



Los Angeles Regional Water Quality Control Board

January 7, 2015

Dominguez Channel Watershed Management Area Group
(See Distribution List)

REVIEW OF THE DOMINGUEZ CHANNEL WATERSHED MANAGEMENT AREA GROUP'S DRAFT COORDINATED INTEGRATED MONITORING PROGRAM, PURSUANT TO PART VI.B AND ATTACHMENT E PART IV.B OF THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT (NPDES PERMIT NO. CAS004001; ORDER NO. R4-2012-0175)

Dear Dominguez Channel Watershed Management Area Group:

The Regional Water Board has reviewed the draft Coordinated Integrated Monitoring Program (CIMP) submitted on June 25, 2014 by the Dominguez Channel Watershed Management Area Group (DC WMA Group). This program was submitted pursuant to the provisions of NPDES Permit No. CAS004001 (Order No. R4-2012-0175), which authorizes discharges from the municipal separate storm sewer system (MS4) operated by 86 municipal Permittees within Los Angeles County (hereafter, LA County MS4 Permit).

The LA County MS4 Permit allows Permittees the option to develop and implement, in coordination with an approved Watershed Management Program per Part VI.C, a customized monitoring program that achieves the five Primary Objectives set forth in Part II.A of Attachment E and includes the elements set forth in Part II.E of Attachment E. Customized monitoring programs may be developed on an individual jurisdictional basis, referred to as an Integrated Monitoring Program (IMP), or a on watershed basis, referred to as a CIMP. These programs must be approved by the Executive Officer of the Regional Water Board.

The Regional Water Board has reviewed the draft CIMP and has determined that, for the most part, the CIMP includes the elements set forth in Part II.E and will achieve the Primary Objectives set forth in Part II.A of Attachment E of the LA County MS4 Permit. However, some additions and revisions to the CIMP are necessary. The Regional Water Board's comments on the CIMP, including detailed information concerning necessary additions and revisions to the CIMP, are found in Enclosure 1 and Enclosure 2.

Please make the necessary additions and revisions to the CIMP as identified in the enclosures to this letter and submit the revised CIMP as soon as possible and no later than **April 7, 2015**. The revised CIMP must be submitted to losangeles@waterboards.ca.gov with the subject line "LA County MS4 Permit – Revised DC WMA Group CIMP" with a copy to Ivar.Ridgeway@waterboards.ca.gov and Chris.Lopez@waterboards.ca.gov.

CHARLES STRINGER, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

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Upon approval of the revised CIMP by the Executive Officer, the Permittees must prepare to commence their monitoring program within 90 days. If the necessary revisions are not made, the Permittees must comply with the Monitoring and Reporting Program (MRP) and future revisions thereto, in Attachment E of the LA County MS4 Permit.

Until the Permittees' CIMP is approved by the Executive Officer, the monitoring requirements pursuant to Order No. 01-182 and MRP CI 6948, and pursuant to approved TMDL monitoring plans shall remain in effect for the Permittees.

If you have any questions, please contact Mr. Chris Lopez of the Storm Water Permitting Unit by electronic mail at Chris.Lopez@waterboards.ca.gov or by phone at (213) 576-6674. Alternatively, you may also contact Mr. Ivar Ridgeway, Chief of the Storm Water Permitting Unit, by electronic mail at Ivar.Ridgeway@waterboards.ca.gov or by phone at (213) 620-2150.

Sincerely,



Samuel Unger, P.E.
Executive Officer

Enclosures:

- Enclosure 1 – Summary of Comments and Necessary Revisions to Draft CIMP
- Enclosure 2 – Comments on Aquatic Toxicity Testing
- Dominguez Channel WMA Group Distribution List

Los Angeles Regional Water Quality Control Board

Enclosure 1 – Summary of Comments and Necessary Revisions to Draft CIMP

Dominguez Channel Watershed Management Area Group

CIMP Reference	MRP Element/ Reference (Attachment E)	Comment and Necessary Revision
Receiving Water Monitoring		
Section 1.1 (Watershed Management Plan Area)	Part VI.B.2	<p>The EWMP workplan and CIMP indicate that the DC WMA Group’s jurisdictional area includes Point Fermin at the southernmost tip of the watershed. This is consistent with the watershed boundary indicated in Attachment B (Figure B-3) of the MS4 Permit.</p> <p>However, the Point Fermin area was actually added to Santa Monica Bay Jurisdictional Group 7 in January 20, 2004 (see Attachment to this Enclosure). As part of Jurisdictional Group 7, Point Fermin is subject to the Santa Monica Bay Beaches Bacteria TMDLs and the associated Coordinated Shoreline Monitoring Plan.</p> <p>Therefore, the Group should note the different watershed for this area, and cite the applicable TMDLs and associated TMDL monitoring in their revised CIMP.</p> <p>Alternatively, the Group may consider coordinating with the Santa Monica Bay Watershed Jurisdiction 7 WMP Group and redefining EWMP boundaries to match the applicable subwatershed boundaries of the Santa Monica Bay Beaches Bacteria TMDLs.</p>
Section 2.0 (Harbor Toxics TMDL)	Part VI.B.2	<p>Although the draft CIMP addresses the Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary Compliance Monitoring Program requirement of the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL (Harbor Toxics TMDL), the Group should provide more on this monitoring program in its revised CIMP since there is no preexisting TMDL monitoring plan in place.</p> <p>The draft CIMP should include and/or incorporate all the elements of a technically appropriate Monitoring and Reporting Plan (MRP) and Quality Assurance Project Plan (QAPP) as detailed in the Basin Plan (Basin Plan, Chapter 7, Section 7-40, Table 7-40.1 “Monitoring Plan”) or pages 22-24 of Attachment A to Resolution No. R11-008. For example, this CIMP should include more information on how the Group is complying with the water column, sediment, and fish</p>

		<p>tissue monitoring requirements:</p> <p>For water column monitoring (of outfalls), the CIMP should provide more detail on sampling and analytical methods. Both water samples and total suspended solids samples should be analyzed, and the minimum frequency of monitoring should be two wet weather events and one dry weather event.</p> <p>For sediment monitoring, the CIMP should clearly state the selected method for compliance and detail sample protocols. If the Group is choosing compliance based on the SQO compliance method, additional sediment chemistry samples should be collected every five years in addition to sediment triad sampling events. Preferably, these samples should be collected two to three years after a sediment triad sampling event. Furthermore, the CIMP should provide more detail regarding sediment quality objective evaluation:</p> <p>“Sediment quality objective evaluation as detailed in the SQO Part 1 (sediment triad sampling) shall be performed every five years in coordination with the Biological Baseline and Bight regional monitoring programs, if possible. Sampling and analysis for the full chemical suite, two toxicity tests and four benthic indices as specified in SQO Part 1 shall be conducted and evaluated. If moderate toxicity as defined in the SQO Part 1 is observed, results shall be highlighted in annual reports and further analysis and evaluation to determine causes and remedies shall be required in accordance with the EO approved monitoring plan. Locations for sediment triad assessment and the methodology for combining results from sampling locations to determine sediment conditions shall be specified in the MRP to be approved by the Executive Officer. The sampling design shall be in compliance with the SQO Part 1 Sediment Monitoring section (VII.E).”</p> <p>For fish tissue monitoring, additional detail should be provided on sampling methods, species, and analyses. Per monitoring requirements, Table 2-4 (page 19) should also include dieldrin and toxaphene as parameters to be measured.</p> <p>The Group may consider collaborating or coordinating their efforts with other responsible parties as identified in the TMDL and/or WMP/EWMP Groups.</p>
<p>Section 2.0 (Superseding of Existing TMDL Monitoring</p>	<p>Part IV.B.3</p>	<p>Several Machado Lake TMDL monitoring requirements that the draft CIMP addresses are currently being addressed by approved monitoring plans. In some of these cases, the draft CIMP incorporates monitoring from the approved monitoring plan into</p>

<p>Plans)</p>		<p>the CIMP and states that “upon approval of the CIMP this program will be superseded by CIMP Implementation.”</p> <p>For example, in section A.2.3.3.1 (page A-12), the Group references the biweekly sampling in Machado Lake outlined in the Machado Lake Nutrients TMDL Lake Water Quality Management Plan. The Group then states:</p> <p style="padding-left: 40px;">“The monitoring requirements covered by these locations have been incorporated into the receiving water monitoring section in the CIMP and upon approval of the CIMP this program will be superseded by the CIMP Implementation.”</p> <p>The word “superseded” seems to imply that the Group proposes to modify the approved TMDL Monitoring Plan through a CIMP per Part IV.B.3 of the MRP (page E-7). However, based on the draft CIMP, it is unclear what modifications, if any, the Group is proposing to make.</p> <p>If there are no modifications, the CIMP does not need to “supersede” existing programs. Instead, the Group should simply reference and incorporate the existing programs. Existing TMDL monitoring plans that are incorporated with no changes into the CIMP should be referenced and included as an attachment. If only certain sections of the existing monitoring program are applicable to the Group, then the CIMP should specifically reference the applicable section(s) of the TMDL monitoring plan and may include only the applicable section(s) as an attachment to the CIMP.</p> <p>If the Group intends to make modifications to an existing program, the Group should still incorporate the CIMP by reference and as an attachment, and then clearly note in a section within the CIMP what modifications of existing monitoring programs it is proposing to make.</p> <p>Additionally, Attachment A (pages A-12 to A-13) states that the County of Los Angeles Department of Public Works 30_VAND monitoring location has been incorporated into the receiving water monitoring component of the CIMP, however it does not appear to be included in the draft CIMP.</p>
<p>Section 2.0 (Machado Lake TMDLs – City of Lomita)</p>	<p>Part VI.B.2</p>	<p>The draft CIMP fails to include Machado Lake Nutrients TMDL monitoring for the City of Lomita. On April 25, 2012, the City of Lomita was sent a Request to Comply by the Regional Water Board, which required the City to submit an MRP to comply with the Machado Lake Nutrients TMDL. Previous to this letter, an MRP submitted by the City dated March 11, 2010, was found to be missing critical elements.</p>

		<p>Additionally, the draft CIMP fails to include Machado Lake Toxics TMDL monitoring for the City of Lomita. Current records indicate that the City of Lomita has failed to submit an MRP as required by the Machado Lake Toxics TMDL Implementation Plan.</p> <p>Since the City of Lomita is part of the Group, the CIMP must address and incorporate Machado Lake Nutrients TMDL and Machado Lake Toxics TMDL monitoring for the City of Lomita.</p>
Section 2.0 (Machado Lake Nutrients and Toxics TMDLs)	Part VI.B.2	<p>Table 2-4 (pages 17-19) appears to be missing constituents required under the Machado Lake Nutrients TMDL. The table should be revised to include receiving water monitoring for total phosphorus, orthophosphorus, chlorophyll-a, secchi depth, and lake elevation at monitoring locations ML-1 and ML-2.</p> <p>Table 2-4 appears to be missing constituents required under the Machado Lake Toxics TMDL. The table should be modified to include:</p> <ul style="list-style-type: none"> (a) Water column analyses at ML-3; (b) Total organic carbon and dieldrin for WD-1; and (c) Dieldrin for fish tissue samples. <p>The Group should clearly state if it is incorporating the Lake Water Quality Management Plan (LWQMP) by reference into the CIMP. Furthermore, as noted previously, if the Group intends to modify any elements in the approved LWQMP, it should clearly state proposed modifications.</p>
Sections 2.3 and 4.2; Attachment C (Wet Weather Definition)	Part VI.C.1.b and Part VIII.B.1.b	<p>Section C.2.1.4 (page C-31) defines wet-weather conditions as “[w]hen there is at least 0.1 inch of rain during the targeted storm event,” noting that TMDLs within the Dominguez Channel watershed have defined wet weather as such.</p> <p>However, the Harbor Toxics TMDL has defined wet weather as when the stream flow rate in Dominguez Channel is greater than or equal to 62.7 cfs. The Group should modify their definition of wet weather conditions to be consistent with the definition in this TMDL.</p>
Section 12 (Phased Implementation)	Part IV.C.6	<p>Table 12-1 (page 55) indicates that receiving water monitoring at Dominguez Channel (at 135th street) and Torrance Lateral will start in Year 2 due to autosampler installation.</p> <p>The phasing for these two locations should be moved up to include receiving water monitoring in Year 1 so that compliance with interim water quality-based effluent limitations for Dominguez Channel freshwater and Torrance Lateral may be assessed. The Group should plan to start wet weather sampling during the 2015-</p>

		<p>16 wet season and dry weather sampling in summer 2015. If autosamplers cannot be installed in time, the Group can temporarily conduct manual composite sampling as described in the LA County MS4 Permit MRP.</p> <p>For outfall monitoring, the Group notes on page 55 that monitoring locations DOM-OF-001 and DOM-OF-003 are existing stations that may only need upgrades and/or repairs, and that wet weather monitoring at these sites can reasonably be conducted within 6-8 months after CIMP approval. The phasing for these two locations should be moved up to include sampling in Year 1. If repairs cannot be made in time, the Group can temporarily conduct manual composite sampling.</p>
<p>Section 10 (Adaptive Management)</p>	<p>Part VI.C.1 and Part VI.D.1</p>	<p>The draft CIMP lists on page 52 potential CIMP modifications including discontinuing the monitoring of parameters if there are two years with no exceedances.</p> <p>The CIMP needs to be revised to clarify that reductions in monitoring, including elimination of parameters from the monitoring program, would need to be proposed to the Regional Water Board and would be subject to Executive Officer approval.</p>
<p>Outfall Monitoring</p>		
<p>Section 4.3 (Storm Water Outfall Monitoring)</p>	<p>Part VIII.B.1</p>	<p>Table 4-2 (page 32) does not include all required TMDL and 303(d) parameters:</p> <ul style="list-style-type: none"> - P-77 and P-510: does not include total organic carbon or dieldrin as required under the Machado Lake Toxics TMDL. Furthermore, three wet weather events are required for Phase 1 monitoring. - DOM-OF-001: does not include bacteria, ammonia, and diazinon - DOM-OF-002 and DOM-OF-002: do not include ammonia or bacteria. <p>The draft CIMP does not appear to include appropriate outfall monitoring in the Machado Lake / Harbor HUC-12 subwatershed. Monitoring locations P-77 and P-510 are within this HUC-12, but not all parameters are monitored at the appropriate frequencies required in Part VIII.B (page E-22) of the MRP. Furthermore, these sites have an underrepresented industrial land use. The Group should include a representative outfall monitoring location that monitors all parameters listed in Part VIII.B.1.c at the required frequencies, or provide justification why the current monitoring is adequate.</p> <p>Additionally, for the DOM-OF-001, DOM-OF-002, and DOM-OF-003 monitoring locations, it should be noted that water column</p>

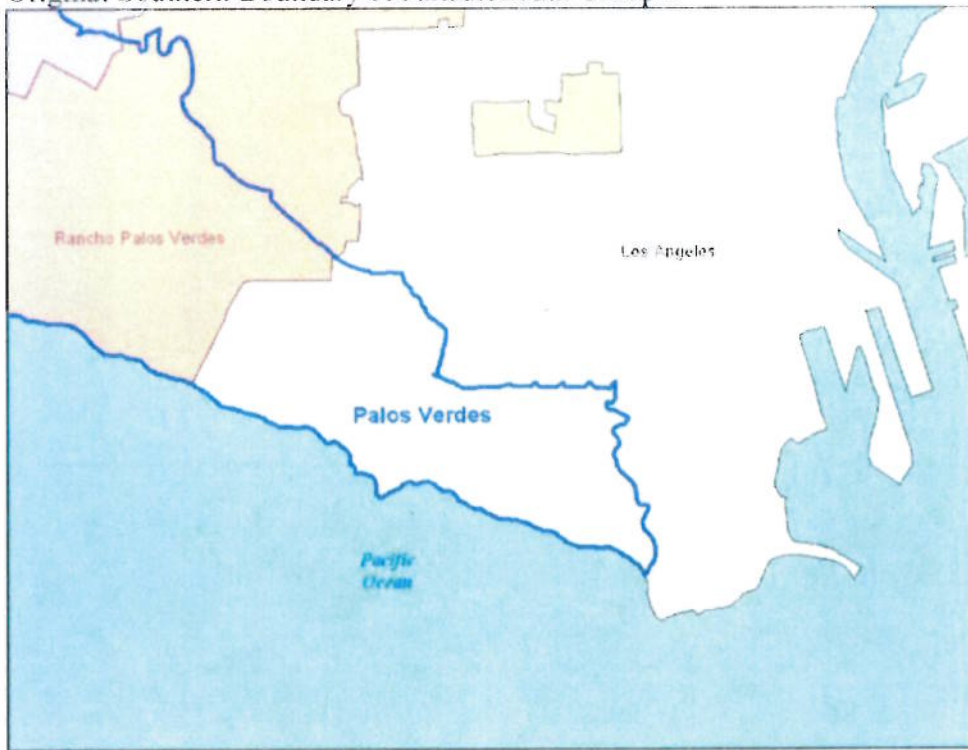
		<p>monitoring under the Harbor Toxics TMDL also requires one dry weather sample per year.</p>
<p>Section 5.4 (Identification of Significant NSW Discharges)</p>	<p>Part IX.C.1.e</p>	<p>Section 5.4 (page 37) notes that the Group may use “[o]ther characteristics as determined by the Permittee(s) and incorporated within the screening program” to determine significant NSW discharges, per Part IX.C.1.e of the MRP. The Group should elaborate on these “other characteristics” in its revised CIMP.</p>
<p>Section 5.8 (NSW Outfall Monitoring)</p>	<p>Part IX.G.1</p>	<p>The draft CIMP notes that: “Other Pollutants on the TMDL and/or 303(d) List for the applicable receiving water body will be monitored if general chemistry above exceeds the Action Levels for the Dominguez Channel Watershed (Attachment G of the Permit, Table G9-G12).”</p> <p>This statement should be removed from the CIMP. TMDL and 303(d) List pollutants should be monitored whether or not there are exceedances of Action Levels.</p> <p>In addition, the list of parameters to be monitored should be revised to include:</p> <ul style="list-style-type: none"> - Pollutants identified in a TIE conducted in response to observed aquatic toxicity during dry weather at the nearest downstream receiving water monitoring station during the last sample event or, where the TIE conducted on the receiving water sample was inconclusive, aquatic toxicity. If the discharge exhibits aquatic toxicity, then a TIE shall be conducted. - Other parameters in Table E-2 identified as exceeding the lowest applicable water quality objective in the nearest downstream receiving water monitoring station per Part VI.D.1.d.
<p>Attachment C (Sampling Methods)</p>	<p>Part VIII.C and Part IX.H</p>	<p>The draft CIMP does not appear to mention whether storm water samples will be collected during the first 24 hours of the storm water discharge or for the entire storm water discharge if it is less than 24 hours.</p> <p>Furthermore, Attachment C is unclear as to whether sampling methods will be consistent with Part VIII.C and Part IX.H of the MRP. For example, it isn’t clear if flow-weighted composite samples will be taken with continuous samplers for outfall monitoring.</p> <p>The revised CIMP should clearly indicate sampling methods in Sections 4 and 5 of the CIMP and provide justification for any deviations from the MRP.</p>

Attachment to Enclosure 1

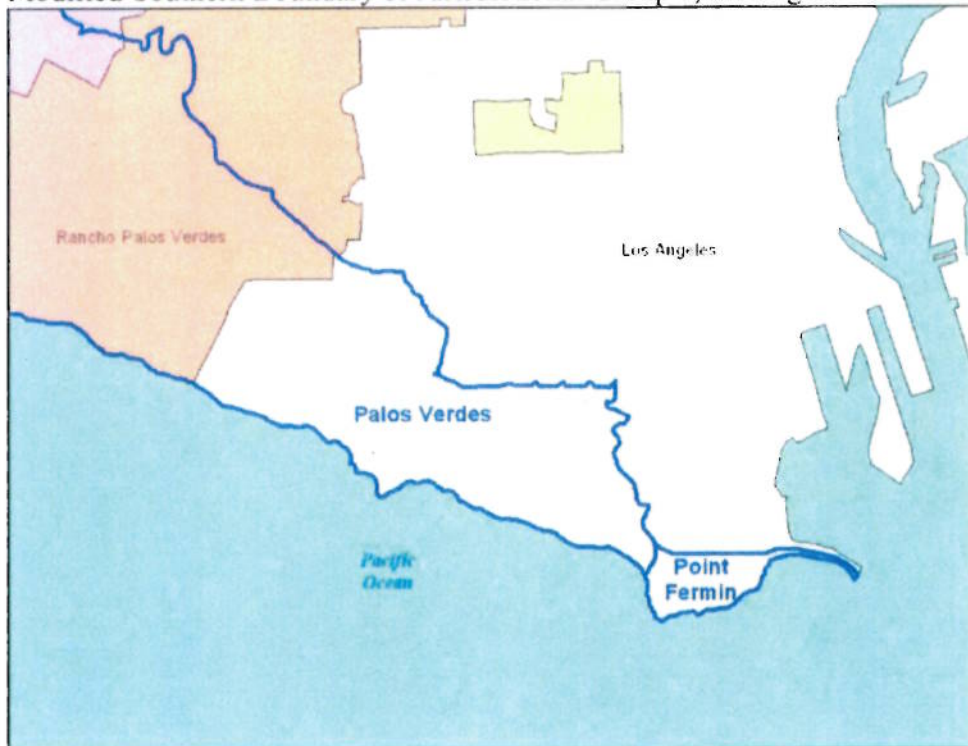
Figure 6 from Regional Water Board Letter RE: Changes to Subwatershed Boundaries, Land Area by Owner, Jurisdictional Group Affiliations and Land Use Data in the Santa Monica Bay Beaches Bacteria TMDLs

Figure 6

Original Southern Boundary of Jurisdictional Group 7



Modified Southern Boundary of Jurisdictional Group 7, Adding Point Fermin



ENCLOSURE 2
COMMENTS ON AQUATIC TOXICITY TESTING
DOMINGUEZ CHANNEL CIMP

Part XII.G.1. (Page E-30) and Part XII.G.2. (Page E-30) of the Monitoring and Reporting Program states that Permittees shall conduct aquatic toxicity monitoring utilizing the critical life stage chronic toxicity test methods listed. The draft CIMP does not propose use of critical life stage chronic toxicity test methods for assessment of toxicity in wet weather samples and instead proposes use of acute toxicity test methods. This is not acceptable; the appropriate chronic toxicity test method listed in the MRP must be used and both survival and sublethal endpoints must be reported. Additionally, the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxics TMDL establishes a freshwater numeric toxicity target expressed in chronic toxic units (TU_c) which requires chronic toxicity monitoring protocols be followed in order to evaluate compliance. We suggest the group consult the State Water Resources Control Board 2011 publication, "Implementation Guidance: Toxicity Testing for Stormwater" to gain insight on how to run chronic toxicity tests on wet weather samples.

Part VIII.B.1.c.vi. (Page E-23) and Part VIII.G.1.d. (Page 27) of the Monitoring and Reporting Program state that where the TIE conducted at the downstream receiving water monitoring station is inconclusive then aquatic toxicity shall be monitored at the outfall. The draft CIMP does not propose conducting this required outfall toxicity monitoring.

While development of the proposed Discharge Assessment Plan (DAP) will be useful, it cannot take the place of the required outfall toxicity monitoring following an inconclusive TIE in the receiving water. And, while there may be situations where TIEs cannot be resolved due to non-persistent toxicity and no further action on that sample can be pursued, inconclusive TIEs often result from a lack of following well-defined procedures rather than non-persistent toxicity. As mentioned elsewhere in this comment letter, including pyrethroids in the TIE procedure will reduce the occurrence of inconclusive TIEs as will including chemical testing for Fipronil and its degradates for comparison to U.S. EPA benchmarks.

Part XII.I.1. (Page E-33) of the Monitoring and Reporting Program states that a toxicity test sample is immediately subject to TIE procedures if either survival or sublethal endpoints demonstrate a Percent Effect value equal to or greater than 50% at the Instream Waste Concentration. The draft CIMP does not propose to perform a TIE when at least a 50% sublethal effect is seen but instead proposes to first collect a confirmatory sample two weeks later.

This is not an acceptable approach. The CIMP seems to be implying that chronic toxicity has some inherent non-persistent quality to it that makes the results unreliable. It also implies that chronic toxicity is of lesser importance. Although it would be hard to generalize to all possible situations, the fact that a large number of invertebrates (or fish) living in a receiving water can survive an ambient pollutant concentration but are impacted in terms of growth or reproduction means that the population as a whole will be impacted, and could eventually collapse. Some species living in the receiving water have very short lifespans and during critical times of the year may be prey for other organisms that will in turn be impacted by their population decline.

Suggested Special Study: The 2013 study released by the California Stormwater Quality Association (CASQA) entitled "Review of Pyrethroid, Fipronil and Toxicity Monitoring Data from California Urban Watersheds" reviewed stormwater data from studies conducted during 2005 - 2012 and highlighted the toxicity impacts from use of pesticides not currently required to be monitored for by the MRP. We suggest the group begin monitoring for these chemicals in the receiving water and, in addition, assess toxicity using the 2002 acute toxicity testing protocol (EPA-821-R-02-012) with the amphipod *Hyaella azteca* as the test organism. *H. azteca* is known to be much more sensitive to pyrethroids than is *Ceriodaphnia dubia* while the latter is useful for its sensitivity to OP pesticides. The two species together may also prove to be more useful in detecting toxicity from fipronil. And, should 50% or greater effect be detected in the toxicity test, we suggest a procedure to incorporate pyrethroids into the subsequent TIE be documented (three possible treatments have been identified by researchers, see <http://www.pubfacts.com/detail/20018342/Focused-toxicity-identification-evaluations-to-rapidly-identify-the-cause-of-toxicity-in-environment>). While fipronil does not have a TIE procedure identified currently, chemical testing for the parameter (and degradates) and comparison to U.S. EPA Office of Pesticide Program's aquatic life benchmarks at http://www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm will aid in determining the cause(s) of toxicity in order to follow up with outfall testing of the parameter(s) with the ultimate goal of removing the source. This approach will also help minimize inconclusive TIE results which would lead to required toxicity testing in the representative upstream outfall(s).

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