

Los Angeles Regional Water Quality Control Board

October 23, 2015

Permittees of the Dominguez Channel Watershed Management Area Group¹
(See Distribution List)

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

Dear Permittees of the Dominguez Channel Watershed Management Area Group:

The Los Angeles Regional Water Quality Control Board (Los Angeles Water Board or Board) has reviewed the draft Enhanced Watershed Management Program (EWMP) submitted on June 25, 2015 by the Dominguez Channel Watershed Management Area Group (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 an EWMP to implement the requirements of the Los Angeles County MS4 Permit on a watershed scale through customized strategies, control measures, and Best Management Practices (BMPs). Participation in an EWMP is voluntary.

The purpose of an EWMP is for Permittees to develop and implement a comprehensive and customized program to control pollutants in MS4 discharges of stormwater and non-stormwater to address the highest water quality priorities. These include complying with the required water quality outcomes of Part V.A (Receiving Water Limitations) and Part VI.E and Attachments L through R (Total Maximum Daily Load (TMDL) Provisions) of the LA County MS4 Permit. Additionally, an EWMP comprehensively evaluates opportunities, within the participating Permittees' collective jurisdictional area (within the Watershed Management Area), for collaboration among Permittees and other partners on multi-benefit regional projects that, wherever feasible, retain all non-storm water runoff and all storm water runoff from the 85th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply.

¹ Permittees of the Dominguez Channel Watershed Management Area Group EWMP include the Los Angeles County Flood Control District; the County of Los Angeles; and the cities of Los Angeles, Hawthorne, Inglewood, El Segundo, and Lomita. Additionally, the cities of Carson and Lawndale have each recently submitted letters to the Los Angeles Water Board stating their intent to join the Dominguez Channel Watershed Management Area Group.

If Permittees opt to develop an EWMP, the EWMP must meet all requirements of Part VI.C (Watershed Management Programs) of the LA County MS4 Permit. This in part, requires Permittees to include multi-benefit regional projects to ensure that MS4 discharges achieve compliance with all final WQBELs set forth in Part VI.E and do not cause or contribute to exceedances of receiving water limitations. An EWMP must be approved by the Los Angeles Water Board, or by its Executive Officer on behalf of the Board.

As stated above, on June 25, 2015, the Group submitted a draft Enhanced Watershed Management Program (EWMP) for their entire jurisdiction to the Los Angeles Water Board pursuant to Part VI.C.4.c.iv of the LA County MS4 Permit.

Public Review and Comment

On July 1, 2015, the Board provided public notice and a 61-day period to allow for public review and comment on the draft EWMPs. A separate notice of availability regarding the draft EWMPs was directed to State Senators and Assembly Members within the Coastal Watersheds of Los Angeles County. The Board received three letters that contained comments specific to the Group's draft EWMP. These letters were from the Construction Industry Coalition on Water Quality; Ms. Joyce Dillard; and the Natural Resources Defense Council, Los Angeles Waterkeeper, and Heal the Bay (jointly). On July 9, 2015, the Board held a workshop at its regularly scheduled Board Meeting on the draft EWMPs. During the review of the draft EWMPs, the Los Angeles Water Board considered those comments applicable to the Group's draft EWMP.

The Los Angeles Water Board has reviewed the draft EWMP and has determined that, for the most part, the draft EWMP includes the elements and analysis required in Part VI.C of the LA County MS4 Permit. However, some revisions to the Group's draft EWMP are necessary. The Los Angeles Water Board's comments on the draft EWMP, including detailed information concerning revisions to the RAA, are found in Enclosure 1 and Enclosure 2, respectively. The LA County MS4 Permit includes a process through which necessary revisions to the draft EWMP can be made (Part VI.C.4 in the LA County MS4 Permit). The process requires that a final EWMP, revised to address Los Angeles Water Board comments identified in the enclosures, must be submitted to the Los Angeles Water Board not later than three months after comments are received by the Permittees on the draft program. Please make the necessary revisions to the draft EWMP as identified in the enclosures to this letter and submit the revised EWMP as soon as possible and no later than **January 23, 2016**.

The revised EWMP must be submitted to losangeles@waterboards.ca.gov with the subject line "LA County MS4 Permit – Revised Dominguez Channel EWMP" with a copy to Ivar.Ridgeway@waterboards.ca.gov and Chris.Lopez@waterboards.ca.gov.

If the necessary revisions are not made and the Group does not ultimately receive approval of its EWMP within 40 months of the effective date of the LA County MS4 Permit, the Group will be subject to the baseline requirements in Part VI.D and shall demonstrate compliance with receiving water limitations pursuant to Part V.A and with applicable interim and final water

quality-based effluent limitations (WQBELs) in Part VI.E and Attachment L pursuant to subparts VI.E.2.d.i.(1)-(3) and VI.E.2.e.i.(1)-(3), respectively.

Until the draft EWMP is approved, the Group is required to:

- (a) Continue to implement all watershed control measures in its existing storm water management programs, including actions within each of the six categories of minimum control measures consistent with Title 40, Code of Federal Regulations, section 122.26(d)(2)(iv);
- (b) Continue to implement watershed control measures to eliminate non-storm water discharges through the MS4 that are a source of pollutants to receiving waters consistent with Clean Water Act section 402(p)(3)(B)(ii);
- (c) Target implementation of watershed control measures in (a) and (b) above to address known contributions of pollutants from MS4 discharges to receiving waters; and
- (d) Where possible, implement watershed control measures, from existing TMDL implementation plans, to ensure that MS4 discharges achieve compliance with interim and final WQBELs and receiving water limitations pursuant to Part VI.E and set forth in Attachments L through R by the applicable compliance deadlines occurring prior to approval of an EWMP.

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, Storm Water Permitting, at Ivar.Ridgeway@waterboards.ca.gov or by phone at (213) 620-2150.

Sincerely,



Samuel Unger, P.E.
Executive Officer

Enclosures: Dominguez Channel WMA Group Distribution List
Enclosure 1 – Comments and Necessary Revisions to Draft EWMP
Enclosure 2 – Comments on the Reasonable Assurance Analysis

Los Angeles Regional Water Quality Control Board

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

Dominguez Channel Watershed Management Area Group

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
General		
(1) Sections 1-9		<p><u>Additional Group Members</u> The Los Angeles Water Board received letters of intent to join the Dominguez Channel WMA Group from the City of Lawndale (August 12, 2015) and the City of Carson (August 26, 2015).</p> <p>Revise the EWMP to fully incorporate any additional Group members, including revisions to the following elements:</p> <ul style="list-style-type: none"> • Evaluation of multi-benefit regional project opportunities; • Water quality characterization; • Water body-pollutant classification; • Source assessment; • Prioritization; • Selection of watershed control measures; • Reasonable Assurance Analysis; • Compliance schedules; • Legal authority.
Source Assessment		
(2) Section 2.3	Part VI.C.5.a.iii	<p><u>Source Assessment</u> The draft EWMP lacks a thorough source assessment section. While the Catchment Prioritization Index (CPI) is a valuable tool for identifying priority areas based on land use EMCs, additional detail must be provided in the source assessment. The Group must review available data, including but not limited to the considerations listed in Part VI.C.5.a.iii.(1)(a)(i)-(viii) of the LA County MS4 Permit.</p> <p>For clarity, the Group should provide a subsection for each pollutant or source of available data (per Part VI.C.4.a.iii.(1)(a)-(c) that describes source assessment findings.</p>
(3) Section 2.3.1	Part VI.C.5.a.iii	<p><u>Catchment Priority Index</u> Provide information on which pollutants are incorporated into the Catchment Priority Index (CPI) analysis, and how these pollutants</p>

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
		<p>were weighted. Additionally, reference and provide the CPI methodology, including the EMCs applied and the source(s) of the EMCs, as an attachment.</p>
Prioritization		
(4) Section 2.5 and Attachment E	Part VI.C.5.a.iv	<p><u>Prioritization and Compliance Schedules</u> Further substantiate the compliance schedules for all category 2 and 3 pollutants. According to Table 2-5 and Attachment E Tables E.21 through E.26, the Group proposes a final compliance date of 2040 for all category 2 and 3 pollutants. This is not appropriate for pollutants that are of a similar class as those addressed by TMDLs in the watershed and the compliance schedules must be adjusted accordingly.</p> <p>For bacteria and any other remaining pollutants, the Group needs to provide rationale for the proposed 2040 compliance dates.</p>
Selection of Watershed Control Measures		
(5) Section 4.1	Part VI.C.5.b.iv.(1). (a)	<p><u>Minimum Control Measures (MCMs)</u> It is unclear if all the Group Members will implement the MCMs as listed in the permit. Clarify whether any of the Group Members intend to modify any of the MCM provisions.</p>
(6) Section 4.1 and Section 5.1.1	Part VI.C.5.b	<p><u>Enhanced Minimum Control Measures (MCMs)</u> Section 4.1.2 (pg. 4-8) states that “[s]ome of the WMG agencies are implementing more aggressive or enhanced MCMs. Because of this, additional load reductions are likely to occur.” However, the EWMP does not clearly list and describe these enhanced MCMs nor does it identify the participating Permittees. (Table 4-4 appears to address this in part, but greater clarity and specificity is needed.)</p> <p>The Group must revise Section 4 to provide additional information on the enhanced MCMs to be implemented under the EWMP. For clarity, the Group should create a sub section for each enhanced MCM and include:</p> <ul style="list-style-type: none"> • A clear description of each enhanced MCM with any relevant supporting information; • Identification of which Permittees will be implementing each enhanced MCM; • Identification of the Category 1-3 pollutants to be addressed by the enhanced MCM; • Milestones and dates for achievement of milestones for each enhanced MCM for each participating Permittee. If

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
		<p>the Permittees do not intend to fully implement these enhancements prior to 2026 (based on Tables 5-3, 5-4 and 5-7) or 2040 (based on Tables 5-5 and 5-6), interim milestones and dates for their achievement should be included.</p> <p>Additionally, the EWMP Implementation Schedule in Section 5 must include and/or reference the milestones and timelines for each enhanced MCM/institutional control.</p>
(7) Section 5.1.3	Part VI.C.5.b	<p><u>Green Streets Implementation</u> Table 5-2 in Section 5.1.3 provides the implementation timeline for Green Streets. The Group must provide this schedule for each Permittee by year and by subwatershed, i.e. combine the information in Tables 4-10 and 5-2. Additionally, provide rationale for the schedule in Table 5-2, which indicates that green street implementation will not begin until 2026.</p>
(8) Section 4.2.4	Part VI.C.5.b	<p><u>Regional Project Information</u> Provide additional information regarding non-member Permittees within the drainage areas contributing to regional projects:</p> <ul style="list-style-type: none"> • Clarify whether subcatchments outside the Dominguez Channel EWMP Group from non-member LA County MS4 Permittees are contributing runoff to regional projects and identify these Permittees; and • Clarify whether the projects are sized to manage any of this additional volume. <p>Furthermore, include the following additional information for each regional project:</p> <ul style="list-style-type: none"> • Include the rainfall volume, and storm water runoff volume associated with each project; • In as much detail as possible, further articulate what the anticipated multi-benefits are for each project; • Identify the responsibilities of each participating Permittee for each project.
(9) Section 4.2.4.1	Part VI.C.5.b	<p><u>Regional Project Preliminary Designs</u> A number of preliminary design concept figures did not display correctly in the copy of the draft EWMP submitted to the Los Angeles Water Board. Correct the following figures:</p> <ul style="list-style-type: none"> • Ramona Park (Figure 4-8);

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
		<ul style="list-style-type: none"> • Hawthorne Memorial Park (Figure 4-9); • Darby Park (Figure 4-10); • Harbor City Park (Figure 4-11); and • Wilmington Recreation Center (Figure 4-13)
(10) Section 5.1.2	Part VI.C.5.b	<p><u>Regional Project Implementation</u> Table 5-1 in Section 5.1.2 provides the completion schedule for the EWMP's nine regional projects. The Group must update this section so that it lists which Permittee(s) are responsible for each Regional Project by the completion date milestone.</p>
Enhanced Watershed Management Program Provisions		
(11) Section 4.2.4	Part VI.C.1.g	<p><u>Process of Identifying and Selecting Regional Projects</u> The Draft EWMP notes that field investigations were performed at six of the nine identified regional project sites:</p> <ul style="list-style-type: none"> • Include a timeline for when field investigations will be performed at the remaining identified regional project sites; • Update the EWMP with any relevant information if further field investigations have been performed since the submittal of the draft EWMP. <p>Furthermore, clearly state in Section 4.2.4 whether any regional projects aside from the nine recommended regional projects were included in the RAA or in the EWMP's control measure implementation.</p>
(12) Section 7.2	Part VI.C.1.g.ix	<p><u>Financial Strategy</u> The Group's financial strategy must be revised to provide more specific information:</p> <ul style="list-style-type: none"> • The Group states that "[t]he Watershed Management Group as a whole, as well as individual members of the WMG are currently prioritizing and selecting the specific financial strategies that best fit their needs." The revised EWMP must include this prioritization and selection of specific financing strategies or, if not completed, include a schedule for completing this prioritization and selection of specific financing strategies. • The Group must update its financial strategy with any new information regarding its efforts and the challenges, potential, and feasibility of securing the potential funding sources. • The Group must specify sources of funding for regional

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
		<p>projects and other near-term projects. If no funding is in place, the Group should identify their process for securing this funding.</p> <p>Additionally, Section 7 appears to incorrectly reference the wrong EWMP attachments for Cost Estimates (Attachment U) and Funding (Attachment V). Correct these references for clarity.</p>
Reasonable Assurance Analysis (RAA)		
(13) Attachment F—Calibration Tables and Figures	Part VI.C.5.b.iv.(5)	<p><u>Model Calibration</u> The Group uses “linear bias (percent)” as a measure of percent difference, however it is unclear if the linear bias numbers in Tables 5-2, 5-4, 5-6, 5-8, 5-11 are percentages. Clarify these tables.</p> <p>Furthermore, although the reported linear bias numbers are relatively low, the other calibration statistics shown in Figures 5-2 through 5-8 appear to be indicative of a higher percent difference between observed and simulated values. Explain any differences in the conclusions drawn from each of the calibration statistics.</p> <p>See Enclosure 2 for additional comments on the RAA.</p>
(14) Attachment F, Table 7-4	Part VI.C.5.b.iv.(5)	<p><u>Machado Lake Water Quality Objective</u> Table 7-4 of Attachment F – RAA Modeling (pg. 25) uses an objective concentration of 1.04 mg/L for Phosphorus in the Machado Lake Watershed. The Group must change the objective concentration to 0.1 mg/L (per the TMDL) and redo the analysis, or provide rationale why this is the appropriate objective.</p>
(15) Section 3.3.3	Part VI.C.5.b.iv.(5)	<p><u>Baseline Simulation and Evaluation of Required Load Reductions</u> Revise the Section 3 to address the following:</p> <ul style="list-style-type: none"> • Provide greater clarity in Section 3.3.3 regarding how baseline pollutant loading estimates were calculated and describe how this is consistent with the RAA Guidelines procedure of setting baseline pollutant loading estimates. • Describe in Section 3.3.4 how the Group’s 90th percentile, 24-hour storm event constituent load approach is consistent with the RAA Guidelines method for estimating required pollutant reductions.
(16) Section 3.3.5	Part VI.C.5.b.iv.(5)	<p><u>Selection of Limiting Pollutants</u> Machado Lake – The Group selected bacteria rather than zinc or total nitrogen as the limiting pollutant for Machado Lake. Section 3.3.5 notes that the discharge of highly treated recycled water into</p>

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		<p>the lake to offset evapotranspiration “will dilute the stormwater stored in the lake and lower the concentration of all pollutants, including nutrients and toxics.” The Group must provide calculations and further analysis to demonstrate the data-driven assumptions of this approach.</p> <p>Zinc in Machado Lake and Wilmington Drain – The Group also notes that it did not select zinc as the limiting pollutant for Machado Lake or Wilmington Drain because the EWMP does not identify zinc as a Category 1-3 Water Body-Pollutant Combination for these subwatersheds. To proceed with this approach, the Group must explicitly commit to reevaluating this decision as it collects monitoring data.</p>
(17) Section 5.2	Part VI.C.5.b.iv.(5)	<p><u>RAA of Control Measure Implementation Schedule</u> In addition to the load reduction tables contained in Section 5.2, provide additional information regarding the volumes of stormwater that control measures will retain and/or treat (this additional information can be referenced and included as an attachment):</p> <ul style="list-style-type: none"> • Present the load reduction information included in Tables 5-3 through 5-7 in terms of BMP volume capacity and/or volume reductions; • Present the above information for each of the five subwatersheds by Permittee (i.e. split up the information contained in Tables 5-3 through 5-7 so that for each subwatershed, each contributing Permittee has a table of control measure implementation); • Clearly indicate the target volume that needs to be addressed based on the RAA for each subwatershed and for each compliance date.

Los Angeles Regional Water Quality Control Board

Enclosure 2 – Summary of Comments and Necessary Revisions for the Reasonable Assurance Analysis (RAA)

**Dominguez Channel Watershed Management Group
Enhanced Watershed Management Program (EWMP)**

Prepared by: C.P. Lai, Ph.D., P.E.

This memorandum contains the comments on Section 3, Reasonable Assurance Analysis (RAA) and Appendix F, RAA Modeling, in the draft Enhanced Watershed Management Program (EWMP) for Dominguez Channel Watershed Management Group dated June 2015.

1. In addition to linear bias statistics presented in Table 5-2, provide additional explanation and interpretation of the root mean square and coefficient of correlation statistics in Table 5-2, Table 5-4, Table 5-6, Table 5-8, and Table 5-11 of the Attachment F, RAA Modeling, and any differences in the conclusions that can be drawn regarding the hydrology and water quality calibrations based on the three statistics. Further, data needed to improve model calibration for these constituents should be identified along with a commitment to collect the necessary data.
2. The model results of the baseline critical condition in terms of runoff volume, pollutant concentration and pollutant loading are provided in Table 3-7 through Table 3-11 of the EWMP. However, the intermediate processes to arrive at the modeled values of runoff volume, pollutant concentration, and pollutant loading are identifiable. As such, the duration curves or frequency curves of runoff volume, pollutant concentration and pollutant loading for baseline condition in each analysis region for each pollutant of concern should be presented in the EWMP or an appendix.
3. The estimated allowable loads appear to be presented in Tables 7-1 to 7-5. Also present the required load reductions for each subwatershed area. Demonstrate that the estimated allowable loads and load reductions are obtained from the 90th percentile critical condition of runoff volume and allowable pollutant concentration. It is recommended that the allowable loads and required load reductions are presented in the same duration curves for baseline condition to demonstrate that the estimated allowable loads and load reductions meet the 90th percentile critical condition.
4. In the report, summary statistics of load reduction and percent reduction for different control measures is provided as shown in Table 5-3 through Table 5-7, however, some of the values used to arrive at the modeled values of load reduction and the percentage of the final target are not clearly identifiable. Provide the RAA results for the proposed control measures and potential BMPs to demonstrate the effectiveness of the proposed BMPs that would achieve the required pollutant load reductions and load reduction goals in terms of 1) influent volume, concentration and load; 2) treated volume, concentration and load; and 3) effluent volume, concentration and load through the system of BMPs at

the downstream point of BMP systems to demonstrate the effectiveness of the proposed BMPs.

5. Finally, please provide an example validation for a representative waterbody within the Dominguez Channel Watershed Management Area, or in another EWMP area where the same RAA approach is used, that demonstrates that with all proposed BMPs in place, as determined from the initial analysis of the necessary volume and/or pollutant load reduction, will result in achieving the RWLs.