

Los Angeles Regional Water Quality Control Board

October 21, 2015

Permittees of the Ballona Creek Watershed Management Group¹
(See Distribution List)

REVIEW OF THE BALLONA CREEK WATERSHED MANAGEMENT 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 Ballona Creek Watershed Management 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 29, 2015 by the Ballona Creek Watershed Management 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 Ballona Creek Watershed Management Group EWMP include the Los Angeles County Flood Control District; the County of Los Angeles; and the cities of Los Angeles, Beverly Hills, West Hollywood, Culver City, Inglewood, and Santa Monica.

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 29, 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 revision 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 20, 2015**.

The revised EWMP must be submitted to losangeles@waterboards.ca.gov with the subject line "LA County MS4 Permit – Revised Ballona Creek 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. Additionally, provide a demonstration of compliance for interim and final trash WQBELs.

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: Ballona Creek Watershed Management 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

Ballona Creek Watershed Management Group

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
Water Body Pollutant Classification		
(1) Section 1	Part VI.C.5.a	<p><u>Applicable TMDLs and Implementation Schedules</u> Make the following revisions to Section 1.3.3:</p> <ul style="list-style-type: none"> Update Table 1-4 (pg. 1-9) to acknowledge the recent revisions to the Ballona Creek Trash TMDL (Resolution No. R15-006 adopted on June 11, 2015). It should be noted that while the LACFCD is not assigned a WLA in the Ballona Creek Trash TMDL, per Resolution No. R15-006, the LACFCD is identified as responsible for certain actions related to TMDL implementation. On page 1-9, the discussion at the top of the page needs to be corrected regarding the Santa Monica Bay Beaches Bacteria TMDL. WLAs are established for BC-1 (at Dockweiler Beach), which apply to the MS4 Permittees in the Ballona Creek Watershed. Accordingly, the SMB Beaches Bacteria TMDL should be included in Table 1-4 and 1-5 and the rest of the EWMP, as appropriate.
(2) Section 3	Part VI.C.5.a	<p><u>Water Body-Pollutant Combinations</u> Revise Section 3 of the EWMP:</p> <ul style="list-style-type: none"> Include the <i>Table 3 Summary of Ballona Creek Water Body-Pollutant Categories</i> from Appendix 3.A in the main EWMP document; List the applicable interim and final WQBELs and receiving water limitations for each identified Category 1, 2, and 3 pollutant.
Selection of Watershed Control Measures		
(3) Section 4.3	Part VI.C.5.b	<p><u>Regional Projects on Private Parcels</u> In the Group’s EWMP Implementation Strategy, regional projects on private parcels make up 52% of the control measure capacity to be implemented by 2021.</p> <p>The Group needs to elaborate on the feasibility of such a strategy</p>

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		<p>and detail its process for implementing these BMPs. The Group must explicitly state any difficulties or issues that may be faced with this strategy and these types of projects.</p> <p>Furthermore, the Group should identify potential alternative approaches that it can pursue and consider the following:</p> <ul style="list-style-type: none"> • Are regional projects on private parcels (to the extent identified in the EWMP Implementation Strategy) ultimately necessary to achieve load reductions in the watershed? • Are there scenarios where the 52% implementation number can be reduced to a lower percentage of the EWMP's control measures (e.g. 10%, 20%, etc.)? And if so, what would be the change in implementation costs?
(4) Section 4.5	Part VI.C.5.b	<p><u>Information on Signature Regional Projects</u> The Group must include the following additional information on the listed signature regional projects:</p> <ul style="list-style-type: none"> • Provide milestones and timelines for each project; • Include the rainfall depth (in inches), rainfall volume, and storm water runoff volume associated with each project; • Identify the responsibilities of each participating Permittee for each project; • In as much detail as possible, further articulate what the anticipated multi-benefits are for each project; • Clarify and/or correct the signature project fact sheets for Culver Boulevard Median, Plummer Park, Queen Anne Recreation Center, Poinsettia Park, and Lafayette Park (Figures 4-12, 4-20, 4-24, 4-28, and 4-36). These fact sheets appear to incorrectly list the Design Storm Event for these projects as "85th Percentile, 24 hr." Table 4-1 indicates that these projects do not retain the 85th percentile, 24-hour storm event.
(5) Section 5.3	Part VI.C.5.b	<p><u>Green Streets</u> The "green street volume utilization" is 60-80% in many areas within the watershed. The Group needs to elaborate on the feasibility of achieving such percentages within the watershed and describe any difficulties or issues that may be faced with implementation.</p> <p>In the program highlights box (pg. 5-4), the Group notes that "[d]ata limitations currently hamper decision making." The Group</p>

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
		must elaborate on these limitations and how these limitations will be addressed.
(6) Section 5.6	Part VI.C.5.b	<p><u>Enhanced Institutional Control Measures</u> Although the Group’s Reasonable Assurance Analysis does not incorporate reductions from “enhanced” institutional control measures beyond the minimum control measures (MCMs), the Group mentions that it is anticipated that Group members “will consider and implement enhanced institutional control measures to reduce the level of structural control measures.”</p> <p>If possible, the Group should provide additional information on these potential enhanced control measures, including:</p> <ul style="list-style-type: none"> • The types of control measures being considered by Group members; • Any timelines for when these enhanced institutional controls will be considered.
(7) Section 7.4		<p><u>Non-Stormwater Strategy and Control Measures</u> Include additional information on the Group’s dry-weather strategies described in Section 7.4:</p> <ul style="list-style-type: none"> • Clarify if the Group is relying on its dry-weather bacteria strategy to address any pollutants aside from bacteria. If so, include the interim tasks and schedule for the North Outfall Treatment Facility (NOTF), Sepulveda Channel LTF, and Centinela Creek Diversion Project BMPs as included in the Draft Pollution Prevention Plan for Time Schedule Order No. R4-2015-0108 submitted on July 13, 2015 to the Regional Water Board. • Clarify whether the elimination of non-stormwater flows includes authorized and exempt non-stormwater discharges through the MS4. • Explain the how the non-stormwater elimination will be achieved as indicated in Figure 7-15. In particular, explain what will produce the 2019 to 2021 reduction in volume (e.g. 40.9 acre-ft to 0 acre-ft for the City of Los Angeles). Additionally, clarify whether this figure assumes that the NOTF and the Sepulveda Channel LTF will be diversion BMPs as opposed to treatment BMPs; or if this figure is based wholly on the water use/wet weather BMP capacity analysis.
<p>Enhanced Watershed Management Program Provisions</p>		

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
(8) Section 4.5	Part VI.C.1.g	<p><u>Retention of NSW runoff and 85th percentile:</u> The Group identifies which of the signature regional projects are able to retain the 85th percentile, 24-hour storm event.</p> <p>For the remaining regional projects, clarify in Section 4.5 and/or Appendix 4.B when the Group will determine which projects will be able to retain all non-storm water runoff and the 85th percentile, 24-hour storm. It is acceptable to identify this in the future as part of the Group's general design and engineering analyses; however the EWMP must at least specify this.</p>
(9) Section 9.3	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"> • Given the Group's soon approaching final compliance date of 2021, the financial strategy needs to detail a process for securing the funding needed for the EWMP Implementation Strategy. • The Group should specify sources of funding for signature regional projects and other near-term projects. If no funding is in place, the Group should identify their process for securing this funding. • The Group states that "[t]he BC EWMP Group as a whole, as well as individual Group members, is currently prioritizing and selecting the specific financing strategies that best fit its members' needs." The revised EWMP should include this prioritization and selection of specific financing strategies. • The Group needs to provide more detail on the potential funding sources listed in Sections 9.3.1 through 9.3.3. The Group should evaluate the challenges, potential, and feasibility of securing each potential funding source. Furthermore, if possible, the Group should also quantify the funding available from each source. • The Group discusses the formation of a subcommittee on funding and identifies the components of a "Stormwater Program Financial Plan," including: Implementation of New Fee or Charge, Establishment of New Enterprise Fund, Cash and Debt Financing, Operating and Capital Reserves, and Cash Flow Modeling. The revised EWMP should provide detail regarding the actual establishment of this subcommittee and the actual progress on achieving the identified financial plan components.

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
Reasonable Assurance Analysis (RAA)		
(10) Section 6.2.4		<p><u>BC Wetlands TMDL for Sediment and Invasive Exotic Vegetation</u> Provide an explanation how the EWMP/RAA addresses the waste load allocation for sediment established in the Ballona Creek Wetlands TMDL for Sediment and Invasive Exotic Vegetation.</p>
(11) Section 6.2.5.1 and Figure 6-6	Part VI.C.5.b.iv.(5)	<p><u>90th Percentile Exceedance Volume</u> The critical condition used for metals is the 90th percentile Exceedance Volume. The Group must add further clarification regarding this critical condition:</p> <ul style="list-style-type: none"> • Provide detail on how the Exceedance Volumes were calculated. Explain whether actual or modeled flows and concentrations were used for these calculations. • Provide detail on how Exceedance Volumes are used in defining average conditions for interim limitations.
(12) Sections 7.1, 8.1., and 8.2		<p><u>EWMP Implementation Strategy Compliance</u> In explaining its EWMP Implementation Strategy, the Group states:</p> <p style="padding-left: 40px;">“the network of control measures that provides reasonable assurance of achieving the Compliance Targets is referred to as the EWMP Implementation Strategy. The identified BMPs (and BMP preferences) will likely evolve over the course of the EWMP Implementation through an adaptive management paradigm and in response to “lessons learned.” As such, it is anticipated the BMP capacities within the various subcategories will be reported to the Regional Board but not tracked explicitly by the Regional Board for compliance determination. As BMPs are substituted over the course of EWMP implementation (e.g., replace green street capacity in a subwatershed with additional regional BMP capacity), the Group will show equivalency for achieving the corresponding Compliance Target.”</p> <p>Give further detail on how equivalency will be calculated and determined, and what kind of information will be provided to show equivalency. In addition, provide example calculations and/or methodology to go along with the scenarios described in Section 8.2.4.</p>
Other		
(13) Section 9.2		<p><u>Existing Stormwater Programs Costs</u> Clarify this section to include the costs of Coordinated Integrated</p>

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
		Monitoring Program (CIMP) monitoring. It is not clear if the monitoring costs noted for the City of Los Angeles and Unincorporated LA County already include Ballona Creek CIMP costs.
(14) Various Sections		<p><u>Miscellaneous</u> Clarify the following:</p> <ul style="list-style-type: none"> • Section 6.2.5.1 (pg. 6-11) states: “In turn, the BC RAA analyzes the volume of runoff during each rolling 24-hour period of the 10-year simulation when water quality targets were exceeded, referred to as the ‘Exceedance Volume’ (see Figure 6-4).” It appears that the quote should reference Figure 6-6 instead. • Table 8-1 (pg. 8-2) is titled: “WMP Control Measures to be Assessed for Compliance Determination with <u>ULAR EWMP</u> if...” The underlined should be changed to “BCWVG EWMP.”

Los Angeles Regional Water Quality Control Board

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

**Ballona Creek Watershed
Enhanced Watershed Management Program (EWMP)**

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

This memorandum contains the comments on Section 6, Reasonable Assurance Analysis (RAA), in the draft Enhanced Watershed Management Program (EWMP) for Ballona Creek Watershed dated June 2015.

1. The model results of water quality calibration for total sediment as shown in Table 6-2 indicated that there is a difference in modeled load versus observed load for total sediment of -33.5%. In addition, the difference in modeled and observed values for E. coli is -31.6%. Therefore, additional discussion should be provided regarding the greater error between modeled and observed values for total sediment and E. coli and potential explanations for this discrepancy. Further, data needed to improve model calibration for total sediment and E. coli should be identified along with a commitment to collect the necessary data and recalibrate the model using these data.
2. Correct titles of Figures 6A-26 and 6A-27, which are plots of fecal coliform not total lead.
3. The critical condition for metals defined as 90th percentile Exceedance Volume (EV) as explained in Section 6.2.5.1. Board staff understands that this EV approach provides assurance that the receiving water limitations (RWLs) will be met instream. Please also provide a comparison of the EV by subbasin with the 90th percentile of pollutant concentration and load to demonstrate that the EV approach is protective relative to other metrics including the 90th percentile pollutant load. For toxics, provide data to support the selection of the 2007/2008 water year as the critical year, such as rainfall, daily storm volume and toxics concentration data or other data as appropriate. As such, provide statistical analyses including: 1) frequency curves for the data above and 2) flow/load duration curves in the receiving water body by using the most recent 10-year period of data to confirm that the 2007/2008 water year is an appropriate condition.
4. In addition to the EV statistics, provide the model results of the baseline condition in terms of runoff volume, pollutant concentration, and pollutant loadings based on the 90th percentile critical condition of runoff volume and pollutant concentration at each subbasin for each limiting pollutant. In addition, please provide the estimated allowable loads and required load reductions on a pollutant-by-pollutant basis.

5. Finally, please provide an example validation for a representative waterbody within the Ballona Creek Watershed, or in another EWMP area using a similar RAA approach, that demonstrates that with all proposed BMPs in place, as determined from the initial analysis of the necessary volume and/or pollutant load reduction, the RWLs will be achieved.