ago is unacceptable. Permittees have been aware of, and in some cases, subject to these TMDLs for years. Similarly, the TMDL Working Proposal suggests that permittees may request TSOs for past due EPA TMDLs. Although EPA TMDLs do not include compliance schedules, and therefore compliance is mandated from the date of incorporation into the MS4 Permit, several of these TMDLs were also established and became effective many years ago. As a result, Permittees have been on notice about the need to comply with these TMDLs for several years and have had time to work on the measures necessary to bring them into compliance in the future. Consequently, there is no justification for granting more time to achieve compliance with EPA TMDLs that have been in place and effective since 2003 and 2007.⁶ Instead, the Regional Board should require timely compliance with necessary water quality protections aimed to improve public health and ecological integrity.

⁴ See, Los Angeles Regional Water Quality Control Board, Order No. 01-182 (as amended by Orders R4-2006-0074 and R4-2007-0042), NPDES Permit No. CAS004001, August 23, 2007.

⁵ Santa Monica Bay Beaches Bacteria TMDL; Santa Clara River Nutrients TMDL; Marina Del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL; Malibu Creek Bacteria TMDL; LA River Nutrient TMDL; LA Harbor Bacteria TMDL (Inner Cabrillo Beach and Main Ship Channel).

⁶ Santa Clara River, Reach 3 Chloride TMDL; Malibu Creek Nutrient TMDL; San Gabriel River Metals and Selenium TMDL.

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IV. Interim TMDL Requirements Must Include Numeric Benchmarks to Properly Track Compliance

In addition to incorporating final numeric waste load allocations for TMDLs, it is imperative that the renewed MS4 Permit also includes interim numeric benchmarks that are consistent with federal regulations in order to track compliance and ensure that final objectives are met.

Rather than allowing for implementation of Watershed Management Programs to serve as the sole compliance measure, each TMDL requirement in the Permit with a future final compliance deadline should include interim numeric benchmarks throughout the process of implementation. This is the only way to track a Permittee's progress and evaluate BMPs and progress toward final compliance along the way, and is consistent with the requirements that compliance schedules include interim deadlines (40 C.F.R. § 122.47(a)(3).) For this reason, the renewed MS4 Permit should mirror the process already adopted by the Regional Board in the Ventura MS4 Permit. In the Ventura MS4 Permit, Permittees must meet both interim and final compliance milestones, consistent with the adopted TMDL.⁷ Likewise, Los Angeles MS4 permittees should be required to monitor and evaluate methodologies, adapt accordingly, and report progress via numeric benchmarks in order to ensure that final numeric benchmarks will be met when required. (40 C.F.R. § 122.47(a)(3).)

In addition, each permittee should be required to report on BMP implementation, BMP maintenance activities, and water quality monitoring results (which some TMDLs require independently)⁸ on an annual basis to the Regional Board. The Working Proposal's requirement that this information merely be available for inspection by the Regional Board is insufficient to ensure that the public can access information related to permit implementation and compliance.

V. Receiving Water Limitations in the Current MS4 Permit Must Remain As They Are

Environmental Groups support maintaining the Receiving Water Limitations ("RWLs") in the current, 2001 MS4 Permit as they are. The RWL provisions in the current permit contain clear, appropriate, and enforceable language that complies with the Clean Water Act and has

⁷ Los Angeles Regional Water Quality Control Board, Ventura County Municipal Separate Stormwater National Pollutant Discharge Elimination System (NPDES) Permit; Order No. R4-2010-0108; NPDES Permit No. CAS004002, July 8, 2010.

⁸ See, e.g., The Ballona Creek Metals TMDL (requiring ambient and effectiveness monitoring and special studies) (Amendment to the Water Quality Control Plan - Los Angeles Region to incorporate the Ballona Creek Metals TMDL, Resolution No. R2007-015, in effect October 29, 2008.

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stood the test of administrative, judicial, and enforcement challenges.⁹ This section of the permit has now been upheld by state and federal courts, and has been strongly supported by the Regional Board through its Amicus Brief submitted to the Ninth Circuit Court of Appeals, provided as Exhibit A. To avoid confusion, the language of the Receiving Water Limitations section should remain unchanged.

VI. The Watershed Management Programs Create a Self-Regulatory Scheme in Violation of the Clean Water Act

NRDC has previously stated its concern regarding a provision of staff's March 21, 2012 working proposal for the permit's Minimum Control Measures, which allows for Permittees to avoid public input and potentially substitute the requirements of a Permittee's local ordinance for certain permit provisions relating to on-site stormwater controls, LID requirements, alternative performance criteria, hydromodification controls, and other post-construction requirements.¹⁰ NRDC noted that the "Local Ordinance Equivalence" provision would create a self regulatory scheme, violating the Clean Water Act's requirements that permittee-derived controls for these programs must be subject to "meaningful review" by the regulating entity, and that this process would allow permittees to bypass critical procedures allowing for public review. Environmental Groups note that Section VI, the proposed "Special Provisions: Watershed Management Programs" raises exactly the same concerns, with potentially far broader application.

The Working Proposal states that "Participation in a Watershed Management Program allows a Permittee to customize the requirements in Part VI.D [Special Provisions: Minimum Control Measures] to address the highest watershed priorities, including achieving compliance with the requirements of Part VI.E and Attachments X through X [Special Provisions: TMDL Provisions]." (Working Proposal at § VI.C.1.b.) The Plans, which could allow for the permittees to effectively re-draft large sections of the permit's core provisions and TMDL implementation requirements, are to be submitted to the Executive Officer for review and approval. (*Id.* at § VI.C.2.) But placing such review authority solely in the Executive Officer shields from public process the development of these critical, core permit requirements and creates a self-regulatory scheme in violation of the Clean Water Act. In *Environmental Defense Center, Inc. v. U.S. E.P.A.*, ((9th Cir. 2003) 344 F.3d 832, 854-56), the court explained the vital need for both public process and regulatory oversight: "[S]tormwater management programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity. . . . Congress identified public participation rights as a critical means of advancing the goals of the Clean Water Act in its primary statement of the Act's approach and philosophy."

⁹ See, e.g., *In re L.A. County Mun. Storm Water Permit Litigation.*, No. BS 080548 at 4-7 (L.A. Super. Ct. Mar. 24, 2005); Exhibit A (Regional Board Amicus Brief).

¹⁰ See NRDC letter to Mr. Sam Unger, Executive Officer, and Members of the Board, Los Angeles Regional Water Quality Control Board, April 13, 2012, at 13.

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In bypassing the public review process, the Watershed Management Programs provision instead has the potential to exempt development from participation in the Permit's core requirements to prevent the discharge of pollutants to and from the MS4 system. These requirements, which are an important part of the Permit's requirements to meet the Clean Water Act's Maximum Extent Practicable standard (*See*, 33.U.S.C. § 1342(p)(3)(B)(iii)), are properly reviewed by the Regional Board, not its staff, and must be vetted through the process of public review and hearing.

Environmental Groups recognize that there are many benefits for permit implementation and for improving water quality to be gained through joint efforts between the Permittee cities, and encourage cooperative efforts by the Permittees to implement many of the Permit's terms and to ultimately control and eliminate sources of storm water and non-storm water pollution. Further, Environmental Groups agree that there may be elements of the Minimum Control Measures, such as for Public Information and Participation, inspection programs, or other provisions, for which flexibility in establishing permit requirements may allow for greater protection or improvement of water quality. However, the Watershed Management Program component is overbroad in its allowance for Permittees to potentially manipulate the adopted core provisions of the Permit. For example, in designing a program to implement the Permit's required Planning and Land Use requirements, including the Permit's LID requirements and on-site retention standard for stormwater runoff, the Board must note that, similar to the March 21, 2012 Working Proposal for MCM's, there are at least six Phase I MS4 permits in California that require retention of the 85th percentile storm unless technically infeasible.¹¹ While limited room for variation from permit to permit may exist, such as allowing the use of regional or other projects that capture and retain stormwater runoff for beneficial use as proposed in the March 21st Working Proposal, the widespread implementation of this retention standard throughout the state, and of similar standards in numerous other locations throughout the country,¹² demonstrates that such a standard is presumptively MEP. Permittees are surely authorized, and encouraged, to add requirements over and above this standard, such as incorporating programs for LID retrofits or green streets, but they are not authorized to deviate below it. These

¹¹ See, e.g., Los Angeles Regional Water Quality Board, Order No. R4-2010-0108 (Ventura County MS4 Permit); Santa Ana Regional Water Quality Control Board, North Orange County MS4 Permit, Order No. RB8-2009-0030, NPDES Permit No. CAS 618030, May 22, 2009; Santa Ana Regional Water Quality Control Board, Riverside County MS4 Permit, Order No. RB8-2010-0033, NPDES Permit No. CAS618033, January 29, 2010; San Diego Regional Water Quality Control Board, South Orange County MS4 Permit, Order No. R9-2009-0002, NPDES Permit No. CAS0108740, December 16, 2009; San Francisco Regional Water Quality Control Board, San Francisco San Francisco Bay Municipal Regional Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, October 14, 2009 (revised November 28, 2011).

¹² See, April 13, 2012 NRDC letter to the Los Angeles Regional Water Quality Control Board, at 5-7.

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provisions of the permit should therefore not be included under the selection of alterable provisions covered by the Watershed Management Programs.

Further, it should be made clear that while the purpose of the Watershed Management Programs provision is to *ensure* compliance with the Permit's independently enforceable Receiving Water Limitations and final TMDL limits, implementation of a watershed management program does not measure or *excuse* compliance with these standards.¹³ As discussed above, TMDLs and water quality standards form the ultimate backstop in the Permit for protection of water quality. TMDLs, for example, are adopted to protect the public health, environment, and our coastal and inland water-dependant economies for waters that are failing to meet scientifically derived limitations on hazardous pollutants. While we support the Working Proposal's requirement that Permittees must meet final TMDL limitations incorporated into the permit,¹⁴ due to the critical nature of TMDLs for protecting our resources, the Permit should likewise require compliance with interim TMDL limits under an approved watershed management program.

¹³ Several Permittees at the May 3, 2012 Regional Board hearing suggested that the Board should excuse compliance with the Permit's independently enforceable Receiving Water Limitations for those cities choosing to implement a watershed management program. Any such action would be unlawful and threaten water quality in the region, and would in any event be contrary to longstanding Regional Board policy, as well as the Board's stated position in litigation over the previous iteration of this Permit. As a result, the Board should decline this invitation to circumscribe application of the Receiving Water Limitations.

¹⁴ See Working Proposal at § VI; Staff Presentation from the May 3, 2012 Regional Board Meeting, at 20. Under 40 C.F.R. § 122.44(d)(vii)(B) Permit terms must be consistent with the waste load allocations adopted in each TMDL, including, unless infeasible, compliance with numeric limitations.

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VII. Conclusion

Environmental Groups appreciate this opportunity to comment on the Working Proposal. Please feel free to contact us with any questions or concerns you may have.

Sincerely,



Noah Garrison
Project Attorney
Natural Resources Defense Council



Kirsten James
Director of Water Quality
Heal the Bay



Liz Crosson
Executive Director
Santa Monica Baykeeper

TABLE 1

Bacteria TMDL	WinterDry Total Exceedances	SummerDry Total Exceedances	Mdr WinterDry 0607	mdrWinterDry0708	mdrWinterDry0809	Winter Dry0910	Winter Dry1011	Winter Dry1112	Smb Summer Dry06	Summer Dry07	Summer Dry08	Summer Dry09	Summer Dry10	Summer Dry11
Santa Monica Bay	1153	3147				287	426	440	420	494	616	527	376	714
Cabrillo	224	294				22	87	115					134	160
Marina del Rey	400	226	1	56	35	133	75	100		48	46	64	27	41
Total	1777	3667	1	56	35	442	588	655	420	542	662	591	537	915

Table 1: TMDL Exceedances since compliance deadlines.

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 9 IN THE UNITED STATES DISTRICT COURT
 10 FOR THE CENTRAL DISTRICT OF CALIFORNIA
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13 **SANTA MONICA BAYKEEPER and**
 14 **NATURAL RESOURCES DEFENSE**
 15 **COUNCIL,**

Plaintiffs,

16 v.

17 **CITY OF MALIBU,**

18 **Defendant.**

Case No.: CV 08-1465-AHM (PLAx)

**BRIEF OF AMICUS CURIAE
 CALIFORNIA REGIONAL
 WATER QUALITY CONTROL
 BOARD, LOS ANGELES REGION,
 IN SUPPORT OF PLAINTIFFS'
 MOTION FOR PARTIAL
 SUMMARY JUDGMENT AND
 OPPOSING DEFENDANT'S
 MOTION FOR JUDGMENT ON
 THE PLEADINGS**

Date: February 22, 2010
 Time: 10:00 a.m.
 Place: Courtroom 14
 Judge: Honorable A. Howard
 Matz

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40 C.F.R. § 122.64(a).....	13
42 C.F.R. § 122.26(d)(2)(iii)(D)	13
55 Fed.Reg. 47,990, 48,040-41 (Nov. 15, 1990)	17
64 Fed.Reg. 68,722, 68,770 (Dec. 8, 1999)	2

INTRODUCTION

1
2 The California Regional Water Quality Control Board, Los Angeles Region
3 (Regional Board) is filing this amicus curiae brief to address issues regarding the
4 interpretation of the Los Angeles County Municipal Storm Water National
5 Pollutant Discharge Elimination System (NPDES) Permit (the Permit), which the
6 Regional Board issued and implements.¹ The Regional Board is concerned that
7 Defendant City of Malibu (the City) has taken positions that are inconsistent with
8 the Permit as adopted, interpreted, and implemented by the Regional Board.²

9 The Regional Board submits this brief because the Permit is critical to the
10 Board's efforts to protect water quality in the Los Angeles Region. Storm water and
11 urban runoff are among the principal threats to water quality in the region. See
12 Regional Board's Request for Judicial Notice (RB RJN), Exhibit A, Permit, at pp.
13 5-6 ¶ B.1 to B.6. NPDES permits, such as the Permit, bridge the gap between water
14 quality and regulatory requirements. The Supreme Court has described NPDES
15 permits as serving "to transform generally applicable effluent limitations and other
16 standards including those based on water quality into the obligations . . . of the
17 individual discharger." *Environmental Protection Agency v. California ex rel. State*
18 *Water Resources Control Bd.* 426 U.S. 200, 205, 96 S.Ct. 2022, 2025 (1976); *see*
19 *also* Cal.Wat. Code, § 13370. Here, the Permit "transforms" the water quality
20 standards specified in the Los Angeles Basin Plan (*see* California Water Code
21 section 13240) and the California Ocean Plan (*id.* at section 13170.2) into
22 compliance obligations of the City and other co-permittees.

23
24
25 ¹ Issued in 2001, the Permit was Regional Board Order No. 01-182. It has
been amended twice.

26 ² Timing considerations have precluded the Regional Board from filing an
27 amicus brief in the companion case, *NRDC et al v. County of Los Angeles, et al*,
28 Case Number 08-1467 -AHM (PLAx), where many of the same issues appear. The
Court may consider the positions conveyed here in the companion case.

1 Ironically, by invoking the “permit as shield” doctrine, the City itself
2 demonstrates the importance of interpreting the Permit in a manner that preserves
3 its enforceability in both this action and administrative actions before the Regional
4 Board.³ The permit shield provision states that for purposes of enforcement,
5 compliance with an NDPEs permit is deemed compliance with sections of the
6 Clean Water Act upon which those provisions are based. 33 U.S.C. § 1342(k). But
7 “compliance” means compliance with the entire Permit. It is not the case that there
8 is a one-to-one correlation between statutory requirements and permit provisions
9 such that a permittee can insulate itself from direct liability under the statute by
10 complying with selected permit provisions. Any regulatory permit, particularly one
11 as necessarily complex as a system-wide municipal separate storm sewer system
12 (MS4) permit, represents an overall approach to the problem.

13 This brief discusses three aspects of the Permit put at risk and potentially
14 nullified by the City’s positions in this litigation. First, the Permit’s prohibition of
15 discharges that cause or contribute to an exceedance is an enforceable Permit
16 requirement. There is no “safe harbor” provision allowing permittees to escape
17 liability with partial compliance. Second, the Permit envisions a system of self-
18 monitoring and reporting: the permittees must identify an exceedance or other
19

20 ³ City’s Response to Plaintiff’s MSJ at 5, fn. 7. The permit shield provision can be
21 overstated, however, as it does not shield a permittee from all claims that the
22 permittee has violated the Clean Water Act. Nor does the provision mean that
23 compliance with part of the permit means compliance with the whole permit, or that
24 “good faith” is a factor in determining permit violations. It certainly does not mean
25 that if a permittee argues that it has no legal duty to comply, it can use its
26 possession of a permit to avoid liability. Instead, if polluters subject to other
27 sections (33 U.S.C. §§ 1311, 1312, 1316, 1317 and 1343) have a permit issued
28 under section 1342, then compliance with the 1342 permit shall be deemed
compliance with those other sections. (64 Fed.Reg. 68,722, 68,770 (Dec. 8, 1999).)

1 violation, and then take corrective action. Because there are multiple permittees,
2 they must work collaboratively to determine which permittees are causing or
3 contributing to the exceedance. It does not fall to the Regional Board, the United
4 States Environmental Protection Agency (U.S. EPA) or citizens to investigate all
5 potential causes of pollution before any individual permittee's obligations begin.
6 Third, the provisions of the Ocean Plan, including its discharge prohibition, like the
7 provisions of any other Water Quality Control Plan, are incorporated into and
8 enforceable through the Permit.

10 ARGUMENT

11 **I. THE COURT SHOULD NOT REFRAIN FROM ADJUDICATING THESE** 12 **MATTERS BASED UPON THE LOS ANGELES SUPERIOR COURT'S** 13 **DECEMBER 24, 2009 STAY OF CERTAIN PERMIT PROVISIONS.**

14 The Regional Board disagrees with the stay issued by the Los Angeles
15 Superior Court on December 24, 2009 and will vigorously defend the Permit
16 modifications that are the subject of the Superior Court litigation. The court's stay
17 affects only a few provisions of the Permit that are the subject of this citizen suit,
18 and only until June 2, 2010. Even with respect to those few provisions, the
19 Regional Board contends that violations of the Permit predating the stay are still
20 enforceable.

21 **II. VIOLATIONS OF WATER QUALITY STANDARDS ARE VIOLATIONS OF THE** 22 **PERMIT.**

23 The Regional Board disagrees with the City's contention that compliance with
24 the Permit's "iterative process" satisfies all the Permit's water quality standards
25 requirements. In particular, the City argues that if it is complying with the
26 "iterative process," it is fully complying with the Permit and cannot be held liable
27 for any exceedances of water quality standards. *See, e.g.* City's P&As in Support
28 of Motion for Judgment on the Pleadings and Cross-Motion for Summary

1 Judgment, at 12-14, 4:19-20, and 5:6-9; 23-24; *see also* City's Response to
2 Plaintiff's Motion for Summary Judgment at 10.

3 **A. Parts 2.1 and 2.2 Require Compliance with Water Quality**
4 **Standards And Are Enforceable .**

5 The Regional Board issued the Permit as required by the Clean Water Act.
6 *See* 33 U.S.C. § 1342(p)(3). As part of issuing the Permit, the Regional Board
7 considered tens of thousands of pages of reports and data and concluded that
8 municipal storm water discharges are the principal cause of beach closures and
9 water quality impairments. RB RJN, Exhibit A, at 3-7. The Regional Board
10 considered the record and, exercising its authority under Section 402(p)(3)(B)(iii),
11 included permit provisions to prevent MS4 discharges that cause or contribute to
12 exceedances of water quality standards. *See* 33 U.S.C. § 1342(p)(3)(B)(iii); *see*
13 *also County of Los Angeles v. California State Water Resources Control Bd.*, 143
14 Cal.App.4th 985 (2006). To this end, the Permit provides:

- 15 1. Except as provided in Part 2.5 and 2.6 below, discharges from the MS4
16 that cause or contribute to the violation of Water Quality Standards or
17 water quality objectives are prohibited.
- 18 2. Discharges from the MS4 of storm water, or non-storm water, for which
19 a Permittee is responsible for, shall not cause or contribute to a condition
20 of nuisance.

21 Exhibit A at 25, Part 2 ("Receiving Water Limitations").

22 The plain meaning of these provisions is clear: they prohibit discharges that
23 cause or contribute to a "violation of Water Quality Standards" or to a condition of
24 nuisance. The only "exceptions" concern even more explicit requirements provided
25 in Parts 2.5 and 2.6 for protecting certain beaches during the summer dry weather
26 months.⁴ As Permit requirements, these provisions are separately enforceable from

26 ⁴ Those "exceptions" are the subject of the Los Angeles Superior Court's
27 stay, issued on December 24, 2009. To the extent those newer provisions are
28 stayed after December 24, 2009, then what remains are the general, pre-existing
prohibitions of Parts 2.1 and 2.2.

1 other programs outlined within the Permit. *See* 40 C.F.R. § 122.41(a) (“Any permit
2 noncompliance constitutes a violation of the Clean Water Act and is grounds for
3 enforcement action.”)

4 In 2001, precisely because they understood Parts 2.1 and 2.2, the permittees
5 filed administrative and judicial challenges to the Permit. The permittees claimed
6 then that they could not comply with what they now argue the Permit does not
7 mean. *See County of Los Angeles, supra*, 143 Cal.App.4th at 985. The Los Angeles
8 Superior Court and the California Court of Appeal upheld the Permit, the
9 permittees’ concerns about Parts 2.1 and 2.2 notwithstanding. In response, the
10 County of Los Angeles and Los Angeles County Flood Control District (the
11 Principal Permittee for the Permit) summarized the Permit in a petition for review
12 to the California Supreme Court, “[A]ccording to the Regional Board, the County
13 must comply with Parts 2.1 and 2.2[.]” *See* RB RJN, Exhibit G, County’s Petition
14 for Review at 257. Further, the County entities argued that “[t]he Regional Board
15 adopted a Permit requiring compliance with those water quality standards, terms
16 that were ‘absolute and unconditioned.’ The Court of Appeal erred in not holding
17 such action to be an abuse of discretion.” *Id.* at 258. The Supreme Court declined
18 to review the Court of Appeal’s decision upholding the Permit and rejecting the
19 Permittees’ pointed challenge to Parts 2.1 and 2.2. Clearly, the permittees did not
20 believe they had prevailed on their claims that Parts 2.1 and 2.2 cannot stand alone.

21 Despite this prior acknowledgement by the permittees, the City now asserts
22 that Parts 2.1 and 2.2 of the Permit cannot be enforced separately from the iterative
23 process provisions that begin with Part 2.3. *See, e.g.* City’s P&As in Support of
24 Motion for Judgment on the Pleadings and Cross-Motion for Summary Judgment at
25 4:19-20. The City’s contention is contradicted by both the plain meaning of the
26 Permit and the Principal Permittee’s previous position. Further, the City’s own
27 papers demonstrate that even *if* it was complying with the “iterative process,” this
28 has not been enough to eliminate discharges of pollutants. *See, e.g.* Thorsen

1 Declaration in Support of City's Motion for Judgment on the Pleadings and Cross
2 Motion for Summary Judgment, Exhibit A at 15 (claiming 160 violations of dry-
3 weather fecal indicator bacteria limits in the period 2008-2009).

4 **B. Reviewing Courts Have Concurred that Parts 2.1 and 2.2 of the**
5 **Permit are Enforceable.**

6 The argument, made by the City and others that Congress intended to prohibit
7 implementing agencies from requiring MS4 dischargers to "strictly comply with
8 promulgated water quality standards" has been rejected by several courts, including
9 the decisions relied upon by the City. City's P&As in Support of Motion for
10 Judgment on the Pleadings and Cross-Motion for Summary Judgment at 12-14.

11 As addressed above, in their judicial challenges to the Permit, the permittees
12 articulated the very interpretations of the Permit the City now attacks. They
13 presented that theory as overreaching by the Regional Board. The reviewing courts,
14 however, neither rejected the Regional Board's interpretation nor overturned the
15 Permit.

16 At the time the permittees brought their challenge to the 2001 version of the
17 Permit, the principal case arguably on point was *Defenders of Wildlife v. Browner*,
18 191 F.3d 1159, 1165 (9th Cir. 1999), upon which the City continues to rely.
19 *Defenders*, however, held that while "Congress did not require municipal storm-
20 sewer discharges to comply strictly with" water quality standards, "the [U.S. EPA]
21 has the authority to determine that ensuring strict compliance with state water-
22 quality standards is necessary to control pollutants." 191 F.3d at 1166. The latter
23 holding, although arguably dicta, undermines any contention, in this judicial circuit,
24 that Congress intended to prohibit U.S. EPA or state authorities from requiring
25 MS4 owners and operators to comply with water quality standards.

26 Similarly, in *Building Industry Association of San Diego County v. State*
27 *Water Resources Control Board*, 124 Cal.App.4th 866 (2004) (*BIA*), the California
28 Court of Appeal reviewed an MS4 permit issued by the California Regional Water

1 Quality Control Board, San Diego Region. The permit included terms similar to
2 the Permit in question here. It prohibited the discharge of pollutants that caused or
3 contributed to exceedances of receiving water objectives and/or caused or
4 contributed to the violation of water quality standards and included an iterative
5 process for responding to violations of water quality standards. *Id.* at 876-77. The
6 issue on appeal was “narrow”: whether a regulatory agency could prohibit
7 discharges that caused or contributed to exceedances of water quality standards, or
8 whether the “maximum extent practicable” standard was the limit of permit controls.
9 *Id.* at 880.

10 The *BIA* court noted that Congress and the courts had long held that agencies
11 should use water quality standards to supplement, not supplant, effluent limitations
12 and conditions to prevent water quality from declining. *BIA*, 124 Cal.App.4th at
13 883-884 (citing *Environmental Protection Agency v. State Water Resources Control*
14 *Bd., supra*, 426 U.S. at 205 fn. 12; *PUD No. 1 of Jefferson County v. Washington*
15 *Dept. of Ecology*, 511 U.S. 700, 715; *Northwest Environmental Advocates v.*
16 *Portland*, 56 F.3d 979, 987 (9th Cir. 1995). Municipal permits, too, were intended
17 to strengthen, not weaken, the Clean Water Act in this regard. *BIA*, at 884. The
18 *BIA* court upheld the permit’s inclusion of prohibitory receiving waters language, in
19 addition to provisions requiring controls to the maximum extent practicable. *Id.* at
20 885-886. It found that *Defenders* agreed with this approach. *Id.* at 886-887.
21 “Although dicta, this conclusion reached by a federal court interpreting federal law
22 is persuasive and is consistent with our independent analysis of the statutory
23 language.” *Ibid.*; see also, *City of Rancho Cucamonga v. Regional Water Quality*
24 *Control Board—Santa Ana Region*, 135 Cal.App.4th 1377, 1388-1389 (2006)
25 (citing *BIA* to find that Water Boards are not limited to “maximum extent
26 practicable” standard in MS4 permits, but may require compliance with water
27 quality standards).

28

1
2 **C. The Permit Does Not Include a Safe Harbor or “Good Faith”**
3 **Exception to Permit Compliance.**

4 Permittees would like to read a “safe harbor” into the Permit: if a permittee
5 was in compliance with the iterative process specified in Sections 2.3 and 2.4 of the
6 Permit, it would be in compliance with the Permit, regardless of whether water
7 quality standards are met. *See, e.g.*, City’s P&As in Support of Motion for
8 Judgment on the Pleadings and Cross-Motion for Summary Judgment at 12-14;
9 City’s Response to Plaintiff’s MSJ at 10. In other words, if a permittee is *trying* to
10 meet water quality standards, it would be the same as meeting them. The Regional
11 Board did not include a safe harbor in the Permit and, under California law, could
12 not have done so. Further, the City now makes the same argument rejected in the
13 permittees’ challenge to the 2001 Permit.

14 In 1998, the State Water Resources Control Board (State Board) did, in fact,
15 approve an MS4 permit with the type of “safe harbor” provision the City wants to
16 read into the Permit. RB RJN, Exhibit E, State Board WQ Order 98-01, at 219.
17 The permit in question included the following language: “The permittees will not
18 be in violation of this provision so long as they are in compliance with [the iterative
19 process set forth in the permit].” *Ibid.*

20 The U.S. EPA, however, objected to that safe harbor provision and issued its
21 own permit, in effect mooting the state-issued permit. RB RJN, Exhibit F, State
22 Board Order 99-05, at 229. In this manner, U.S. EPA supplanted three state-issued
23 permits containing the improper safe harbor provision. *Ibid.* The State Board, in
24 turn, issued a new Water Quality Order, amending its prior order, and directing the
25 Regional Boards to include the language devised by EPA – with no safe harbor
26 provision – in all future MS4 permits. The State Board specifically invoked its
27 authority to issue precedential, *i.e.* binding, decisions. *Id.* at 230. (In Resolution
28 96-01, the State Board exercised its authority under Government Code section

1 11425.60 to designate its water quality orders, such as State Board Order WQ 99-
2 05 as precedential.)

3 Notwithstanding the directives from the State Board and U.S. EPA, in 2001,
4 the City and other permittees included a safe harbor provision in their MS4 permit
5 application to the Regional Board. RB RJN, Exhibit D, Report of Waste Discharge
6 for Municipal Stormwater and Urban Runoff Discharges in the County of Los
7 Angeles (Order No. 96-054, NPDES No. CAS614001). The permittees proposed
8 that the provision read as follows: “Timely and complete implementation by a
9 Permittees(s) of the stormwater management programs prescribed in this Order
10 shall satisfy the requirements of this section and constitute compliance with
11 receiving water limitations.” *Id.* at 159.)

12 As required by State Board Order 99-05, the Regional Board did not include
13 the safe harbor provision in the final permit. RB RJN, Exhibit A, at 23-24 & 14, ¶
14 24 (intending the Permit’s receiving waters limitations language to be consistent
15 with State Board Water Quality Order 99-05 and *Defenders of Wildlife*.) The
16 Regional Board’s position then, as now, is that the Permit cannot be read so as to
17 excuse exceedances of water quality standards. A permittee cannot shield itself
18 from liability for causing exceedances of water quality standards simply by
19 invoking the iterative process. The permittees are well aware of this fact.

20 The permittees have already complained that the Court of Appeal has upheld
21 the Regional Board’s decision to omit a safe harbor provision from the Permit. In
22 its petition for review with the California Supreme Court, the Principal Permittee
23 equated the absence of a safe harbor with going beyond what it contended was the
24 Congressionally mandated Maximum Extent Practicable standard (MEP). It argued
25 that the Court of Appeal had erred by allowing the Regional Board to require the
26 “impossible” by requiring compliance with Parts 2.1 and 2.2 and not be limited to
27 the MEP standard. RB RJN, Exhibit E, at 226. As has been noted, despite these
28 arguments, the Supreme Court denied review. The permittees’ petition to the

1 Supreme Court, and their arguments in support of that petition, eviscerate the City's
2 claim that any court has read a "safe harbor" into the Permit.

3 In sum, the iterative process is a means of addressing violations, not a
4 defense to them. The process requires a permittee to identify violations and correct
5 them. It requires a permittee to assess the inadequacy of its best management
6 practices and develop new measures. The provisions also allow the Regional Board
7 to assess a permittee's best management practices and determine whether to require
8 further, specific, actions to resolve the violations. Information gathered through a
9 permittee's self-evaluation and reporting process may also assist the Regional
10 Board in determining whether penalties or other enforcement actions are required.
11 Nothing within the Permit, however, limits the Regional Board's enforcement
12 authority to only require permittees to engage in this iterative process or its ability
13 to enforce the prohibitions of Parts 2.1 and 2.2 directly. *See also City of Rancho*
14 *Cucamonga, supra*, 135 Cal.App.4th at 1388 (holding that there is no statutory right
15 to a safe harbor provision stating that a permittee is in compliance with its permit if
16 in full compliance with the terms and conditions of its permit).

17 **III. PERMITTEES ARE RESPONSIBLE FOR DISCHARGES FROM THEIR STORM**
18 **SEWERS; REQUIRING THE REGIONAL BOARD TO DISENTANGLE**
19 **PERMITTEES' COLLECTIVE REPORTING AND DISCHARGES WOULD**
20 **RENDER THE PERMIT VIRTUALLY UNENFORCEABLE**

21 The City takes the position that the plaintiffs have not met their burden of
22 showing that the City in particular is liable for the exceedances observed adjacent to
23 the City's discharges. *See City's Response to Plaintiff's MSJ* at 9, 12. It suggests
24 that until there is a formal determination that the *City* is responsible for discharges
25 that cause or contribute to the exceedance of water quality standards, it need not
26 examine monitoring data, inspect its own discharges, or determine whether it is
27 responsible for poisoning receiving waters with bacteria, toxic metals, sediment or
28 other pollutants. *City's P&As in Support of Motion for Judgment on the Pleadings*

1 and Cross-Motion for Summary Judgment at 24; *see also* City’s Response to
2 Plaintiff’s MSJ at 17. Again, the Regional Board disagrees.

3 **A. The Permit Prohibits Violations of Water Quality Standards,
4 but also Requires the City to Identify and Correct Discharges
5 that Cause or Contribute to Exceedances of Water Quality
6 Standards.**

7 The Permit makes the permittees responsible for complying with water quality
8 standards. RB RJN, Exhibit A, at 25, Part 2.1. The Permit requires the permittees,
9 including the City, to develop a program “designed to achieve compliance with
10 receiving water limitations.” RB RJN, Exhibit A at 25, Part 2.3. Further, the
11 Permit specifies that:

12 If exceedances of Water Quality Objectives or Water Quality Standards
13 (collectively, Water Quality Standards) persist, notwithstanding
14 implementation of the [Storm Water Quality Management Plan] and its
15 components and other requirements of this permit, *the Permittee shall*
16 *assure* compliance with discharge prohibitions and receiving water
17 limitations.

18 *Ibid.* (emphasis added). The Regional Board squarely placed upon the *permittees*
19 the responsibility for assuring compliance. The City’s arguments are wrong
20 because they shift that responsibility away from the permittees.

21 In further discussing the permittees’ responsibilities, Part 2.3.a grants the
22 Regional Board the authority to trigger the iterative process, but this does not erode
23 the permittees’ responsibilities in the first instance. Part 2.3.a specifies that
24 “[u]pon a determination *by either* the Permittee or the Regional Board that
25 discharges are causing or contributing to an exceedance of an applicable Water
26 Quality Standard,” the permittee shall undertake a further sequence of actions
27 designed to bring the permittee into compliance with the prohibitions. RB RJN,
28 Exhibit A, at 25, Part 2.3.a (emphasis added). First, this language must be read in
the context of Part 2.3, which places responsibility on the permittees for assuring
compliance. Nothing in Part 2.3.a diminishes the City’s obligation to assure
compliance with water quality standards. Second, the language merely ensures that

1 *in addition* to the City’s obligation to identify exceedances and direct the permittees
2 to take further actions, the Regional Board can determine that there are exceedances
3 and direct the permittees to take further actions. This makes perfect sense. The
4 agency primarily responsible for enforcing the Clean Water Act in the Los Angeles
5 Region can force the permittees to comply with the Permit. As discussed in greater
6 detail below, Part 2.3.a cannot be read to excuse the City from making the required
7 determination and assuring compliance with water quality standards.

8 **B. The Monitoring and Self-Reporting Provisions of the Permit**
9 **Place the Burden on Permittees to Respond to an Exceedance of**
10 **Water Quality Standards; They Cannot Wait For A Formal**
11 **Determination of Liability before Self-Reporting and Analysis**
12 **Begins.**

13 While the City relies upon its alleged “good faith” compliance with the
14 iterative process, it also argues that these Permit provisions are triggered only upon
15 a formal request by the Regional Board. City’s P&As in Support of Motion for
16 Judgment on the Pleadings and Cross-Motion for Summary Judgment at 5:6-9 &
17 23-24. The error in the City’s arguments is best understood by starting with the
18 Clean Water Act’s fundamental premise: no one may discharge pollutants from a
19 point source. 33 U.S.C. § 1311(a). This prohibition is the cornerstone of the Act.
20 The only means to avoid the total prohibition is to possess a permit issued under the
21 NPDES program. 33 U.S.C. §§ 1311(a); 1342. Permits are intended to impose
22 effective enough controls upon dischargers that they may be allowed to discharge,
23 rather than be held to account under the total prohibition. *See Natural Res. Def.*
24 *Council v. Costle*, 568 F.2d 1369, 1375 (D.C. Cir. 1977) (noting that a permitting
25 agency has discretion to issue a permit or leave the discharge subject to section
26 1311’s total bar). Indeed, the Clean Water Act is intended to “restore and maintain
27 the chemical, physical, and biological integrity of the Nation’s waters,” not to
28 create a means for polluters to discharge pollution. *See* 33 U.S.C. § 1251(a). There

1 is no right to discharge waste. Cal.Wat. Code, § 13263 (“All discharges of waste
2 into waters of the state are privileges, not rights.”).

3 When a permittee applies for, and receives, an NPDES permit, it implicitly
4 agrees to comply with a host of regulations and requirements. Among these is the
5 need to establish and maintain records, sample and monitor discharges and report
6 the results to the permitting agency. *See* 33 U.S.C. § 1318(a); 40 C.F.R. §§
7 122.41(j); 122.48 & 123.25. This system of self-reporting is critical to the NPDES
8 program, which “fundamentally relies” upon it. *U.S. v. Brittain*, 931 F.2d 1413,
9 1416 (10th Cir. 1991).⁵ The data provided through accurate and complete
10 monitoring reports serve as conclusive evidence as to whether permit violations
11 exist. *Ibid.*; *see also* 40 C.F.R. §§ 122.26(d)(1)(iv)(B) (permit application must
12 describe program to sample and analyze discharges); (d)(1)(iv)(E) (sampling points
13 must be “appropriate for representative data collection”); 122.41(j) (samples should
14 represent monitored activity); 122.44(i)(l) (permits must use monitoring to assure
15 permit compliance). The reports do not exist in a vacuum; it is the very process of
16 reliable information-gathering and analysis required by these reports through which
17 NPDES permits meet their goals of reducing or eliminating the discharge of
18 pollutants.

19 Given the importance of self-monitoring, analysis and reporting to NPDES
20 permits—and, specifically to this Permit’s requirements—the City cannot wait until
21 the Regional Board formally declares the City’s discharges to cause or contribute to
22 exceedances before the City bears the responsibility to engage in self-analysis and

23 ⁵ The need for this self-monitoring and assessment explains why a
24 municipality cannot obtain a permit at all without proposing a monitoring program
25 for representative data collection. *See, e.g.*, 42 C.F.R. § 122.26(d)(2)(iii)(D).
26 Recognizing that administrative agencies rely upon monitoring and other reports to
27 set permit conditions and enforce their terms, federal regulations require that these
28 documents be signed and certified. 40 C.F.R. §§ 122.22; 122.26(d)(2)(iii)(A)(4).
A permittee faces civil and/or criminal penalties for submitting false or incomplete
information. 40 C.F.R. §§ 122.22(d); 122.41(l)(8). A permitting agency may even
terminate a permit or refuse to issue a new one if a permittees misrepresents facts at
any time. 40 C.F.R. § 122.64(a).

1 reporting. The City cannot shift the initial determination of liability from a straight
2 look at objective monitoring data (asking whether levels of a given pollutant are
3 greater than the applicable water quality standard) to instead require a subjective
4 investigation as to the liability of each and every discharger potentially responsible
5 for an exceedance of water quality standards before presuming that some, or all, of
6 them bear responsibility. Under the latter regime, the regulatory agency would
7 need to formally establish that the particular municipality caused or contributed to
8 an exceedance in order to obtain the very information needed to make that
9 determination in the first place. The argument is circular.

10 To accept the City's argument, along with its arguments elsewhere, would
11 create a nonsensical permit implementation scheme that completely violates public
12 policy and contradicts the purpose of the Clean Water Act. The scheme would be
13 this: the permittees would perform sampling and monitoring; they may become
14 aware of violations of water quality standards; their own MS4s could be responsible
15 for the violations; they could choose to ignore the violations or, choose not to report
16 on such violations until the Regional Board ordered an investigation; if the
17 Regional Board did not do so, then the permittee could do nothing; but if the
18 Regional Board or a citizen's group attempted enforcement without the information
19 the permittee should have provided in the report, the permittee could shield itself
20 from liability by claiming that the enforcing party did not have sufficient
21 information to enforce the Permit.

22 Such a scheme would be inconsistent with the Clean Water Act's requirement
23 for monitoring that is sufficient to determine compliance with water quality
24 standards and its assumption that permittees will not hide from or turn a "blind-
25 eye" (whether willful or not) to violations. Indeed, under the City's read of the
26 Permit and supporting law, no permittee would ever want to know of potential
27 Permit violations or water quality exceedances. And, if they knew of violations or
28

1 exceedances, they would not attempt to investigate whether the source of the
2 discharges was theirs.

3 In contrast to the City's suggested implementation scheme, the effectiveness
4 of the permittees' storm water and other programs depends upon their honest
5 participation; otherwise, the NPDES program does not function to reduce and
6 eliminate the discharge of pollutants. Compliance should not turn on whether a
7 permittee gets caught violating the Permit. It is the permittee, not the Regional
8 Board, which bears the burden of catching problems with its system and, more
9 importantly, reporting and addressing them. RB RJN, Exhibit A, at 73, ¶ 6.A.2; *see*
10 *also* 40 C.F.R. §122.41(l)(8).

11 For example, every year, permittees must provide the Principal Permittee with
12 "Individual Annual Reports," which must summarize their storm water
13 management programs' effectiveness.⁶ RB RJN, Exhibit B, Monitoring and
14 Reporting Program, at 81, § I.A.3; Exhibit C, Individual Annual Report Form, at
15 139. The summary should include an assessment of compliance with permit
16 requirements, the strength and weaknesses of the management program and how
17 cities have coordinated in support of those programs. *Ibid.* Without effective
18 monitoring and self-assessment, permittees cannot perform this analysis and
19 reporting. Any failure to provide such complete reports creates a further problem:
20 the Principal Permittee is required to submit a monitoring report every year based
21 upon the Individual Annual Reports. RB RJN, Exhibit B, at 82. The report must
22 provide data and results of water quality monitoring. *Ibid.* It must analyze,

23
24 ⁶ The permittees' Individual Annual Report Form asks whether a permittee is
25 aware, or has been informed, that its MS4 has caused or contributed to a violation
26 of water quality standards or condition of nuisance. RB RJN, Exhibit C, Permit at
27 106. It also asks the permittee if the Regional Board has advised it that its MS4 has
28 caused or contributed to an exceedance of water quality standards. *Ibid.* Under
either situation, the permittee must attach a Receiving Water Limitations
Compliance Report to its annual report. *Ibid.* This requirement stands in contrast
to the City's read of Part 2.3 as allowing it to wait for the Regional Board to issue
orders before reporting on exceedances of water quality standards.

1 identify, and prioritize water quality problems. *Ibid.* It must identify potential
2 sources of the problems and recommend future monitoring and programs to identify
3 and address sources of pollutant discharges. *Id.* at 82-83. Thus, the determination
4 of whether the Permit adequately controls the discharge of pollutants, why it does
5 not adequately control the discharge of pollutants and how to prevent such
6 discharges, rests upon the permittees to faithfully implement the Permit's terms.

7 The permittees are best situated to perform this analysis. It only makes sense,
8 therefore, that they cannot shield themselves from self-analysis and reporting
9 obligations by shifting the burden to enforcing parties to prove that the City is liable
10 for the discharge before these obligations arise.⁷ All permittees are expected to
11 report any discharges that cause or contribute to exceedances of water quality
12 standards or other instances of non-compliance. RB RJN, Exhibit A, at 73 ¶ 6.A.3.

13 **C. The Systemwide Basis for the Permit Creates The Presumption**
14 **that Municipalities Upstream of an Exceedance Share Liability**
15 **for Exceedances.**

16 The Clean Water Act allows the Regional Board to issue MS4 permits on a
17 system-wide basis, as it did for the City and its co-permittees. See 40 C.F.R. §
18 122.26(a)(1)(v) & (a)(3)(ii) (permitting agency may issue permit for categories of
19 discharge, such as by municipality, by watershed, by system, or by jurisdictions).
20 This was the type of permit the City and 82 co-permittees sought, including the
21 County of Los Angeles and the lead permittee, the Los Angeles County Flood
22 Control District. RB RJN, Exhibit D, at 149-155. This was the type of permit they
23 received.

24 _____
25 ⁷ As another example, for the Bacteria TMDL provisions incorporated into
26 Part 2.5 and 2.6, the Regional Board advises that if Receiving Waters Limitations
27 are exceeded, it "will generally" issue an order requesting investigation. RB RJN
28 19, ¶ 37. But "generally" suggests that this may not always occur and, when read
with the Permit's other requirements, means that permittees cannot wait for
Regional Board notification before beginning the self-evaluation and analysis
necessary to correct exceedances.

1 The City's argument—that it can act as if it is the only permittee—
2 misunderstands the operation of MS4 permits. The word “municipal” in MS4
3 refers to the type of discharger and does not imply that the permit has issued to a
4 single municipality. Final Rule, National Pollutant Discharge Elimination System
5 Permit Application Regulations for Storm Water Discharges, 55 Fed.Reg. 47,990,
6 48,040-41 (Nov. 15, 1990). The City could have applied for its own permit. 40
7 C.F.R. § 122.26(f). It chose not to do so. Thus, it became part of a larger system
8 that must recognize the physical reality of the sewer systems' interconnectedness.

9 For this Permit—and for MS4 permits in general—co-permittees have an
10 enforceable obligation to cooperate with day-to-day obligations and in response to
11 observed exceedances. RB RJN, Exhibit A, at 27-29. As a general matter, each
12 MS4 owner or operator is responsible for pollutants discharged from its system. *Id.*
13 at 5, 20-21. In addition, by accepting a permit based on system-wide discharges,
14 the City agreed to accept the additional roles and responsibilities necessary to
15 control, and reduce the discharge of pollutants in, comingled discharges. *See, e.g.*
16 40 C.F.R. § 122.26(d)(2)(iv) (permit applicants propose management programs and
17 controls showing plan for inter-government coordination to reduce the discharge of
18 pollutants through management practices and controls), (d)(2)(vii)(when more than
19 one legal entity applies for a permit, they agree to accept the roles and
20 responsibilities necessary to ensure effective coordination) & (d)(2)(i)(D)(permittee
21 must have legal authority and agreement with other dischargers to control
22 contribution of pollutants from one portion of the MS4 to another). This
23 responsibility is the only meaningful way to read the requirements for a system-
24 wide permit. If a permittee desires to opt out of this system-wide responsibility, it
25 may submit its own distinct permit application which only covers discharges from
26 its own MS4. 40 C.F.R. § 122.26(a)(3)(iii)(B). Until then, it is part of a larger
27 system.
28

1 The Permit recognizes that the inter-connected nature of the system means that
2 it may be difficult to determine exactly where pollutant originated within the
3 MS4. This does not mean, however, that the Permit assumes only one permittee
4 may be responsible. Instead, it recognizes that in such an integrated storm sewer
5 system, “one or more Permittees” may have caused or contributed to violations.
6 RB RJN, Exhibit A, at 19, ¶ 37(d).

7 With respect to Parts 2.5 and 2.6 of the Permit (the Dry-Weather Bacteria
8 TMDL provisions), the Permit provides a means for the Regional Board to “rule
9 out” potential contributors pollutants to the system. Once the permittee or Regional
10 Board has data that show such exceedances, the permittee must provide information
11 on its system. Based upon this information, the Regional Board may determine that
12 no enforcement is warranted against the permittee. For example, if the Regional
13 Board determines that the permittee could not have caused or contributed to the
14 exceedance, the permittee will not be held liable for the water quality violation. RB
15 RJN, Exhibit A, at 19, ¶ 37. Once data indicate that a violation of water quality
16 standards is occurring, the Permit requires the permittees to undertake the necessary
17 inquiry and develop information to either demonstrate that its discharges are not the
18 source of the exceedances or, if they are the source, they must correct the problem.
19 At this time, the City has not conducted the required inquiry and provided the
20 Regional Board with the necessary information. The Regional Board has not
21 determined that the City is not liable.

22 Having constructed a joint storm sewer system that, by design, co-mingles the
23 cities’ discharges, they cannot avoid enforcement because one cannot determine the
24 original source of pollutants in the waste stream. Moreover, the Permit
25 incorporates the type of monitoring scheme that the permittees’ expressly requested
26 in their permit application. RB RJN, Exhibit D, at 195-204. That scheme
27 determines compliance not at any city’s individual outfalls, but in-stream at “mass
28 emissions stations” or at beach compliance monitoring sites, where waste has

1 already co-mingled. In other words, the monitoring program that the permittees
2 requested (and were granted) does not readily generate the permittee-by-permittee
3 outfall data that the City would require as a precondition to enforcement.

4 Therefore, any attempt to enforce the receiving water limitations would require an
5 extensive and expensive investigation. It would require the Regional Board to
6 know all potential legal and illicit sources of discharge within a permittees' system
7 and jurisdiction. It further would require the Regional Board to distinguish
8 between molecules of pollutants as to whether they came from one city's MS4 or
9 another's. The Regional Board does not agree with the City that this burden rests
10 upon the enforcing entity before violations are proven.

11 The City's proposed burden-shifting undermines the enforceability of a
12 system-wide-based Permit. On the contrary, the Clean Water Act seeks to
13 encourage, not impede, enforcement efforts and does not impose a heavy burden
14 upon those who seek to hold violators accountable:

15 One purpose of these new requirements is to avoid the necessity of
16 lengthy fact finding, investigations at the time of enforcement.
17 Enforcement of violations of requirements of this Act should be based
18 on relatively narrow fact situations requiring a minimum of
19 discretionary decision making or delay.

20 *U.S. v. Brittain, supra*, 931 F.2d at 1416-1417 (citing legislative history for Clean
21 Water Act). In the context of citizens' suits, allowing a permittee that knows of
22 water quality violations to wait for the government to fully investigate discharges,
23 and use any failure to perform such an investigation to shield itself from liability,
24 would contradict the need to ensure that environmental laws are enforced. *See, e.g.,*
25 *Sierra Club v. Union Oil Co. of Cal.*, (N.D. Cal. 1988) 716 F.Supp. 429, 436
26 (allowing citizens' suits to enforce environmental laws absent state enforcement,
27 rather than finding that government has "acquiesced" to permit violations by not
28 investigating).

1 The Clean Water Act puts the onus on the permittee to have sufficient control
2 over its system to prevent discharges that are not compliant. See, *e.g.*, 40 C.F.R. §
3 122.26(d)(2)(iv)(B)(3) (application for permit must show how permittees will
4 investigate any part of their system with a reasonable potential for contributing
5 pollutants into the system from other sources). The Permit is in accord. RB RJN,
6 Exhibit A, at 30-31 (permittees must have legal authority to inspect and monitor
7 industrial sources within their jurisdiction that have the potential to discharge
8 polluted storm water to the MS4). The Act requires permittees to know their
9 systems and to constantly evaluate the sufficiency of their storm water programs.

10 Finally, should any permittee determine that it no longer wishes to be
11 permitted under a system-wide regime, it has multiple opportunities to seek to have
12 the permit modified or opt out of the permit. Permits issued on a jurisdiction-wide,
13 system-wide watershed or other basis may specify different conditions relating to
14 different discharges. 40 C.F.R. § 122.26(a)(3)(v). So, if a permittee is unable or
15 unwilling to cooperate with adjacent jurisdictions within the structures created by
16 the Permit, it could ask for particular situations/discharges to have their own
17 conditions imposed. It may also seek its own permit with permit terms that are
18 specific to its own MS4. 40 C.F.R. § 122.26(a)(3)(iii)(B). Or, conceivably, the
19 MS4 operator who neither desires to work with other operators on a system-wide
20 basis, nor wants responsibility for its own permit, could be denied a permit entirely.
21 *See Natural Res. Def. Council v. Costle*, 568 F.2d at 1375. “The use of the word
22 ‘may’ in [33 U.S.C. § 1342] means only that the Administrator has discretion either
23 to issue a permit or to leave the discharger subject to the total proscription of [§
24 1311]. This is the natural reading, and the one that retains the fundamental logic of
25 the statute.” (*Ibid.* (emphasis added).)

26
27
28

1 **IV. A VIOLATION OF THE OCEAN PLAN DISCHARGE PROHIBITION IS A**
2 **VIOLATION OF THE PERMIT.**

3 The City argues that the Ocean Plan's prohibition of discharging waste into an
4 Areas of Special Biological Significance (ASBS) is not incorporated into the
5 Permit. The Regional Board does not agree.

6 As noted above, the Permit incorporates Water Quality Standards from two
7 Water Quality Control Plans: the Basin Plan for the Los Angeles Region and the
8 statewide Ocean Plan. RB RJN, Exhibit A, Part 5 at 72 ("Water Quality Standards
9 and Water Quality Objectives' means water quality criteria contained in the Basin
10 Plan [and] the California Ocean Plan . . ."); Cal.Wat. Code § 13050. The Permit
11 does not make any distinction between the force and effect of the two plans. Indeed
12 the findings note that the "Ocean Plan contains water quality objectives *which*
13 *apply to all discharges to the coastal waters of California.*"⁸ RB RJN, Exhibit A, at
14 13 (emphasis added).

15 The Ocean Plan is required by Water Code section 13170.2, which directs the
16 State Board to update the plan triennially. The prohibition on discharges of waste
17 into ASBS is one such Water Quality Standard. RB RJN, Exhibit I, Ocean Plan, at
18 307-308 & 310; *In re Cal. Dep't of Transp.*, Order WQ 2001-08 at 8-9 (Apr. 26,
19 2001) (*CalTrans*) ("The Ocean Plan discharge prohibition is a water quality
20 standard.")

21 The discharge prohibition is self-implementing and incorporated into the
22 Permit. Nothing in the language of the prohibition itself—"Waste shall not be
23 discharged to designated Areas of Special Biological Significance except as
24 provided in [the implementation provisions]."—or in those implementation
25 provisions—"Discharges shall be located a sufficient distance from such designated
26 areas to assure maintenance of natural water quality conditions in these areas"

27 ⁸ A similar provision was included in the Permittees' permit application. RB
28 RJN, Exhibit D, at 152.

1 suggests that any additional agency action is needed to effectuate the prohibition.
2 RB RJN, Exhibit I, Ocean Plan, at 307-308 & 310. On the contrary, the Ocean
3 Plan establishes procedures for the State Board and the regional boards,
4 respectively, to give permanent and temporary exceptions to the discharge
5 prohibition. RB RJN, Exhibit I, Ocean Plan, at 307-308 & 310. Neither provision
6 would be necessary if the prohibition was subject to an implementation process of
7 the sort the City suggests.

8 The Permit requires compliance with the ASBS discharge prohibition. Here
9 again, this is not a question of the Regional Board's discretion. Rather, the State
10 Board's determination in *CalTrans* that the discharge prohibition is a water quality
11 standard is binding on the Regional Board. Accordingly, the Permit itself
12 references the *CalTrans* decision "The State Board in In Re: California Department
13 of Transportation (State Board Order WQ 2001-08), determined that the discharge
14 of storm water to ASBS is subject to the prohibition in the Ocean Plan against the
15 discharge of wastes to an ASBS."⁹ RB RJN, Exhibit A, at 13.

16 In *CalTrans*, the California Department of Transportation (CalTrans)
17 challenged a Cease and Desist Order, in which the Santa Ana Regional Board had
18 directed the agency to cease discharging stormwater into an ASBS. The State Board
19 held first that that "the discharge prohibition in the current Ocean Plan applies to
20 storm water runoff." RB RJN, Exhibit H, State Water Resources Control Board,
21 Order WQ 2001-09 at 271-272. The State Board then addressed *CalTrans*'
22 contention that its State-Board-issued municipal storm water permit shielded it
23

24 ⁹ This provision appeared in the Permit as issued in 2001. See
25 http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/ms4_permits/los_angeles/01-182_LosAngelesMS4Permit.pdf.

26 The State Board issued its *CalTrans* order in April 2001; the Regional Board
27 issued the 2001 Permit in December 2001. That a former employee of the Regional
28 Board, Dr Xavier Swamikannu, in his deposition, did not recall that the CalTrans
decision predated the Permit is of no consequence.

1 from compliance with the discharge prohibition.¹⁰ The State Board held there was
2 no inconsistency because the CalTrans' permit incorporated the Discharge
3 Prohibition. RB RJN, Exhibit H, at 272-273 ("Receiving Water Limitation C-1-2
4 [sic.] prohibits discharges in violation of water quality standards. The Ocean Plan
5 discharge prohibition is a water quality standard.")¹¹

6 It is precisely because most Clean Water Act enforcement proceedings are
7 based on violations of NPDES permits, as Malibu (and CalTrans) acknowledge,
8 that water quality standards are incorporated wholesale rather than individually.
9 *EPA v. State Bd.*, *supra*, 426 U.S. 200 at 205 ("With few exceptions, for
10 enforcement purposes a discharger in compliance with the terms and conditions of
11 an NPDES permit is deemed to be in compliance with those sections of the
12 Amendments on which the permit conditions are based") In the case of the
13 Permit, as upheld by the California Court of Appeal, it incorporated and
14 transformed the water quality standards into an enforceable prohibition on causing
15 or contributing to exceedances of water quality standards. The City's interpretation
16 of the Permit's Receiving Water Limitations, such as section 2.1 of the Permit,
17 would undermine, rather than "transform," water quality standards if dischargers
18 were shielded from every such standard not explicitly incorporated into the permit.

19 //

20 //

21 //

22 //

23 _____
24 ¹⁰ Although not a municipality under state law, because it owns and manages
25 a municipal separate storm sewer system as defined by the Clean Water Act,
26 CalTrans is required to obtain a "municipal" storm water permit. 40 C.F.R. §
27 122.26(b)(8).

28 ¹¹ The Receiving Water Limitations in the present Permit and in the CalTrans
permit are virtually identical. The applicable provision of the CalTrans permit is C-
1-1; the reference in the CalTrans decision to Receiving Water Limitation C-1-2
appears to be a typographical error.

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CONCLUSION

As stated above, the California Regional Water Quality Control Board, Los Angeles Region, disagrees with the arguments asserted by the City of Malibu with respect to the Regional Board's Permit. The Regional Board therefore respectfully asks this Court to consider the Regional Board's positions, as stated within this amicus curiae brief, and would be pleased to provide any other assistance to the Court.

Dated: January 29, 2010

Respectfully submitted,
EDMUND G. BROWN JR.
Attorney General of California

JENNIFER F. NOVAK
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California Regional Water Quality
Control Board, Los Angeles Region*

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CERTIFICATE OF SERVICE

Case **Natural Resources Defense** No. **CV08-01467 GHK (RCx)**
Name: **Council, et al. v. County of**
Los Angeles, et al.

I hereby certify that on January 29, 2010, I electronically filed the following documents with the Clerk of the Court by using the CM/ECF system:

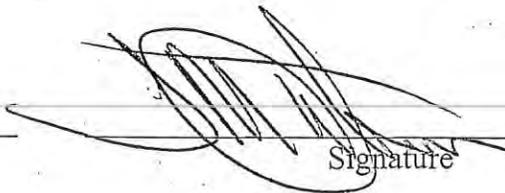
- 1) **Request for Judicial Notice by Amicus Curiae California Regional Water Quality Control Board, Los Angeles Region, in Support of Plaintiffs' Motion for Partial Summary Judgment and Opposing Defendant's Motion for Judgment on the Pleadings; Declaration of Jennifer F. Novak**
- 2) **Ex Parte Application of California Regional Water Quality Control Board, Los Angeles Region to File Amicus Curiae Brief in Support of Plaintiffs' Motion for Partial Summary Judgment and Opposition to Defendant's Motion for Judgment on the Pleadings**
- 3) **Brief of Amicus Curiae California Regional Water Quality Control Board, Los Angeles Region, in Support of Plaintiffs' Motion for Partial Summary Judgment and Opposing Defendant's Motion for Judgment on the Pleadings**

I certify that **all** participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system.

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on January 29, 2010, at Los Angeles, California.

TINA M. HOUSTON

Declarant



Signature



TECS Environmental Compliance Services

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May 14, 2012

Sam Unger, PE
Executive Officer
LARWCB
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Comments In Re: WMP, TMDL, and RWL Working Proposals

Dear Sam:

Thank you for the opportunity to provide written comment on staff's proposed watershed management plan (WMP), total maximum daily loads (TMDL), and receiving water limitation (RWL) language. Additional comments are also made on behalf of my clients¹ in the attached comments in re: TMDL provisions; and in the attached presentation that was made to the Regional Board on May 3rd.

For now, I would like to make salient a few points that must be taken into consideration in shaping the next MS4 permit and its implementation of TMDL waste load allocations (WLA).

- *Compliance with TMDL WLAs Can Only Be Achieved through WQBELs*

As you are aware, I have been making this argument for over a year now. I am pleased to see that draft permit language recognizes WQBELs as a compliance action. However, it still falls short of what federal stormwater regulations actually require. To begin with, allowing compliance with WLA in the receiving water is not sanctioned under federal regulations. Federal regulations make it clear that TMDL WLAs must be addressed through WQBELs and only WQBELs. WQBELs can only apply to the discharge (the effluent) from the receiving water, not in it. According to Clean Water Act Section 502:

The term "effluent limitation" means any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical,

¹Azusa, Baldwin Park, Carson, Compton, Claremont, Duarte, Gardena, El Monte, Glendora, Inglewood, Irwindale, Lawndale, Lomita, Pico Rivera, San Dimas, San Gabriel, San Fernando, South El Monte, West Covina

*physical, biological, and other constituents which are **discharged from point sources into navigable waters**, the waters of the contiguous zone, or the ocean, including schedules of compliance.*

And, once again, “point source” per federal regulations means outfall. Therefore, compliance with a WQBEL cannot be determined in the receiving water. Receiving water monitoring is performed only to set an allowable ambient concentration for a pollutant. In other words, it establishes the target that the MS4 permittee must strive to achieve. But it is outfall monitoring that determines to what extent the MS4 is causing or contributing an excursion above the target ambient standard in the receiving water. That of course has not happened. As you know there has been no outfall monitoring and an “ambient” (normal) standard has not been set. For reasons that are not fully understood, the Regional Board adopted TMDLs that have required only wet weather monitoring during storm events, which is non-ambient.

In consideration of the foregoing it is recommended that Regional Board staff re-open all TMDLs that set the compliance point in the receiving water and remove any reference to compliance monitoring therein. It is also recommended that such TMDLs include a provision that references WQBELs and their translation into best management practices (BMPs) similar to what the San Diego and Santa Ana Regional Boards have done relative to bacteria TMDLs. It is also recommended that the implementation schedules be removed. Language could be inserted to defer implementation of TMDLs to the MS4 permit through its stormwater quality management plan.

Further, Regional Board staff should remove from any of its “working proposals” references to complying with receiving water limitations as they relate to TMDLs.

- *Numeric WQBELs Are Not Justified*

Regional Board staff has proposed in various places that numeric WQBELs can only be used to comply with TMDL WLAs. It has, in the TMDL working proposal, treated a WQBEL to mean the same as WLA. It has, for example, explained in the TMDL working proposal:

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.

It has defined a numeric WQBEL, apparently, to mean the same as a WLA. There are two problems with this interpretation. First, a numeric WQBEL does not mean absolute compliance with a WLA. For a number of reasons it

could never mean that. Second, a numeric WQBEL, as explained in USEPA's 2010 guidance memorandum on TMDL compliance, numeric WQBELs includes surrogate parameters such as flow or impervious cover reduction that would be achieved by setting a target for reducing flow or impervious cover that would be implemented over the term of the permit. BMPs such as low impact development techniques would be employed to achieve such targets. What is important to note, however, is that it is the MEANS of meeting the number that determines compliance; not meeting the actual number.

In any case, requiring strict compliance with a numeric WQBEL expressed as a WLA is impossible. As several USEPA guidance memoranda point out, numeric WQBELs would only rarely be used. Supporting a numeric WQBEL over a BMP-WQBEL would require compliance with CFR §122.44.b.3.d.1.ii, which states:

When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.

USEPA has provided detailed instructions on how to determine reasonable potential in its *NPDES Permit Writer Manual*. It calls for a "reasonable potential analysis." Of course, that has not happened. There has been no outfall monitoring because the Regional Board has not required it. Without this data the next steps cannot be performed: determining the need for parameter-WQBELs and calculating parameter specific WQBELs. Without effluent monitoring at the outfall an analysis cannot be conducted that takes into the variability of pollutant/pollutant parameter in the effluent. Further, it would seem that a dilution study using, for example, a CORMIX (dilution) model would be appropriate to calculate the WQBEL. This is what POTWs are required to do so relative to sewer discharges to receiving waters.

Then there is the issue of feasibility. Federal regulations say that numeric WQBELs can only be established if feasible. According to a State Water Resources Control Board Blue Ribbon Panel, numeric effluent limitations are not feasible. Based on this conclusion, the State Water Resources Control Board is not requiring numeric WQBELs for the next Caltrans MS4 permit.²

² Consistent with the findings of the Blue Ribbon Panel and precedential State Water Board orders (State Water Board Orders Nos. WQ 91-03 and WQ 91-04), this Order allows the Department to implement BMPs to comply with the requirements of the Order.

It is recommended, therefore, that Regional Board staff eliminate numeric WQBELs to express TMDL WLAs and, instead, rely on BMP-WQBELs.

- *Commingled Discharges*

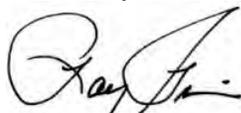
Commingled discharges from the outfall should not be a compliance issue. For one thing, it would be impossible for an MS4 permittee to prove that it did not cause or contribute to an exceedance, based on future outfall monitoring data. The reason is that several discharges can enter into an MS4 over which a permittee has no control. These include discharges from superior jurisdictions (State and federal). For example, discharges from Caltrans, State water districts, and industrial and construction activities, which are subject to stormwater NPDES permit coverage, are not subject to municipal control. Each of these dischargers has permits that do not require compliance with numeric WQBELs expressed as WLAs. They are allowed to use BMPs instead. Discharges from public education institutions (school districts, community colleges and state universities) are not even required to be covered under Phase II MS4 permits³, and, therefore, are not subject to TMDLs. The question is how is one going to know if an MS4 permittee or other discharger (permitted or non-permitted) is causing or contributing to an exceedance?

One thing should be clarified about commingled discharges. Compliance for each MS4 can be determined at a man-hole point upstream of an outfall that does not include discharges from other MS4s. For example, if City A's storm drain is upstream of City B's storm drain, a sample taken at the end of City A's storm drain should only pick-up pollutants from that system segment. In the case of City B, the pollutant concentrations recorded from City A monitoring at the last point of discharge could be deduced to produce a "net" pollutant concentration from its system.

The reference to commingled compliance should be eliminated.

Please feel free to respond to any of the foregoing comments. Should you have any questions or require additional information regarding this matter please call me.

Sincerely,



Ray Tahir

³ Regional Boards have had the discretion to require public education facilities to obtain coverage under the Phase II stormwater program but has largely chosen not to.



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Comments on General Total Maximum Daily Load (TMDL) Provisions

1. Questions to Regional Board Staff

The TMDL working proposal is in need of clarification in several places as is more particularly explained below.

- i. Section E.1, says that *provisions of this Part are consistent with 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.*

Questions:

1. How were provisions here determined to be *consistent with assumptions and requirements of all waste load allocations (WLAs) established in TMDLs?*
2. What are the assumptions and requirements for each WLA relative to requiring (a) compliance with numeric WQBELs; and (b) compliance with receiving water limitations?
- ii. Under E.1(a) a reference is made *to achieve WLAs and meet other requirements of TMDLs covering receiving waters impacted by the Permittees.*

Questions:

1. What does “and meet other requirements of TMDLs” mean?
2. Should not meeting the WLA be sufficient?
- iii. Under E.1(a) a reference is made Attachments X through X.

Questions:

1. Where is attachment X through X?
2. Has Regional Board staff made attachment x through x available?
- iv. Under E.1(c) its says that *Permittees shall comply with applicable water quality based limitations and/or receiving water limitations contained in Attachments X through X, 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)

Questions:

1. What does “applicable” mean within the context of a water quality based effluent limitation?
 2. Must Permittees comply with just numeric water quality based effluent limitations or with non-numeric ones as well?
 3. *40 CFR §122.44(d)(1)(vii)(B) deals with effluent limits to protect narrative and numeric water quality criteria or both.* There does not appear to be a connection between this citation and TMDL implementation plans and schedules. Could staff please explain?
 4. *CWC 13263(a)* is general requirement for discharges in a disposal area or receiving waters and does not speak specifically to TMDLs. Why is referencing it necessary?
- v. *According to section E.1(d): A Permittee may comply with water quality based effluent limitations and/or receiving water limitations in Attachments X through X using any lawful means.*

Questions:

1. Can a Permittee comply with a non-numeric as well as a numeric water quality based effluent limitation?
 2. How can a TMDL WLA be obtained in a receiving water through an MS4 permit?
 3. Don't federal regulations require a TMDL WLA to be exclusively complied with in the effluent (discharge) from the outfall (or end-of-pipe) by translating the WLA into WQBELs and not with WLA in the receiving water?
 4. Could staff please cite the appropriate legal authority either under the Clean Water Act, California Water Code, or State Board order that allows the Regional Board to compel Permittee compliance with a WLA in a receiving water?
 5. What does *using any legal means* mean?
- vi. *According to E.2.a.i: A Permittee shall demonstrate compliance at compliance monitoring points established in each TMDL or an approved TMDL monitoring plan or in accordance with an approved*

integrated monitoring plan per Attachment X [Monitoring and Reporting Program] and Part VI.C.5 Integrated Watershed Monitoring and Assessment.

1. What does monitoring point mean? Does it mean an outfall/end-of-pipe or does it mean an in-stream monitoring station. Or, does it mean both?
 2. What is the difference between a monitoring point in each TMDL and an approved TMDL monitoring plan in accordance with an approved integrated monitoring plan?
 3. What is the general difference between an approved monitoring plan and an approved integrated monitoring plan? Again, without seeing attachment X, which is not made available, it is impossible to understand the differences.
- vi. According to E.2.a.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 X through X.*

Questions:

1. Where can Parts VI.E.2.d and VI.E.2.e be found? It is impossible to understand this section without seeing them.
- vii. According to E.2.a.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 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.*

Questions:

1. How are all water quality based effluent limitations and receiving water limitations to be met? Again, why does a Permittee need to address both water quality based effluent limitations and receiving water limitations (viz., meeting a WLA or other water quality standard in the receiving water) when the former are required by federal regulations and the latter are not?

viii. According to E.2.b.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.*

Questions:

1. Are permittees that are subject to a group WLA required to comply with that WLA in the receiving water or can they opt for compliance in the discharge from the outfall to the receiving water? If the WLA is met, based on receiving water monitoring data, would each permittee that is part of the group be in violation for the “group” exceedance?
 2. If permittees choose or are required to comply with the WLA in the receiving water, what happens if monitoring shows a cumulative exceedance for that portion of the receiving water? Would all of the permittees be in an instant state of non-compliance; or would they continue to be in compliance, notwithstanding the exceedance, provided that they can demonstrate complete and timely implementation of best management practices (BMPs) that address the WLA; and will there be a need for a ramping up of BMPs, through an iterative process?
 3. Regarding commingling of discharges, can't this issue be avoided by simply requiring an MS4 permittee to sample at its last point of discharge, upstream of the outfall, which would, thereby, avoid commingled discharges? If so, the issue of commingled discharges should go away – shouldn't it?
- vii. According to E.2.b.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.*

Questions

1. On what legal authority is staff relying to compel a Permittee to comply with the requirement that its discharges do not cause or contribute to an exceedance (presumably an exceedance of a WLA)?
- viii. According to E.2.b.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.

1. How can a water quality based effluent limitation be exceeded? A WQBEL is a translation of a WLA into specific actions intended to address a WLA? Even if staff can provide the necessary justification to show that equating a numeric WQBEL with a WLA is feasible, the WQBEL must be translated into actions that meet the WLA. It appears that staff is using the terms WLA and WQBEL interchangeably. Please explain.
 2. Given that other discharges enter a Permittee's MS4, which are either permitted, not permitted, or are beyond the Permittee's jurisdiction (includes State facilities such as school districts, community college districts, and universities and federal facilities) Permittee demonstrate that those discharges caused or contributed to an exceedance?
- ix. According to E.2.b.v: *A Permittee may demonstrate that its discharge did not cause or contribute to an exceedance of an applicable water quality-based effluent limitation or receiving water limitation in any of the following ways:*
1. Demonstrate that there is no discharge from the Permittee's MS4 into the applicable receiving water; or
 2. Demonstrate that the discharge from the Permittee's MS4 is treated to a level that does not exceed the applicable water quality-based effluent limitation; or
 3. Demonstrate through a source investigation pursuant to protocols established under Water Code section 13178 or 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).

Questions

1. Regarding 2, what does treatment mean in terms of structural controls? And, if outfall monitoring shows no exceedance then why would it be necessary to even discuss treatment? Once again, how can a WQBEL be exceeded if it is supposed to be a method of compliance with the WLA? Further, does staff plan on conducting a "reasonable potential analysis" which is required federal stormwater regulations to determine if a discharge causes or contributes to an excursion above a water quality standard?

2. The reference to CWC 13178 appears only to apply bacteria. But the provision here appears to apply to all pollutant sources. Could staff please explain? Further, how will the protocols be explained in guidance documents – or will there be guidance documents and, if so, who will develop them?

Questions:

- i. Why is it necessary to have as a separate compliance standard, receiving water limitations to comply with a TMDL WLA? RWLs encompass in addition to WLAs, other water quality standards and water quality objectives in the basin plan. Wouldn't it be simpler and less confusing just to require compliance with the WLA as a specific water quality standard, instead of having both a WLA and receiving water limitation, which is broad?
- x. According E.2.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 and Attachments X through X of this Order.
 - ii. A Permittee shall not be considered in violation of a Receiving Water Limitation in Part V.A., if it is in compliance with the applicable TMDL requirement(s), including compliance schedules, of this Part and Attachments X through X.
 - iii. A Permittee shall not be considered in violation of a Receiving Water Limitation in Part V.A., if it is in compliance with the applicable TMDL requirements contained in a time schedule order.

Questions:

- i. Where are attachments X through X?

Does not the CWC say that the regional board cannot dictate compliance?

- ii. Why is staff trying to create a separate compliance standard using the receiving water as the point of compliance when federal regulations require compliance with any water quality standard through an MS4 permit is to be achieved at the outfall? Is it because staff does not want to re-open each of the TMDLs that set the compliance point in the receiving water?

Fordyce, Jennifer@Waterboards

From: McChesney, Frances@Waterboards
Sent: Friday, July 06, 2012 3:58 PM
To: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
Cc: Unger, Samuel@Waterboards; Fordyce, Jennifer@Waterboards; Johnson, Nicole@Waterboards
Subject: Amendment to Water Code section 13207
Attachments: Lutz 13207 conflict Final MEMO (7-6-12).pdf

Hello Board Members,

As you know, the California Water Code was recently amended in several respects regarding Regional Board members. I am providing a short memo to you regarding the revisions to Water Code section 13207(a) regarding conflicts. As explained in the memo, the change in the law means that Board Member Lutz no longer has a conflict with respect to the Los Angeles County MS4 permit due to her position as a mayor of the City of Monrovia. Board Member Lutz may attend workshops scheduled for the LA MS4 permit. The Office of Chief Counsel will be reviewing whether Board Member Lutz participation in the board hearing for the LA MS4 permit is affected by any other legal requirements, but the 13207 conflict no longer applies. The laws regarding ex parte communications and common law bias were not affected by the change to section 13207 and continue to apply. If you have any questions, please let me know.

See you Thursday

Frances McChesney
Attorney IV
State Water Resources Control Board
Office of Chief Counsel
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EDMUND G. BROWN JR.
GOVERNORMATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

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SENT VIA EMAIL ONLY

TO: Regional Board Members
Los Angeles Regional Water Quality Control Board

CC: Samuel Unger
Los Angeles Regional Water Quality Control Board

FROM: 
Frances McChesney, Attorney IV
OFFICE OF CHIEF COUNSEL

DATE: July 6, 2012

SUBJECT: AMENDMENT TO WATER CODE SECTION 13207(a)

The purpose of this Memorandum is to inform you that on June 27, 2012, amendments to the Porter-Cologne Water Quality Control Act that affect the participation of board members in the adoption of waste discharge requirements, waivers of waste discharge requirements, NPDES permits, and certain other decisions, became effective.

Under the former California Water Code section 13207(a) board members could not participate in matters in which they were waste dischargers or where they were connected to a waste discharger as a director, officer, or employee or where the board member had a disqualifying financial interest in the decision. The recent amendments deleted the conflict of interest provisions directed at waste dischargers and those board members connected to waste dischargers.¹ Under the new law, board members with a disqualifying financial interest in the decision may still not participate in a decision affecting their financial interest, but board members are no longer subject to the "waste discharger" conflict of interest.

¹ § 13207. Conflict of interest (a) No member of a regional board shall not participate in any board action pursuant to Article 4 (commencing with Section 13260) of Chapter 4, this chapter, or Article 1 (commencing with Section 13300) of Chapter 5, of this division which involves himself or herself or any waste discharger with which he or she is connected as a director, officer or employee, or in which he or she has a disqualifying financial interest in the decision within the meaning of Section 87103 of the Government Code.

This change in the law affects the Los Angeles County MS4 permit adoption. Based on the previous law, Board Member Lutz could not participate in the permit because she was connected to a waste discharger – the City of Monrovia – as an officer. Under the new law, Board Member Lutz is not prohibited from participating as a discharger because the new law deletes that conflict provision. Board members who are dischargers or connected to a discharger may participate in matters so long as they do not have a disqualifying financial interest in the decision.² Additionally, board members continue to be subject to laws regarding ex parte communications and common law bias, which could disqualify them from participating in a decision.

If you have any questions about the new law and its application to any matter before you, please contact Frances McChesney by email at fmcchesney@waterboards.ca.gov, or by phone at (916) 341-5174.

cc: **[Via email only]**

Jennifer Fordyce, Attorney

Nicole Johnson, Attorney

² In addition, Board Member Lutz does not have a disqualifying financial interest in the matter because her city pay of \$400 per month is not subject to the financial conflict requirements of the Fair Political Practices Act.

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

Los Angeles Regional Water Quality Control Board

TO: MS4 Permittees and Interested Persons

FROM:

for *Juan K. Redgeway*
Renee A. Purdy
Section Chief
Regional Programs

DATE: June 19, 2012

SUBJECT: NOTICE OF STAFF LEVEL PUBLIC WORKSHOP ON THE DEVELOPMENT OF THE UPDATED GREATER LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) NPDES PERMIT

On July 9, 2012, Board staff will hold a public workshop to discuss requirements proposed in the Tentative Los Angeles County MS4 Permit. MS4 permittees and interested persons are invited to the staff level public workshop on:

**Monday, July 9, 2012
1:00 - 3:30 PM
The Los Angeles Regional Water Board
Carmel Room
320 West Fourth Street, Los Angeles, CA**

A quorum of Los Angeles Water Board members may be present during the workshop. However, no action or voting will take place at the workshop.

The primary focus of the workshop is to have Board staff answer questions from MS4 permittees and interested persons regarding the Tentative Order. The discussion may include but is not limited to the following topics:

- TMDL Provisions
- Monitoring requirements
- Tentative permit requirements for the following minimum control measures comprising co-permittees' core stormwater management program:
 - Development Construction Program
 - Planning and Land Development Program
 - Public Agency Activities Program
 - Industrial/Commercial Facilities Control Program
 - Public Information and Participation Program
 - Illicit Connections and Illicit Discharges Detection and Elimination Program

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

Permittees and interested persons will have an opportunity to ask questions of Los Angeles Water Board staff and provide initial feedback. Please contact me at (213) 576-6622 or rpurdy@waterboards.ca.gov or, alternatively, Mr. Ivar Ridgeway at (213) 620-2150 or iridgeway@waterboards.ca.gov with questions.

LYRIS MAILING

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6/19/12

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7/6/2009 13:53	rsalas@lapuente.org	Rene Salas
10/28/2009 14:20	rsoto@ci.vernon.ca.us	Rafael Soto
7/6/2009 13:49	rtahir@tecsenv.com	Ray Tahir
3/4/2011 13:50	rtremblay@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
8/6/2009 16:44	rwellington@willdan.com	Ray Wellington
7/6/2009 13:23	rwishner@ci.walnut.ca.us	Rob Wishner
2/15/2011 10:36	s.guldimmann@gmail.com	Suzanne Guldimmann
7/6/2009 13:49	sam.gutierrez@westcovina.org	Sam Gutierrez
7/6/2009 13:20	samw@ci.rolling-hills-estates.ca.us	Samuel R. Wise
6/15/2012 13:49	sandym@lwa.com	Sandy Mathews
7/6/2009 13:52	sarinamoraleschoate@santafesprings.org	Sarina Morales-Choate
8/3/2009 6:17	sbarankiewicz@ohslegal.com	Stan M. Barankiewicz II
8/3/2009 10:47	scheng@sgch.org	Angela Cheng
12/13/2011 11:08	sean.j.dunn@damco.com	Sean Dunn
5/3/2010 17:44	selimeren@gmail.com	SELIM EREN
11/9/2010 15:56	seth.carr@lacity.org	seth carr
6/7/2012 10:43	sfleischli@nrdc.org	Steve Fleischli
7/6/2009 13:43	sfurukawa@ci.south-pasadena.ca.us	Shin Furukawa
7/6/2009 13:25	sgrund@lacsds.org	Shannon Grund
7/6/2009 13:11	shahram.kharaghani@lacity.org	Shahram Kharaghani
2/21/2012 8:50	shawn.hagerty@bbklaw.com	Shawn Hagerty
11/16/2011 8:40	shenley@covinaca.gov	Steve Henley
11/4/2009 13:46	shikhac@lwa.com	Shikha Chetal
7/6/2009 11:32	skelley@waterboards.ca.gov	Sandra Kelley
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	smania@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
1/21/2010 11:52	sphillip@dtsc.ca.gov	Stan Phillippe
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@biasec.org	steven schuyler
12/20/2011 12:32	stanleys@uppercrustent.com	Stanley Shimabuku

11/16/2011 8:59	steve.huang@redondo.org	Steve Huang
1/14/2010 14:32	stormwatercentral@gmail.com	Anna Hensley
6/19/2012 17:02	sturney@weho.org	Susannah Turney
5/31/2011 16:33	suhles@delanegroup.com	Scott Uhles
5/27/2012 12:38	suzi_youssef@ymail.com	Suzi Youssef
11/16/2011 8:46	swalker@cityofpasadena.net	Stephen Walker
5/27/2010 11:33	symeon.finch@orco.com	Symeon Finch
7/6/2009 13:08	szurn@ci.glendale.ca.us	Stephen M. Zurn
11/10/2011 9:40	tajenkins@sgvwater.com	Thomas A. Jenkins
6/8/2012 15:29	tattnlaw@gmail.com	JOHNTOMMY ROSAS
7/6/2009 13:04	tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57	tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33	tiffanyshedrick@santafesprings.org	Tiffany Shedrick
12/13/2011 10:32	tliddell@kirklandwa.gov	Tommy Liddell
5/31/2011 16:30	tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51	tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19	tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20	tony@csstudios.com	Tony Ignacio
2/20/2012 13:01	tracy@egoscuelaw.com	Tracy Egoscue
7/26/2010 10:25	tracyegoscue@paulhastings.com	Tracy Egoscue
7/6/2009 13:10	trobins@cityoflamirada.org	Tom E. Robinson
7/6/2009 11:29	trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33	tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59	ttait@ci.arcadia.ca.us	Tom Tait
7/6/2009 13:22	tybarra@soelmonte.org	Tony Ybarra
4/3/2011 19:01	uhdenr@metro.net	Roger Uhden
6/17/2011 20:16	uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42	vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02	vcastro@covinaca.gov	Vivian Castro
1/24/2011 11:30	vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/7/2011 11:10	victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39	vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38	vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03	vsinghal@baldwinpark.com	Vijay Singhal
2/18/2011 11:31	wade@grahamstudio.net	Wade Graham
3/9/2010 16:40	wblistserv@gmail.com	SWRCB Listserv
2/21/2012 4:06	wbotha@brownandwinters.com	Wentzelee Botha
6/29/2011 9:59	wcaffrey@vandermostconsulting.com	wade caffrey
12/29/2011 11:17	welchrc@pbworld.com	Robert Welch
11/14/2011 16:14	wgross@lacs.org	bill gross
7/6/2009 13:52	wrlindinc@aol.com	Wes Lind
8/17/2011 11:33	wynesta@earthlink.net	Wynesta Dale
11/16/2011 8:58	ykwan@lcf.ca.gov	Ying Kwan
7/6/2009 13:35	ys@cityofrh.net	Yolanta Schwartz
12/6/2010 17:34	ysim@dpw.lacounty.gov	Youn Sim
9/17/2010 8:45	zora.baharians@lacity.org	Zora

**LOS ANGELES COUNTY MS4 PERMIT WORKSHOP
JULY 9, 2012
1:00 - 3:00 PM
CARMEL ROOM**

AGENDA

Topic	Time
Welcome/Introduction	1:00-1:10
TMDL Provisions & Receiving Water Limitations Provisions	1:10-1:40
Monitoring and Reporting Provisions	1:40-2:00
Storm Water Management Program "MCM" Provisions	2:00-2:30
Watershed Management Program Provisions	2:30-2:50
Wrap-up	2:50-3:00

MS4 WORK SHOP
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
JULY 9TH 2012
CARMEL ROOM 1:00 TO 3:00P.M.

Name	Representing	Address	Phone	E-mail Address
BRUNO CALLU	CITY OF S. EL MONTE	1415 SANTA ANITA AVE. SOUTH EL MONTE, CA 91733	(626) 652-3163	bcallu@soelmonte.org brun
Ewelina Mutkowske	County of Ventura	8005. Victoria Ave. Ventura, CA 93003	805-645-1382	ewelina.mutkowske @ventura.org
Cameron McCullough	City of South Gate et al	6131 Orangethorpe Ave #2350 Buena Park, CA 90620	562 802-7880	cmccullough@jha.net
Arthem Thomas	LA County	900 S. Fremont Ave Alhambra, CA 91803	626-458-4310	athomas@dpw.lacounty.gov
Maged Soliman	LA County DPW	900 S. Fremont Ave Alhambra, CA 91803	626. 458. 7163	masoliman@dpw.lacounty.gov
Ruby Wang	LA County DPW	900 S. Fremont Av. Alhambra, CA 91803	626-458-4343	rwang@dpw.lacounty.gov
Aracely Lasso	LA County DPW	900 S. Fremont Ave. Alhambra, CA 91803	626-458-7146	alasso@dpw.lacounty.gov
Sil Busick	City of El Segundo	150 Illinois St El Segundo 90245	310 524-2754	gbusick@elsegundo.org
Andrew Henderson	BIA/SC	17740 Sky Park Ct. Suite 170 IRVINE CA 92614	310 597-1187	ahenderson@ biasec.org
Lauren Amimoto	City of Inglewood	1 W Manchester Blvd Inglewood	310 412 5192	lamimoto@ cityofinglewood.org

MS4 WORK SHOP
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
JULY 9TH 2012 CARMEL ROOM 1:00 P.M.

Name	Representing	Address	Phone	E-mail Address
Norm Witt	Cook Hill Prop	23 Corporate Plaza Newport Beach	949 760 6600	NWITT@COOK-HILL.COM
Steve Schuyler	BIASC	17744 Sky Park Irvine	949 955-9500	SSchuyler@BIASC.org
Cody Howing	RKA Consulting Group	393 Lemon Grove Dr. Ste E. Walnut CA 91787	909 594 9702	chowing@rkgroup.com
KADEN YOUNG	CULVER CITY	9505 W. JEFFERSON BLVD. CULVER CITY, CA 90232	310/253-6445	KADEN.YOUNG@CULVERCITY.ORG
Katherine Rubin	LADWP	111 N. Hope St., Rm 1213 Los Angeles, CA 90012	213/267-0436	Krubin@ladwp.com
Clayton Yoshida	LADWP	111 N Hope St Rm 1213 Los Angeles CA 90012	213 367 4651	clayton.yoshida@LADWP.COM
MIRIAM C. SYKES	CITY OF GLENDALE ^{STC} W & Power	141 N. Glendale Ave. Glendale, 91206	Level 818 - 9548-3807	msykes@ci.glendale.ca.us
RENE GUERRERO	CITY OF PICO RIVERA	6615 PASSONS BLVD. PICO RIVERA, CA 90660	(562) 801-4417	rguerrero@pico-rivera.org
GIADIS DERAS	CITY OF PICO RIVERA	6615 Passons Blvd Pico Rivera CA 90660	(562) 801-4351	gderas@pico-rivera.org
Ray Tahir	TECS several cities	106 S. Mentor Pasadena, CA 91106	626 396-9424	rtahir@tecsenv.com
Patricia Elkis	Carson	701 E. Carson St Carson, CA 90745	310 847-3529	pelkis@carson.ca.us

MS4 WORK SHOP
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
JULY 9TH 2012
CARMEL ROOM 1:00 TO 3:00P.M.

Name	Representing	Address	Phone	E-mail Address
RICK VALTE	CITY OF SANTA MONICA	1437 4th St. #300 SANTA MONICA, CA 90401	(310) 458-8234	rick.valte@sm.gov.net
Neal Shapiro	II	200 Santa Monica Pier SM 90401	310 458 8223	neal.shapiro@smgov.net
Vanessa Hevener	City of Arcadia		626 305-5327	vhevener@ci.arcadia.ca.us
Jason Pereira	CWE	2100 E. Howell Ave. Suite 209 Anaheim, CA 92806	714 385-2600 x211	jpereira@cwecorp.com
Rou Bow	MORROVIA	600 S. MOUNTAIN MORROVIA Cat	626 932-5844	rbow@ci.morroria.ca.us
Franca Murto				
Oliver D. Galang	Brown & Caldwell	601 S. Figueroa suite 950 Los Angeles, CA	213 271 2242	egalang@brownandc.com
KATHLEEN MCGAWAN	CONSULTANT		310 373-0330	KATHLEEN.GUWLS @VERIZON.NET
BARMESHWAR RAI	INDEPENDENT	1 W Manchester Bl. Inglewood	310-412- 5333	bras@cityofinglewood.org
Susannah Turney	City of West Hollywood	8300 Santa Monica Blvd Westo, CA 90069	(323) 848- 6499	sturney@weho.org

MS4 WORK SHOP
 LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
 JULY 9TH 2012
 CARMEL ROOM 1:00 TO 3:00P.M.

Name	Representing	Address	Phone	E-mail Address
Eroy Kiepke	Rossmore, Paramount Le Canada Placentbridge	13191 Crossroads Parkway Mo Industry, Ca 91746	562-908-6278	ekiepke@willdon.com
MIKE HARRISON	DIMOND WEST	24005 VENTURA BL CALABASAS 91302	8184441800	MHARRISON@ DIMONDWEST.NET
MARYJANE MACLEOD	Contech ENGINEERING SOLUTIONS	110 W DANNICE THORNDALE CA 91360	805-374-2829	mmacleod@ ContechES.com
Jim Ciampa	Public Water Agencies Group	301 N. LAKE AVE, 10th FLOOR PASADENA, CA 91101	626/793-9400	jciampa@lajwrqf.com
Charlie Yu	City of Los Angeles	1149.5 Broadway, LA CA 90015	(213) 485-3929	charlie.yu@lacity.org
Brandon Steets	Geosyntec	924 Anacapa St Santa Barbara, CA 93101	805-755-9591	bsteets@geosyntec.com
Kosta Kaporis	City of Los Angeles	1149 S Broadway LA, CA 90015	(213) 485-0586	kosta.kaporis@ lacity.org
Robert Vega	LACity PW-SAN	1140 S. Broadway L.A., CA, 90015	(213) 485-3901	Robert.Vega@lacity.org
Shahram Kharaghani	CLA-WPD-	=	(213) 485-0587	Shahram.Kharaghani@lacity.org
Karen Cowan	Larry Walker Assoc.	720 Wilshire Blvd Santa Monica, CA 90403	310-394-1036	Karenc@lwa.com

MS4 WORK SHOP
 LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
 JULY 9TH 2012
 CARMEL ROOM 1:00 TO 3:00P.M.

Name	Representing	Address	Phone	E-mail Address
Richard WATSON	RWA/Signal Hill	21422 Viso Lane Missim Viejo, CA 92691	949 955-6272	rwatson@rwaplanning.com
John Hunter	Monteary Park/JLHA et al	6131 Orange Thorne Buena Park	714 902 7880	JHunter@JLHA.net
Heather Merenda	City of Santa Clara WRP	22522 Valencia Santa Clara 95055	650 284 1414	hmerenda@ santa-clara.ca.gov
John Dettle	Torrance	20500 Madrona Ave Torrance, CA 90503	310 618 3059	jdettle@torranceca.gov
Allyson Clark	California Water Service Co.	2632 W 237 th St. Torrance Ca 90505	310-257-1431	aclark@calwater.com
Jan Duggall	Los Virgenes MWD	4232 Los Virgenes Rd Calabasas CA 91301	818 251 2167	jduggall@lvwmd.com
DVID Kimbrough	Pasadena Water & Power	150 S. Los Robles Suite 200 Pasadena 91101	626-774-7315	dkimbrough@ cityofpasadena.net
Kirsten James	Heal the Bay	1444 9 th St 90401	310-451-1500	kjames@healthebay.org
LIZ Crosson	LA Waterkeeper	120 Broadway Suite 605 SM CA 90401	310 374 6162	liz@lanwaterkeeper.org
Mark Garrison	NRDC	1314 2nd St Santa Monica CA 90401	310-434-2300	mgarrison@nrdc.org

MS4 WORK SHOP
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
JULY 9TH 2012 CARMEL ROOM 1:00 P.M.

Name	Representing	Address	Phone	E-mail Address
Shila Kennedy	Entact Solutions	P.O. Box 11043 Newport 92658	310 344-8651	Skennedy@entact.net
ED SUHER	City of Industry	—	310- 291-1150	e-suher@ aei-casc.com
Ron Ruiz	City of San Fernando	117 MacNeil St San Fernando, CA	818-898-1237	r Ruiz@sfcity.org
Adrian Ortega	Upper District	Manzanita CA	923-301-08 52	adortega@ucme.com
Bernie Iniguez	City of Bellflower	16600 Civic Center Dr Bellflower, CA 90706	562-804-1424 x2233	b.iniguez@bellflower.org
Rachel McPherson	Port of Los Angeles	425 S. Palos Verdes San Pedro, CA	310-732-0814	rmcpherson@portla.org
Joyce Dillard		PO Box 31397 LA 90037		dillardjoyce@ verwood.com
Kathryn Curtis	Port of Los Angeles	425 S. Palos Verdes St San Pedro CA 90731	310-732-3681	kcurtis@portla.org
Mike Shay	City of Redondo Beach	415 Diamond St. Redondo Beach CA 90277		
Elaine Jeng	City of Redondo Beach	415 Diamond St. Redondo Beach, CA 90277	(310) 318- 0661	elaine.jeng@redondo.org

MS4 WORK SHOP
 LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
 JULY 9TH 2012
 CARMEL ROOM 1:00 TO 3:00P.M.

Name	Representing	Address	Phone	E-mail Address
Oliver Cramer	City of Santa Clarita	23920 Valencia Blvd Santa Clarita, CA 91355	661 255-4904	OCramer @santa-clarita.com
BRUCE INMAN	CITY OF SIERRA MADRE	232 W. SIERRA MADRE BL. SIERRA MADRE, CA	626 355 7135 x 801	binman@ cityofsierramadre.com
JAMES CARLSON	CITY OF SIERRA MADRE	" ↑ "	626 355-7135 x 803	jcarlson@ Cityofsierramadre.com
Ron Fajardo	City of El Segundo	350 main st. El Segundo, CA 90245	(310) 524-2709	rfajardo@ elsegundo.org
STEVE TSUMURA	City of El Segundo	314 MAIN ST El Segundo, CA 90245	(310) 524-2242	Stsumuradelsegundo.org
DAREN GRILLEY	CITY OF SAN GABRIEL	425 S MISSION DR 91716	(626) 308-2806	dgrilley@sgch.org
Samuel Aguirre	City of San Gabriel	425 S MISSION DR	(626) 308-2806	Seguirre@sgch.org
JUNE HEAVOLD	CITY OF LAUNDALE	4799 MANHATTAN BLVD BLVD, LAUNDALE	(310) 973- 3260	jheavold@laundalecity.org
Shannon Yachzee	City of West Covina		626-939 8425	Shann.yachzee@westcovina.org
Susan Reyes	Senator Ed Hernandez	100 S. Vincent Ave Suite 401 W. Covina 91790	626-430-2499	Susan.Reyes@ca.gov

MS4 WORK SHOP
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
JULY 9TH 2012
CARMEL ROOM 1:00 TO 3:00P.M.

Name	Representing	Address	Phone	E-mail Address
Kevin Sales	San Marcos		5/914-4066	Kevin@ksservices.net
JERRICK TORRES	VERNON	4305 SANTA FE AVE. VERNON, 90058	(323) 583-8811 X204	JTORRES@CI.VERNON.CA.US
Claudia Arellano	Vernon	4305 Santa Fe Avenue Vernon, Ca 90058	323 583 8811 X258	carellano@ci.vernon.ca.us
Janet Bell	Metropolitan Water District	700 W. Alameda LA, Calif. 90012	(213) 217-5516	jbelle@metwd.com
Meg Montade	City of Pomona	505 S Garey Ave Pomona, CA	909-620- 2392	meg-montade@ci.pomona.ca.us
Latoya Cyrus	City of San Dimas	145E. Bonita Ave San Dimas, CA	909-394- 6244	lcyrus@ci.san-dimas .ca.us
Julie Carver	City of Pomona	505 S. Garey Ave. Pomona CA 91766	909-620- 3628	Julie-Carver@ci.pomona. ca.us
Peter PEURON	FOREST LAWN	1712 S. GLEN- DALE AVE, GLENDALE	323 342 4587	P.PEURON@FOREST LAWN CA.COM
Holly Schroeder	ISLA	2840 Avenue Star Santa Cruz	661 257 5046	hschroeder@isla.org
Lisa Austin	Geosyntec Consultants	1111 Broadway 6th Fl. Oakland, CA 94607	(310) 946-9000	laustin@geosyntec.com
Mam Lynn Coffee	Nossaman	18881 Von Karman Ave, Irvine CA 92612	(949) 833-7800	mlcoffee@nossaman.com

MS4 WORK SHOP
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
JULY 9TH 2012
CARMEL ROOM 1:00 TO 3:00P.M.

Name	Representing	Address	Phone	E-mail Address
Wendy Wang	of Best Best/Krieger	300 S. Grand Ave, 25 th Floor, LA, CA 90071	(213) 787- 2554	wendy.wang@ bbklaw.com
Jodie Nygaard	LACSD	1955 Workman Mill Rd Whittier, CA 90601	(562) 908-4288 ext 2811	jnygaard@lacsd.org
Susanne Kluth	GLACVED	12545 Florence Ave Santa Fe Springs, 90670	562-944-9656 ext 520	SKLUTH@GLACVED.ORG
Mark Daniel	GLACVED	"	562 944 9656 ext 540	mdaniel@glacved.org
Jim Covin	RWQCB-LA	320 West 4th Street	(213) 620-2229	jcovin@waterboards.ca.gov
Michelle Keitz	City of Burbank	6000 Wustntr Ave	626 388 3218	mkeitz@cityofburbank.org
Mark Green	BIASC/CICWA		909-525-0623	mgreen@biasc.org
MATT CARPENTER	NLF		661-305-7546	mcarpenter@newhall.com

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

Los Angeles Regional Water Quality Control Board

June 5, 2012

The Honorable Andre Quintero
Mayor, City of El MonteThe Honorable Mayor Luis Aguinaga
Mayor, City of South El Monte**Subject: Stormwater Workshop and Tour Invitation**

Dear Mayors Quintero and Aguinaga:

On behalf of Chair Maria Mehranian and the Los Angeles Water Quality Control Board (Regional Board), I am writing to thank you for inviting Regional Board members to the municipal separate storm sewer system (MS4) workshop and tour you are planning on June 22, 2012. The Regional Board members and I fully understand the importance of the Los Angeles County MS4 permit to municipalities and county agencies. The Regional Board also appreciates the MS4 programs developed by the Cities of El Monte and South El Monte and other cities to protect water quality in Los Angeles County.

As you know, the Los Angeles County MS4 permit is a pending matter before the Regional Board, and, therefore, the Board must follow the Bagley-Keene Open Meeting Act and other due process requirements, including the rule prohibiting ex parte communications for pending adjudicative proceedings. Consequently, the Board members may only attend a tour and workshop that is publicly noticed by the Board and otherwise follows the applicable due process requirements. Accordingly, the Regional Board members will unfortunately not be able to attend your tour and workshop on June 22, 2012 as their attendance would violate applicable due process requirements, including the ex parte rules.

At the Regional Board's May 2012 workshop, several Board members expressed interest in attending a tour of portions of the Los Angeles County MS4 prior to considering a tentative permit for adoption in September 2012. To afford Regional Board members an opportunity to view areas of the MS4 system, I have been directed by Chair Mehranian to organize a tour of portions of the Los Angeles County MS4 prior to permit consideration. I have been directed to coordinate with the key stakeholder groups, including the Cities of El Monte and South El Monte, in organizing the tour and in choosing locations. Board staff will then publicly notice the

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

The Honorable Andre Quintero
The Honorable Luis Aguinaga

- 2 -

June 5, 2012

tour in accordance with state requirements so that all due process requirements are adhered to and all permittees and interested persons are invited to attend. I will ensure that you receive notice of any such tour.

The Regional Board believes that the views of all permittees and interested persons of the pending MS4 permit are important. As such, the Regional Board has provided many opportunities for permittees and interested parties, including the Cities of El Monte and South El Monte, to express their thoughts and concern to the Board and/or Board staff. The Board has held four public Board-level and staff-level workshops since November 2011, and staff has been meeting with your representatives on a frequent basis since last summer to hear and understand your cities' concerns. Regional Board staff has also provided permittees and interested persons opportunities to submit written comments on pre-draft working proposals. Any day now, Regional Board staff will be releasing the full tentative MS4 permit and allow a 45-day written comment period. The Regional Board will also hold a hearing this fall and will provide all permittees and interested persons an opportunity to provide oral comments on the Los Angeles County MS4 permit prior to its consideration by the Regional Board. Your cities will, have the opportunity to raise to the Regional Board in writing and orally at the hearing the issues you intended to cover in your June 22, 2012 workshop.

Thank you once again for your commitment to stormwater quality and the benefit it provides to all residents and businesses of Los Angeles County. Please call me at (213) 576-6605 if you or your staffs have any questions regarding this letter or the pending Los Angeles County MS4 permit.

Sincerely,



Samuel Unger
Executive Officer

cc: Regional Board Members
Frances McChessney, MCC
Ray Tahir TECS Environmental



Los Angeles Regional Water Quality Control Board

NOTICE OF SPECIAL MEETING BOARD MEMBER FIELD TOUR OF PORTIONS OF THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

Tuesday, July 31, 2012
9:00 AM

Meeting Location:
El Monte Community Center
3130 Tyler Avenue
El Monte, CA 91731

A quorum of the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) may be present at a Board Member field tour of portions of the Los Angeles County MS4 that will begin at 9:00 AM at the El Monte Community Center on July 31, 2012. While a quorum of the Los Angeles Water Board may be in attendance, there will be no action or voting taking place during the tour.

Los Angeles Water Board staff will review procedures for the tour and provide a brief overview of the locations that will be included in the tour. Board Members will then visit various MS4 locations with presentations by Board staff and staff of the Los Angeles County Flood Control District at each stop. To ensure adequate time is provided to visit diverse portions of the Los Angeles County MS4, tour stops will be in the general vicinity of the El Monte Community Center within the upper San Gabriel River watershed. An itinerary of the specific tour stops will be provided in advance of the tour.

Interested persons are invited to attend. Interested persons wishing to participate in the tour will be responsible for providing their own transportation to stops along the tour route. Information on and directions to the tour stops will be provided to interested persons at the El Monte Community Center. Due to possible parking constraints, the Los Angeles Water Board encourages participants to carpool if possible.

To ensure a productive and efficient tour, and to ensure that adequate parking capabilities is arranged in advance for all participants, members of the public wishing to join the tour should RSVP by **5:00 PM on Tuesday, July 24, 2012**. To RSVP, please send an email (preferred) with the subject line "LA MS4 Tour RSVP" to Theresa Rodgers at trodgers@waterboards.ca.gov. In the body of the email, please include a contact phone number along with the number of persons who will participate and the number of vehicles. Alternatively, you may call Ms. Rodgers at (213) 576-6789. Individuals who require special accommodations are also requested to contact Ms. Rodgers at the contact information above.

Questions concerning this notice may be directed to Ivar Ridgeway at iridgeway@waterboards.ca.gov or (213) 620-2150.

LYRIS MAILING

RB-AR2878

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11/11/2010 10:47 jwilliams@marchem.net	Jeffrey Williams
11/11/2011 16:23 kamara.sams@boeing.com	Kamara Sams
6/21/2010 10:10 karenc@lwa.com	Karen Cowan
2/17/2012 11:53 katharine.moore@sen.ca.gov	Katharine Moore
1/17/2012 11:02 katherine.paris@tetrattech.com	Katherine Paris
7/6/2009 13:20 kathleen.enve@verizon.net	Kathleen McGowan
2/22/2012 16:20 kaying_lee@ci.pomona.ca.us	Kaying Lee
7/19/2012 8:24 kbreyer@santa-clarita.com	Kerry Breyer
3/10/2011 10:39 kemmerer.john@epa.gov	John Kemmerer
1/5/2011 14:32 kens@sccwrp.org	Ken Schiff
5/6/2011 8:10 kevarts@rbf.com	Kevin Evarts
11/16/2011 9:00 kevin@kjservices.net	Kevin Sales
7/6/2009 13:22 kfarfsing@cityofsignalhill.org	Kenneth C. Farfsing
11/9/2010 15:31 kfisher@ci.agoura-hills.ca.us	Kelly Fisher
7/6/2009 13:03 kimberlycolbert@caaprofessionals.com	Kimberly Colbert
11/7/2011 14:06 kirk.c.brus@usace.army.mil	Kirk Charles Brus
10/4/2010 9:18 kjames@healthebay.org	Kirsten James
10/17/2011 16:22 kkunysz@mwdh2o.com	Kathy Kunysz
9/6/2010 13:03 klamorie@charter.net	Kim Lamorie
12/22/2011 16:15 klinker@anaheim.net	Keith Linker
8/23/2010 11:36 kmattfeld@portla.org	Kenneth Mattfeld
8/6/2009 9:54 kmoore@sunstarlabs.com	Kevin Moore
6/5/2012 14:16 kosta.kaporis@lacity.org	Kosta Kaporis
7/6/2009 13:36 kpatel@ci.san-dimas.ca.us	Krishna Patel
7/6/2009 13:21 kpulskamp@santa-clarita.com	Kenneth R. Pulskamp
2/2/2010 9:23 kristy.allen@tetrattech.com	Kristy Allen

11/10/2010 11:39	kristy@lasgrwc.org	Kristy Morris
4/5/2010 11:48	kruffell@lacs.org	Kristen Ruffell
11/9/2010 16:32	kstpeters@earthconsultants.com	Kay St. Peters
7/6/2009 13:09	ktam@ci.irwindale.ca.us	Kwok Tam
7/6/2009 13:40	kvivanti@lakewoodcity.org	Konya Vivanti
11/9/2010 15:50	kwang@waterboards.ca.gov	Kenny Wang
7/6/2009 13:52	kwatson@cityofinglewood.org	Ken Watson
7/6/2009 13:38	kwilson@ci.vernon.ca.us	Samuel Kevin Wilson
7/6/2009 13:40	lamimoto@cityofinglewood.org	Lauren Amimoto
7/29/2010 9:03	langford.book@ladwp.com	Langford Book
8/24/2011 15:36	laral@usgvmwd.org	Lara L. Larramendi
12/8/2009 11:15	larry.richards@legrand.us	Larry Richards
3/25/2012 16:12	laustin@geosyntec.com	Lisa Austin
7/6/2009 13:18	lbenedetti@paramountcity.com	Linda Benedetti-Leal
7/19/2012 9:46	lcyrus@ci.san-dimas.ca.us	Latoya Cyrus
9/9/2009 9:15	ldods@counsel.lacounty.gov	Lauren E. Dods
11/9/2010 17:11	leo.raab@wecklabs.com	Leo Raab
11/7/2011 16:42	leverett@clwa.org	Lauren Everett
7/31/2009 16:20	lfeldman@localgovlaw.com	Lauren Feldman
11/6/2011 11:56	lilykaye@hotmail.com	Lily Kaye
6/28/2010 13:58	liz@smbaykeeper.org	Liz Crosson
7/6/2009 13:23	ljackson@torrnet.com	LeRoy Jackson
11/11/2009 20:40	llaari@gmail.com	latif laari
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
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
2/4/2011 10:02	marycarol@atlglobal.com	Marycarol Valenzuela
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

5/20/2010 7:53	navedissian@quakercityplating.com	NICK AVEDISSIAN
7/29/2009 13:55	ndupont@rwglaw.com	Norman Dupont
7/6/2009 13:43	neal.shapiro@smgov.net	Neal Shapiro
11/5/2011 20:04	neilandeb@aol.com	Neil Dipprey
4/12/2010 8:26	nfelix@sarecycling.com	Nancy Felix
8/6/2009 11:06	ngarrison@nrdc.org	Noah Garrison
11/30/2009 11:21	nisheeth.kakarala@lacity.org	Nisheeth Kakarala
7/6/2009 13:43	ocramer@santa-clarita.com	Oliver Cramer
10/28/2011 14:52	ogalang@brwnald.com	Oliver D. Galang PE
11/9/2010 15:30	ogalang@dpw.lacounty.gov	Oliver Galang
8/3/2009 12:35	olivia@malibutimes.com	Olivia Damavandi
8/9/2010 10:52	paul.ahn@sce.com	Paul ahn
7/17/2009 15:05	paul.singarella@lw.com	Paul Singarella
5/4/2012 15:16	pauling.sun@tetrattech.com	Pauling Sun
1/12/2010 8:06	pcmsusa@hotmail.com	Raymond Wells PhD
7/6/2009 13:41	pelkins@carson.ca.us	Patricia Elkins
5/17/2012 15:48	pete_halpin@caltestlabs.com	Peter Halpin
9/16/2011 9:48	ply@wrđ.org	Phuong Ly
2/27/2010 15:59	pmglick@gmail.com	Peter Glick
10/12/2010 14:27	quangtran59@gmail.com	Quang Tran
4/1/2011 14:18	r.appy@cox.net	Ralph Appy
9/23/2010 7:17	rabbott5@toromail.csudh.edu	Rodney Abbott
2/1/2011 11:42	rasancho@dpw.lacounty.gov	Randall Sancho
7/4/2012 11:03	razzip1@aol.com	Paul V. Ferrazzi
11/16/2011 9:01	rbeste@torranceca.gov	Rob Beste
7/6/2009 13:17	rbow@ci.monrovia.ca.us	Ron Bow
2/17/2012 9:50	rchristmann@waterboards.ca.gov	Rebecca Christmann
7/6/2009 13:22	rdickey@sogate.org	Robert T. Dickey
12/28/2011 16:43	rdrayse@treepeople.org	Rebecca Drayse
8/15/2011 13:46	reddy.pakala@ventura.org	Reddy Pakala
9/16/2009 14:00	rehsiteworks@aol.com	Ray E. Hensley
7/6/2009 13:42	rfajardo@elsegundo.org	Ron Fajardo
8/24/2009 9:40	rfreeman@lawa.org	Robert Freeman
7/2/2010 12:04	rwpetro@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
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	rolly@kal-plastics.com	Rolly A. Panganiban
11/16/2011 7:16	rond@rpv.com	Ron Drago, P.E.
11/9/2010 15:42	rorton@lvmwd.com	Randal D. Orton Ph.D. D.Env.
2/1/2011 8:56	rpurdy@waterboards.ca.gov	Renee Purdy
7/6/2009 13:20	rruiz@sfcity.org	Ron Ruiz
7/6/2009 13:53	rsalas@lapuente.org	Rene Salas
10/28/2009 14:20	rsoto@ci.vernon.ca.us	Rafael Soto
7/6/2009 13:49	rtahir@tecsenv.com	Ray Tahir
3/4/2011 13:50	rtremblay@lacs.org	Raymond L Tremblay
7/6/2009 13:53	rvasquez@scsengineers.com	Ralph Vasquez
4/14/2010 11:46	rveiga@waterboards.ca.gov	Rebecca Veiga Nascimento
3/23/2011 11:22	rwang@dpw.lacounty.gov	Ruby Wang
4/8/2011 13:18	rwatson@rwaplanning.com	Richard A. Watson
8/6/2009 16:44	rwellington@willdan.com	Ray Wellington
7/6/2009 13:23	rwishner@ci.walnut.ca.us	Rob Wishner
2/15/2011 10:36	s.guldimann@gmail.com	Suzanne Guldimann
7/6/2009 13:49	sam.gutierrez@westcovina.org	Sam Gutierrez
7/6/2009 13:20	samw@ci.rolling-hills-estates.ca.us	Samuel R. Wise
6/15/2012 13:49	sandym@lwa.com	Sandy Mathews
7/6/2009 13:52	sarinamoraleschoate@santafesprings.org	Sarina Morales-Choate
8/3/2009 6:17	sbarankiewicz@ohslegal.com	Stan M. Barankiewicz II
8/3/2009 10:47	scheng@sgch.org	Angela Cheng
12/13/2011 11:08	sean.j.dunn@damco.com	Sean Dunn
5/3/2010 17:44	selimeren@gmail.com	SELIM EREN
11/9/2010 15:56	seth.carr@lacity.org	seth carr
6/7/2012 10:43	sfleischli@nrdc.org	Steve Fleischli
7/6/2009 13:43	sfurukawa@ci.south-pasadena.ca.us	Shin Furukawa
7/6/2009 13:25	sgrund@lacs.org	Shannon Grund
7/6/2009 13:11	shahram.kharaghani@lacity.org	Shahram Kharaghani
2/21/2012 8:50	shawn.hagerty@bbklaw.com	Shawn Hagerty
11/16/2011 8:40	shenley@covinaca.gov	Steve Henley
11/4/2009 13:46	shikhac@lwa.com	Shikha Chetal
7/6/2009 11:32	skelley@waterboards.ca.gov	Sandra Kelley
2/23/2011 10:55	smartin@remet.com	Scott Martin
11/30/2009 14:50	smurow@mooote.com	Steven Murow
11/16/2011 8:01	smyrter@cityofsignalhill.org	Steve Myrter
2/2/2011 14:43	smania@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
1/21/2010 11:52	sphillip@dtsc.ca.gov	Stan Phillippe
11/15/2011 15:20	srigg@ci.vernon.ca.us	Scott Rigg
5/31/2011 16:28	ssanchez@bialav.org	Sandy Sanchez
1/30/2012 13:55	ssantilena@healthebay.org	Susie Santilena
2/9/2012 12:40	sschuyler@biasc.org	steven schuyler
12/20/2011 12:32	stanleys@uppercrustent.com	Stanley Shimabuku

11/16/2011 8:59	steve.huang@redondo.org	Steve Huang
1/14/2010 14:32	stormwatercentral@gmail.com	Anna Hensley
6/19/2012 17:02	sturney@weho.org	Susannah Turney
5/31/2011 16:33	suhles@delanegroup.com	Scott Uhles
5/27/2012 12:38	suzi_youssef@ymail.com	Suzi Youssef
11/16/2011 8:46	swalker@cityofpasadena.net	Stephen Walker
5/27/2010 11:33	symeon.finch@orco.com	Symeon Finch
7/6/2009 13:08	szurn@ci.glendale.ca.us	Stephen M. Zurn
11/10/2011 9:40	tajenkins@sgvwater.com	Thomas A. Jenkins
6/8/2012 15:29	tattnlaw@gmail.com	JOHNTOMMY ROSAS
7/6/2009 13:04	tcoroalles@cityofcalabasas.com	Anthony Coroalles
7/31/2009 15:57	tford@smbaykeeper.org	Tom Ford
2/23/2012 8:33	tiffanyshedrick@santafesprings.org	Tiffany Shedrick
12/13/2011 10:32	tliddell@kirklandwa.gov	Tommy Liddell
5/31/2011 16:30	tom.mitchell@pardeehomes.com	Tom Mitchell
12/15/2009 10:51	tony.barboza@latimes.com	Tony Barboza
3/23/2010 11:19	tony.pepe@csun.edu	Tony Pepe
9/16/2010 10:20	tony@csstudios.com	Tony Ignacio
2/20/2012 13:01	tracy@egoscuelaw.com	Tracy Egoscue
7/26/2010 10:25	tracyegoscue@paulhastings.com	Tracy Egoscue
7/6/2009 13:10	trobins@cityofflamirada.org	Tom E. Robinson
7/6/2009 11:29	trodgers@waterboards.ca.gov	Theresa Rodgers
11/14/2011 8:33	tsmith@bonterraconsulting.com	Thomas Smith
7/6/2009 12:59	ttait@ci.arcadia.ca.us	Tom Tait
7/6/2009 13:22	tybarra@soelmonte.org	Tony Ybarra
4/3/2011 19:01	uhden@metro.net	Roger Uhden
6/17/2011 20:16	uyeda@pbworld.com	Pamela Uyeda
7/6/2009 13:42	vcastro@ci.covina.ca.us	Vivian Castro
4/11/2011 13:02	vcastro@covinaca.gov	Vivian Castro
1/24/2011 11:30	vhevener@ci.arcadia.ca.us	Vanessa Hevener
11/7/2011 11:10	victor.kennedy@cshs.org	Victor Kennedy
11/16/2011 8:39	vpeterson@malibucity.org	Vic Peterson
10/28/2010 12:38	vsalazar@ldcla.com	Victor Salazar PE
7/6/2009 13:03	vsinghal@baldwinpark.com	Vijay Singhal
2/18/2011 11:31	wade@grahamstudio.net	Wade Graham
3/9/2010 16:40	wblistserv@gmail.com	SWRCB Listserv
2/21/2012 4:06	wbotha@brownandwinters.com	Wentzelee Botha
6/29/2011 9:59	wcaffrey@vandermostconsulting.com	wade caffrey
12/29/2011 11:17	welchrc@pbworld.com	Robert Welch
11/14/2011 16:14	wgross@lacs.d.org	bill gross
7/6/2009 13:52	wrlindinc@aol.com	Wes Lind
8/17/2011 11:33	wynesta@earthlink.net	Wynesta Dale
11/16/2011 8:58	ykwan@lcf.ca.gov	Ying Kwan
7/6/2009 13:35	ys@cityofrh.net	Yolanta Schwartz
12/6/2010 17:34	ysim@dpw.lacounty.gov	Youn Sim
9/17/2010 8:45	zora.baharians@lacity.org	Zora

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

Los Angeles Regional Water Quality Control Board

ITINERARY FOR BOARD MEMBER FIELD TOUR OF PORTIONS OF THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

Tuesday, July 31, 2012

9:00 a.m.

Meeting Location:

El Monte Community Center
3130 Tyler Avenue
El Monte, CA 91731

On July 19, 2012, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) provided notice to permittees and interested persons that a quorum of the Los Angeles Water Board may be present at a Board member field tour of portions of the Los Angeles County MS4 beginning at 9:00 a.m. at the El Monte Community Center on July 31, 2012. As previously indicated there will be no Board action or voting taking place during the tour.

Los Angeles Water Board staff has worked with the Los Angeles County Flood Control District and other permittees, including the City of El Monte, in choosing appropriate tour locations. The locations selected by Los Angeles Water Board staff are representative of some aspects of the greater Los Angeles County MS4 that may be referenced at the upcoming September Board hearing.

Subsequent to the July 19, 2012 notice, Los Angeles Water Board staff has learned that a representative of the City of El Monte will be conducting a separate tour of the El Monte MS4 also beginning at 9:00 a.m. at the El Monte Community Center on July 31, 2012; a separate notice for that tour and a workshop to follow the tour was distributed by the City's representative. For clarification, Board members will be attending the tour organized by the Los Angeles Water Board staff that was publicly noticed on July 19, 2012, which will still be departing from the El Monte Community Center at 9:00 a.m. The Los Angeles Water Board members will not be attending the City of El Monte's tour, or the workshop that the City of El Monte will be conducting after their tour.

Participants on the tour should wear comfortable walking shoes and business casual attire suitable for warm weather. Due to possible parking constraints, the Los Angeles Water Board encourages participants to carpool from the El Monte Community Center to tour stops if possible. Questions concerning the Board member field tour may be directed to Ivar Ridgeway at iridgeway@waterboards.ca.gov or (213) 620-2150.

Tour Itinerary

- 9:00 a.m. Meet at El Monte Community Center, 3130 Tyler Avenue, El Monte, CA
- *Opening Remarks by Executive Officer*
 - *Tour Information and Procedures*
 - *Tour Site Location Map (Note: Maps and driving directions will be provided to participants.)*

(Timing of tour stops is approximate.)

- 9:30 a.m. Depart from El Monte Community Center

Discussion at the tour stops will be led by Los Angeles Water Board staff and staff of the Los Angeles County Flood Control District.

- 9:50 a.m. Meet at the Rio Hondo Spreading Grounds for discussion of:
- *The Role of Spreading Grounds and Operational Information*
 - *The History of Modification of River Channels and Discussion of their Multiple Uses*

- 10:50 a.m. Depart from the Rio Hondo Spreading Grounds

- 11:00 a.m. Meet at the San Gabriel Coastal Basin Spreading Grounds for discussion of:
- *Spreading Grounds (continuation of discussion from Stop 1)*
 - *The Function and Value of Soft Bottom and Natural Channels*
 - *Storm Drain Outfalls and Monitoring Considerations*

- 12:00 p.m. The tour will conclude at approximately noon at the San Gabriel Coastal Basin Spreading Grounds.

Prohibition on Ex Parte Communications

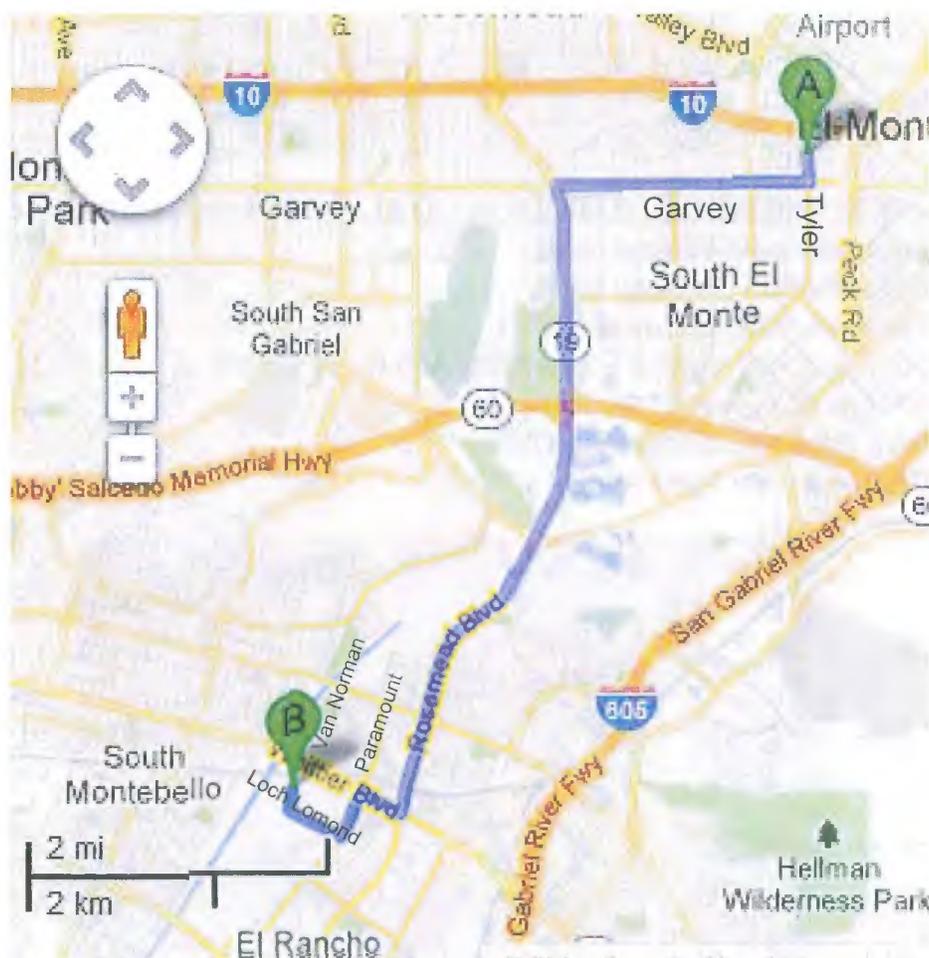
An ex parte communication is a communication to a board member from any person, about a pending matter, that occurs in the absence of other parties and without notice and opportunity for them to respond. The California Government Code prohibits the board members from engaging in ex parte communications during permitting, enforcement, and other “quasi-adjudicatory” matters. These 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.

Please be advised that the tentative Los Angeles County MS4 permit is a quasi-adjudicative matter that is currently pending before the Los Angeles Water Board. To comply with state law regarding ex parte communications, individual or private conversations with Los Angeles Water Board Members are not allowed before, during, or after the tour.

TOUR DRIVING DIRECTIONS

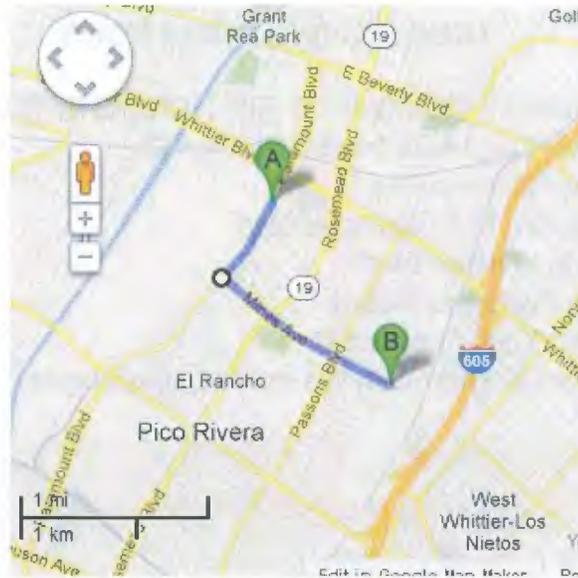
EL MONTE COMMUNITY CENTER TO RIO HONDO SPREADING GROUNDS

- Head south on Tyler Ave. toward Bodger St.
- Turn right onto Garvey Ave.
- Turn left onto CA-19/Rosemead Blvd.
- Turn right onto Whittier Blvd.
- Turn left onto Paramount Blvd.
- Turn right onto Loch Lomond Dr.
- Turn left at Van Norman into the spreading grounds



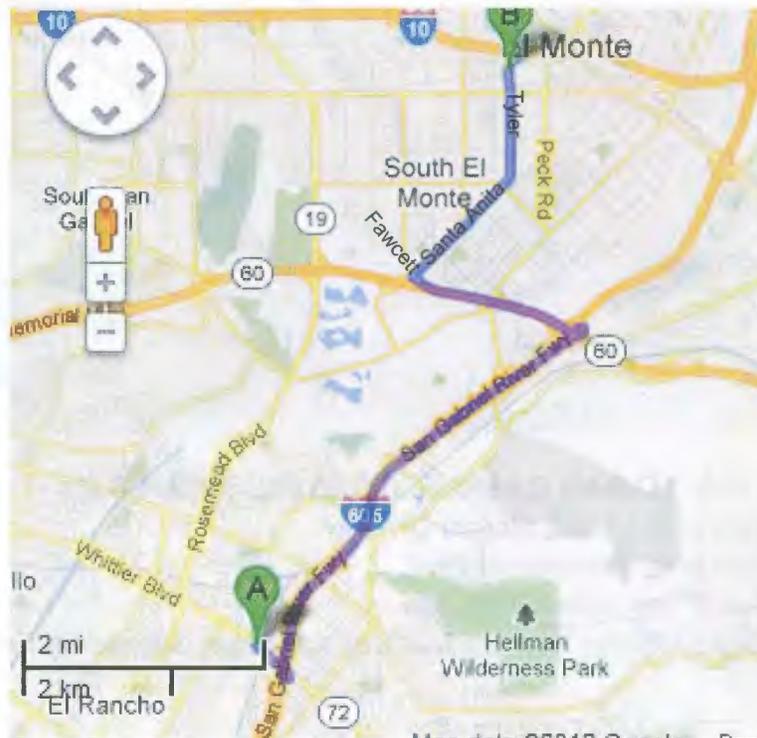
RIO HONDO S.G. TO SAN GABRIEL COASTAL BASIN S.G.

- Turn right onto Loch Lomond Dr.
- Turn right onto Paramount Blvd.
- Take the 3rd left onto Mines Ave.
- Go straight into the San Gabriel Coastal Basin Spreading Grounds



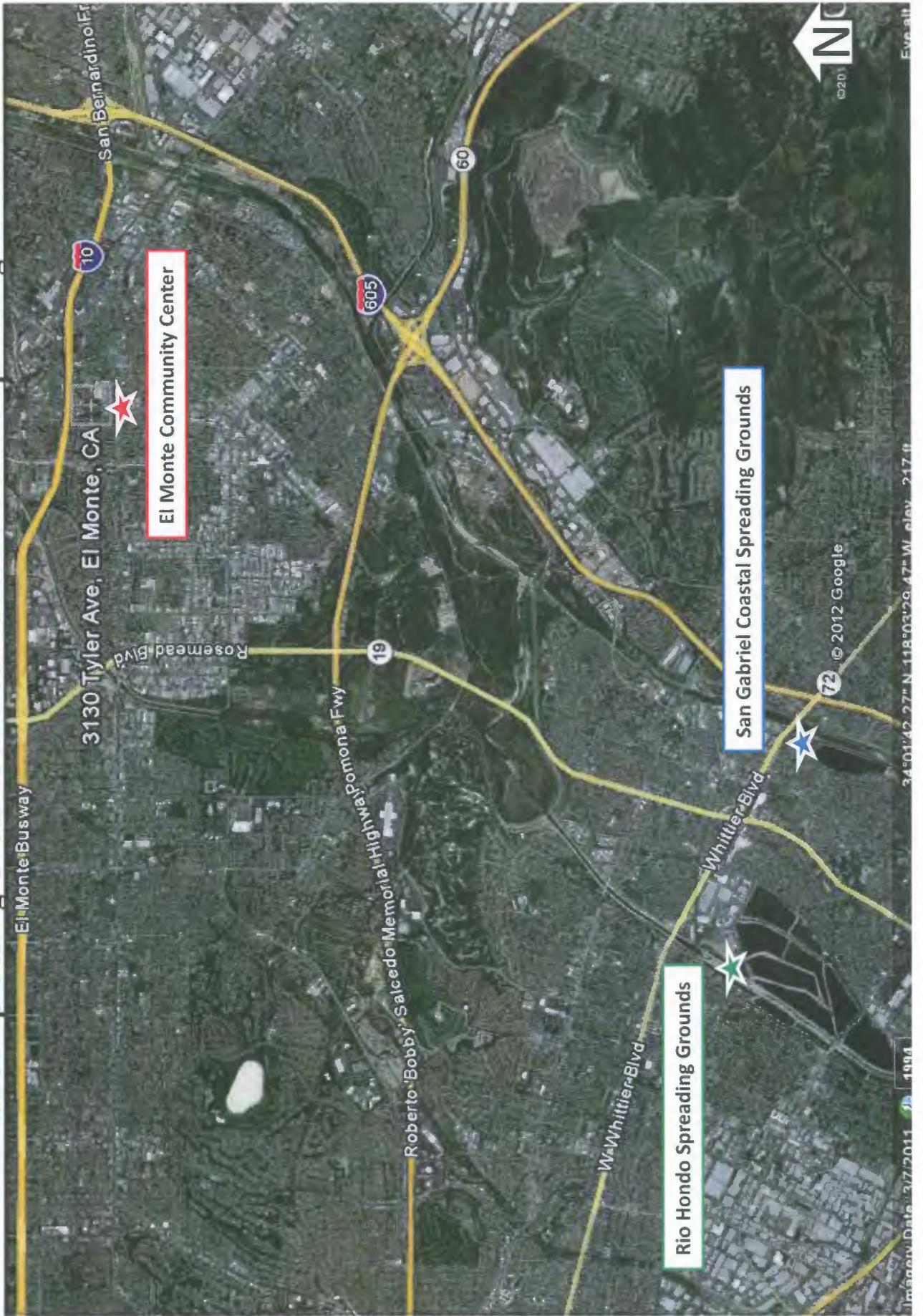
SAN GABRIEL COASTAL BASIN S.G. TO EL MONTE COMMUNITY CENTER

- Turn right onto Whittier Blvd.
- Take the 605 Freeway north
- Take CA-60 Freeway west
- Take exit 10B toward Santa Anita Ave./S. El Monte
- Merge onto Fawcett Ave.
- Turn right onto Santa Anita Ave.
- Continue onto Tyler Ave.



Site Location Map

Rio Hondo Spreading Grounds and San Gabriel Coastal Spreading Grounds



LYRIS MAILING

RB-AR2894

LIST NAME: LA County MSY
 DATE MAILED: 7-27-12

DATEJOINED_	EMAILADDR_	FULLNAME_
2/2/2011 12:04	ADRIEN236@VLPRODUCE.COM	ADRIEN F. MADDALENO
6/22/2010 11:57	AEMiller@waterboards.ca.gov	Alan E. Miller
3/27/2012 13:25	Berry.Ueoka@EverestConsultants.com	Berry Ueoka
3/22/2012 15:22	BryantA@lwa.com	Bryant Alvarado
11/15/2010 7:46	CaliforniaWaterTechnologies@gmail.com	Carlos Aguilar
7/6/2009 13:38	City_manager@ci.glendora.ca.us	Chris Jeffers
11/16/2011 7:58	DLiu@DiamondBarCA.Gov	David G. Liu
6/11/2011 22:09	Daniel.Lee@Arcadis-us.com	Daniel K. Lee
2/22/2010 18:03	Dave@Bubalo.com	Dave Sorem
5/2/2011 6:54	Debbie.Neev@gmail.com	Deborah Neev
7/6/2009 13:58	EKiepke@WILLDAN.com	E. Kiepke
7/6/2009 13:21	FredLatham@santafesprings.org	Frederick W. Latham
6/12/2012 11:32	Fresh@freshcreek.com	wallytrnka
10/5/2010 11:14	Gerhardt.Hubner@ventura.org	Gerhardt Hubner
3/22/2010 15:01	Hamid.Tadayon@lacity.org	Hamid Tadayon
7/6/2009 13:07	James.Destefano@ci.diamond-bar.ca.us	James DeStefano
1/19/2010 11:06	Jeremy.Bock@Kiewit.com	Jeremy Bock
3/7/2012 16:27	Jim@CuratingLA.com	Jim Gilbert
7/6/2009 13:35	John.Beshay@westcovina.org	John Beshay
7/28/2011 16:10	Joyntventr@aol.com	Jayne Staley
8/29/2011 14:09	Julie_Carver@ci.pomona.ca.us	Julie Carver
7/6/2009 13:53	Kaden.Young@culvercity.org	Kaden Young
11/16/2011 8:45	LLanger@localgovlaw.com	Lauren Langer
4/5/2011 9:34	Leroy.Richards@msh.dmh.ca.gov	LeRoy Richards
8/25/2010 13:32	Lynn@MLMENG.com	Lynn Kubasek
11/16/2011 8:39	NOENEGRETE@SANTAFESPRINGS.ORG	Noe Negrete
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
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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
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5/23/2012 7:38 matt.helon@sierrachemsales.com	Matt Helon
2/8/2011 14:00 matzrubber@sbcglobal.net	Phillip Jensen
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7/6/2009 13:35	ys@cityofrh.net	Yolanta Schwartz
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Board Member Field Tour of Portions of the LA County MS4



Sign In Sheet-July 31, 2012

RB-AR2905

Please Initial	Date Confirmed	Name	Email Address	Agency
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		Molly Peterson	mpeterson@scpr.org	KPCC Reporter
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<i>BS</i>		Brian Sheridan	brian@watershedhealth.org	Watershed Health
<i>RW</i>	7/20/12	Richard Watson	www.rwaplanning.com	Richard Watson & Associates
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		Allyson Clark	aclark@calwater.com	Cal Water
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<i>JC</i>		Janet Chin	Susan.Reyes@sen.ca.gov	Senator Ed Hernandez
<i>SR</i>		Susan Reyes	Susan.Reyes@sen.ca.gov	Senator Ed Hernandez
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<i>LZ</i>		Liz Crosson	liz@lawaterkeeper.org	Los Angeles Waterkeeper/SM Baykeeper
		Ray Tahir	rtahir@tecsenv.com	TEC Environmental
		Sal Ramirez	sramirez@tecsenv.com	TEC Environmental

Board Member Field Tour of Portions of the LA County MS4



Sign In Sheet-July 31, 2012

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	Dipali Chaudary	dipali@tecsme.com	TEC Environmental
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	Steve Scauzillo	626-962-8811 x 2237	San Gabriel Tribune
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	Daren Grilley	Dgrilley@SGCH.ORG	City of San Gabriel
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LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

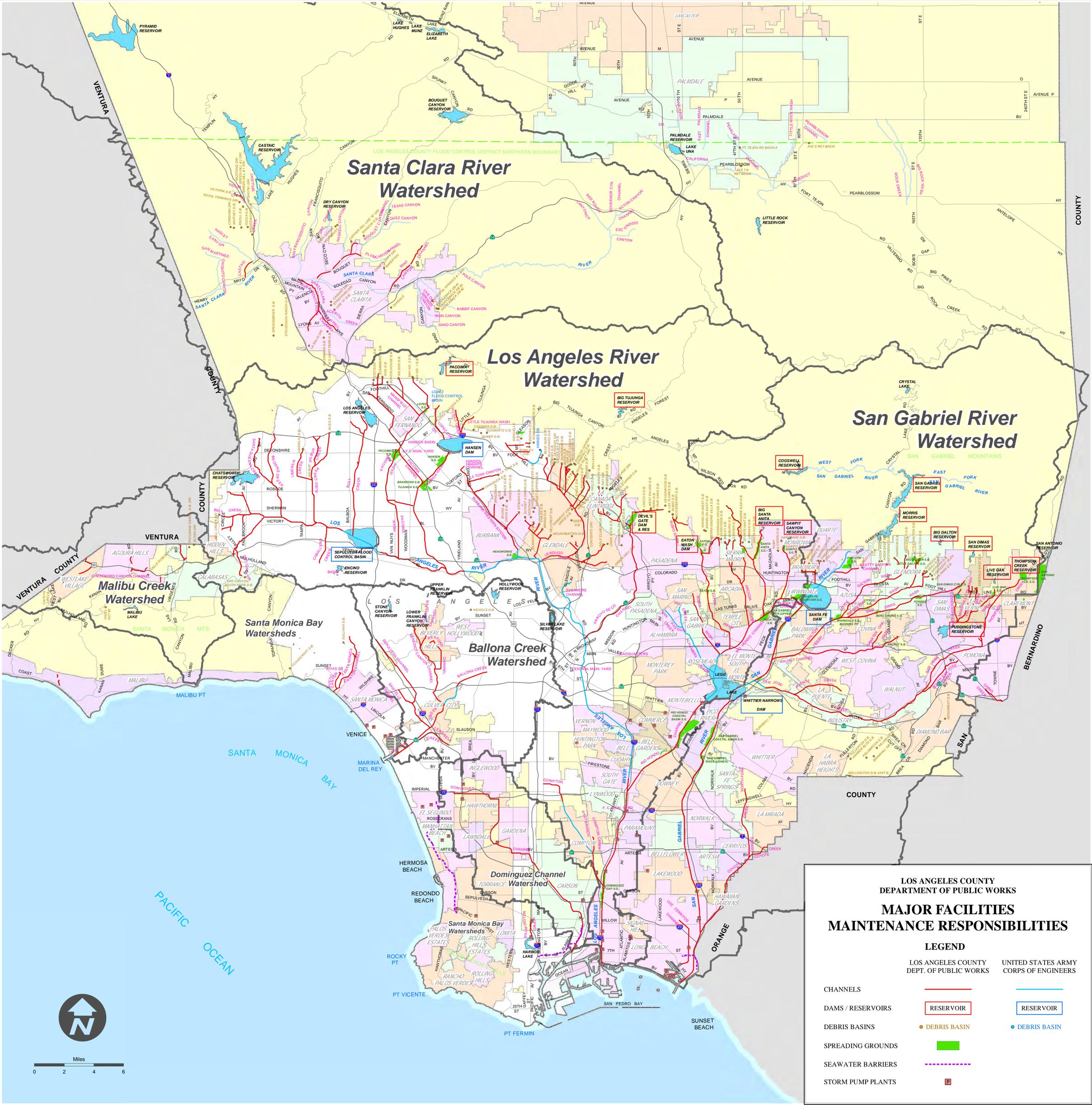
DEBRIS BASINS



BLANCHARD



HOG



**LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
MAJOR FACILITIES
MAINTENANCE RESPONSIBILITIES**

LEGEND

CHANNELS		
DAMS / RESERVOIRS		
DEBRIS BASINS		
SPREADING GROUNDS		
SEAWATER BARRIERS		
STORM PUMP PLANTS		

LOS ANGELES COUNTY
DEPT. OF PUBLIC WORKS

UNITED STATES ARMY
CORPS OF ENGINEERS



Map Data: GIS, Surveying & Mapping Division, Mapping & GIS Services Section

MS4

Defined by USEPA:

1. Municipal Streets and appurtenant drainage systems (curbs, gutters, catch basins, and ditches)
2. Stormdrains and man made channels

Total MS4 Length: approx. 31,545 miles

LACFCD's MS4 portion: 2,940 miles (9.3%)



Legend

-  Total MS4
-  LACFCD's MS4

**Municipal Seperate Storm Sewer System (MS4)
Subject to MS4 Permits in the Los Angeles Area**





Los Angeles Regional Water Quality Control Board

TO: Administrative Record – Los Angeles County MS4 Permit

FROM: Renee Purdy
Section Chief, Regional Programs

DATE: August 27, 2012

SUBJECT: JULY 31, 2012 BOARD MEMBER FIELD TOUR OF PORTIONS OF THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) AND RECEIVING WATERS IN THE UPPER SAN GABRIEL VALLEY

Board members present:

Maria Mehranian, Chair
 Maria Camacho
 Francine Diamond
 Madelyn Glickfeld
 Mary Ann Lutz
 Irma Muñoz

Board staff present:

Samuel Unger, Executive Officer
 Deborah Smith, Chief Deputy Executive Officer
 Paula Rasmussen, Assistant Executive Officer
 Renee Purdy, Section Chief, Regional Programs
 Ivar Ridgeway, Unit Chief, Storm Water Permitting
 Rebecca Christmann, Storm Water Permitting
 Jennifer Fordyce, Attorney
 Nicole Johnson, Attorney

On July 31, 2012, the Los Angeles Water Board conducted a tour of selected portions of the Los Angeles County MS4 and receiving waters in the Upper San Gabriel Valley. The tour commenced at the El Monte Community Center where Los Angeles Water Board staff introduced the Board members present and reviewed field tour logistics and procedural guidelines related to communications with Board members.

At the first stop, participants viewed the Rio Hondo Spreading Grounds, a major outfall, and a portion of the Rio Hondo, which is an engineered trapezoidal hard-bottom channel. The field tour included an overview of the history surrounding the creation of the Los Angeles County flood control and water conservation system, which was given by Gary Hildebrand of the Los Angeles County Department of Public Works. Mr. Hildebrand referred to 3 enlarged maps depicting the Flood Control Facilities which the Los Angeles County Flood Control District is responsible for maintaining, a map of the entire Los Angeles County Flood Control District MS4 system, and a map of Debris Basins owned by the Los Angeles County Flood Control District. Mr. Hildebrand also described the two principal objectives underlying the creation of the flood control district – flood control and water conservation. Mr. Hildebrand also spoke about the Los Angeles County Drainage Area (LACDA) Project, which was a project to increase the flood carrying capacity of the Rio Hondo and lower Los Angeles River. Mr. Hildebrand also described the operation of the 27 spreading grounds throughout the Los Angeles County Flood Control District, and their importance to groundwater recharge.

Los Angeles Water Board members and participants asked Mr. Hildebrand several questions regarding purpose and operation of the spreading grounds, including whether spreading grounds are considered a best management practice (BMP). Mr. Hildebrand responded that spreading grounds are not a BMP as they are drawing water that was initially in a receiving water such as the Rio Hondo. Mr. Hildebrand also generally described the different types of modifications to receiving waters based on the size of storm flows and engineering needs. These types of modifications were generally described as concrete-lined box channels, concrete-lined trapezoidal channels, and soft-bottom and hard-bottom channels with varying degrees of armoring on the sides. Participants also viewed a major outfall from the MS4 to the Rio Hondo and discussed provisions in the draft tentative Los Angeles County MS4 Permit relating to the storm water conveyance system and outfall monitoring.

Los Angeles Water Board members also asked about multi-benefit projects and BMPs in the area to address storm water such as the Sun Valley project. Representatives of the cities of Glendora, Vernon and South El Monte described the status of their efforts to install catch basin inserts, and a representative of the City of South Gate described the city's experience with five Filterra® bioretention systems.

At the second stop, participants toured the San Gabriel Coastal Spreading Grounds, viewed a soft bottom portion of the San Gabriel River, and a rubber dam designed to divert storm water flow to spreading grounds for infiltration. At this location, Mr. Hildebrand further described the operation of the spreading grounds and their importance to groundwater recharge. At this stop, the operation of the rubber dam used to divert channel runoff to the spreading grounds was also discussed. The value of soft bottom and natural channels was also discussed. Los Angeles Water Board members and participants asked Mr. Hildebrand several questions regarding the operation of the San Gabriel Coastal Spreading Grounds and its importance to groundwater replenishment in the region.

Los Angeles Water Board members also asked about the implementation of low impact development BMPs, including green streets and specifically the Elmer Avenue Green Street Project implemented by the City of Los Angeles.

The field tour concluded at approximately noon at the San Gabriel Coastal Spreading Grounds.

Attached to this memo are the following:

- Photographs taken by Board staff during the tour
- Notice of Special Meeting – Board Member Field Tour of Portions of the Los Angeles County MS4
- Itinerary for Board Member Field Tour of Portions of the Los Angeles County MS4
- Sign-in Sheet
- 3 maps, including a map of Flood Control Facilities which the Los Angeles County Flood Control District is responsible for maintaining, a map of the entire Los Angeles County Flood Control District MS4 system, and a map of Debris Basins owned by the Los Angeles County Flood Control District.

Photographs Taken at First Tour Stop - Rio Hondo Spreading Grounds



Gary Hildebrand (right) of the Los Angeles County Dept. of Public Works with Map of Los Angeles County Flood Control District Area and Watersheds



Rio Hondo Channel (a concrete-lined hard-bottom trapezoidal channel)



Spreading Basin along Rio Hondo



Gary Hildebrand responding to questions



Major MS4 Outfall to Rio Hondo

Photographs taken at Second Tour Stop - San Gabriel Coastal Spreading Grounds



Gary Hildebrand discussing the rubber dam on the San Gabriel River



Inflatable Rubber Dam on the San Gabriel River



Upstream of Rubber Dam (soft-bottom portion of the San Gabriel River)



Downstream of Rubber Dam (soft-bottom portion of the San Gabriel River)



Los Angeles Regional Water Quality Control Board

Meeting Minutes

Los Angeles Water Board Special Meeting
July 31, 2012
Board Member Field Tour of Portions of the Los Angeles County
Municipal Separate Storm Sewer System (MS4)

Board Members Present: Maria Mehranian, Fran Diamond, Mary Ann Lutz, Madelyn Glickfeld, Irma Muñoz, and Maria Camacho

Board Members Absent: Charles Stringer and Larry Yee

Staff Present: Samuel Unger, Deborah Smith, Paula Rasmussen, Renee Purdy, Ivar Ridgeway, Rebecca Christmann, Jennifer Fordyce, and Nicole Johnson

Individuals whose Names Appear on the Sign-In Sheet

Ms. Tiffany Shedrick, City of Santa Fee Springs	Mr. George Muse, Jr., Metropolitan Water District
Ms. Heather Maloney, City of Monrovia	Mr. Brian Sheridan, Watershed Health Org.
Mr. Richard Watson, Richard Watson Assoc.	Mr. Noah Garrison, NRDC
Ms. Wendy La, Main SG Basin Watermaster	Ms. Latoya Cyrus, City of San Dimas
Senator Dr. Ed Hernandez	Ms. Kirsten James, Heal the Bay
Ms. Iso Nakasato, Rep. Sen. Ed Hernandez	Ms. Janet Chin, Rep. Senator Ed Hernandez
Ms. Susan Reyes, Rep. Sen. Ed Hernandez	Ms. Nicole Solano, City of Covina
Mr. V. Castro, City of Covina	Ms. Liz Crosson, Santa Monica Baykeeper
Mr. Joseph Perez, TEC Environmental	Ms. Esther Kim, UC Berkeley Student
Mr. John Di Mario, City of La Puente	Ms. Vanessa Hevener, City of Arcadia
Ms. Claudia Arellano, City of Vernon	Mr. Kevin Wilson, City of Vernon
Mr. Michael Kolbensschlag, AEI Consulting	Ms. Jennifer Brown, City of Malibu
Mr. David Boyer, Aleshire & Wynder, LLP	Mr. Wesley Miliband, Aleshire & Wynder, LLP
Mr. Rafael O. Casillas, City of Duarte	Ms. Kimberly Colbert, CAA Professionals
Ms. Julia Carver, City of Pomona	Mr. Daren Grilley, City of San Gabriel
Mr. John Hunter, John Hunter & Associates	Mr. Edward Reiner, Abtech
Mr. Jerry Burve, City of Glendora	Ms. Wynesta Dale, Self
Mr. Mark Kenyon, Northeast Trees	Ms. Violet Ruiz, Rep. Assemblyman Mike Eng
Mr. Thomas Wilson, Aleshire & Wynder, LLP	Mr. Cesar Roldan, City of El Monte
Ms. Olivia Lee, Rep. Assembly. Mike Eng	

The Los Angeles Water Board conducted a tour of selected portions of the Los Angeles County MS4 and receiving waters in the Upper San Gabriel Valley. The tour commenced at approximately 9:00 a.m. at the El Monte Community Center located at 3130 Tyler Avenue in the City of El Monte. Prior to departing, Los Angeles Water Board staff introduced the Board

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members present and reviewed field tour logistics and procedural guidelines related to communications with Board members.

At the first stop, participants viewed the Rio Hondo Spreading Grounds, a major outfall, and a portion of the Rio Hondo, which is an engineered trapezoidal hard-bottom channel. Discussion at the tour stop was led by Gary Hildebrand of the Los Angeles County Department of Public Works concerning:

- An overview of the history surrounding the creation of the Los Angeles County flood control and water conservation system
- The role and operation of spreading grounds throughout the Los Angeles County Flood Control District and their importance to groundwater recharge
- A general description of the different types of modifications to receiving waters based on the size of storm flows and engineering needs

At the second stop, participants toured the San Gabriel Coastal Spreading Grounds, viewed a soft bottom portion of the San Gabriel River, and a rubber dam designed to divert storm water flow to spreading grounds for infiltration. Mr. Hildebrand further discussed:

- The operation of the spreading grounds and their importance to groundwater recharge
- The operation of the rubber dam used to divert channel runoff to the spreading grounds
- The function and value of soft bottom and natural channels

The field tour concluded at approximately noon at the San Gabriel Coastal Spreading Grounds.

A memorandum to the administrative record for the Los Angeles County MS4 permit was prepared by Renee Purdy that includes additional details on the field tour and photographs taken by Board staff during the tour.

Written and submitted by:



Ronji R. Moffett