
Los Angeles Regional Water Quality Control Board

October 26, 2015

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REVIEW OF THE PALOS VERDES PENINSULA 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 Palos Verdes Peninsula Watershed Management Group¹:

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 26, 2015 by the Palos Verdes Peninsula 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.

¹ Permittees of the Palos Verdes Peninsula Watershed Management Group include the cities of Rancho Palos Verdes, Palos Verdes Estates and Rolling Hills Estates, the County of Los Angeles, and the Los Angeles County Flood Control District.

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.

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 26, 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 Natural Resources Defense Council, Los Angeles Waterkeeper, and Heal the Bay; the Construction Industry Coalition on Water Quality; and the Sanitation Districts of Los Angeles County. 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 26, 2016**.

The revised EWMP must be submitted to losangeles@waterboards.ca.gov with the subject line "LA County MS4 Permit – Revised Palos Verdes Peninsula EWMP" with a copy to Ivar.Ridgeway@waterboards.ca.gov and Rebecca.Christman@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 Attachments M and N 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 trash WQBELs and all other final WQBELs and receiving water limitations pursuant to Part VI.E and set forth in Attachments L through R by the applicable compliance deadlines occurring prior to approval of an EWMP.

If you have any questions, please contact Ms. Rebecca Christmann of the Storm Water Permitting Unit by electronic mail at Rebecca.Christmann@waterboards.ca.gov or by phone at (213) 576-5734. Alternatively, you may also contact Mr. Ivar Ridgeway, Chief of the Storm Water Permitting Unit, at Ivar.Ridgeway@waterboards.ca.gov or by phone at (213) 620-2150.

Sincerely,



Samuel Unger, P.E.
Executive Officer

cc: Andy Winje, City of Rancho Palos Verdes
Sheri Rapp Loadsman, City of Palos Verdes Estates
Greg Grammer, City of Rolling Hills Estates
Yolanta Schwartz, City of Rolling Hills
Angela George, County of Los Angeles, Department of Public Works
Paul Alva, County of Los Angeles, Department of Public Works

Enclosures: 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

Palos Verdes Peninsula Watershed Management Group

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
General		
Definitions, Acronyms, and Abbreviations		Ensure that definitions are consistent with those in Attachment A of the 2012 LA County MS4 Permit.
Section 1		Note that the purpose the LA County MS4 Permit and of the EWMPs is broader than acknowledged in Sections 1.1 and 1.5.2 of the draft EWMP. Align description of the purpose of the EWMP with Part VI.C.1 of the permit.
Section 1.7		Define the Group’s use of the phrase “iterative process” under Adaptive Management, or revise to specify an “adaptive management process”.
Section 2.2, Footnote 3		<p>Footnote 3 on page 2-6 of the EWMP states that, “As recognized by the footnote in Attachment K-4 of the MS4 Permit, the Peninsula WMG members have entered into an Amended Consent Decree with the United States and the State of California, including the Regional Board, pursuant to which the Regional Board has released the Peninsula WMG members from responsibility for Toxic pollutants in the Dominguez Channel and the Greater Los Angeles and Long Beach Harbors. Accordingly, no inference should be drawn from the submission of this EWMP Work Plan or from any action or implementation taken pursuant to it that the Peninsula WMG members are obligated to implement the DC Toxics TMDL, including this EWMP Work Plan or any of the DC Toxics TMDL’s other obligations or plans, or that the Peninsula WMG has waived any rights under the Amended Consent Decree.”</p> <p>Revise Footnote 3 on page 2-6 of the EWMP to omit the strike out portion of the sentence: “Accordingly, no inference should be drawn from the submission of this EWMP or from any action or implementation taken pursuant to it that the Peninsula WMG members are obligated to implement the DC Toxics TMDL, including this EWMP Work Plan or any of the DC Toxics TMDL’s other obligations or plans, or that the Peninsula WMG has waived any rights under the Amended Consent Decree”.</p>
Section 3.2		A summary of existing and planned Regional BMPs within the Peninsula EWMP area is summarized in Figure 3-1 and Table 3-4. Section 3.2.4.2.3 includes a description of the evaluation process

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
		that the group undertook to identify opportunities for regional, multi-benefit stormwater retention projects capable of retaining the volume associated with the 85 th percentile, 24-hour storm event for the Palos Verdes Peninsula, which resulted in the projects identified in Figure 3-1 and Table 3-4. Include in this description, the storm event size corresponding to the 85 th percentile, 24-hour event for the Palos Verdes Peninsula WMG area. Also, include a discussion of drainage areas and/or any projects that were initially identified, but ultimately not proposed due to project constraints.
Section 3.2.4.2		The EWMP provides list of existing/planned/proposed regional BMPs and some basic information in Section 3.2.4.2. Casaba Estates Subdivision and the Western Drainage area of the Chandler Quarry Project appear to be the only regional projects that will retain and infiltrate runoff in a volume greater than the 85th percentile, 24-hr storm event. Confirm. Also, clarify for the other planned/proposed regional BMPs the amount of runoff that will be retained relative to the 85th percentile, 24-hour storm event for specific drainage areas tributary to the projects. Also, clarify for each whether the regional project is capable of retaining all non-storm water runoff for the drainage areas tributary to the projects.
Water Body Pollutant Classification and Prioritization		
Section 2.1; Table 2-1		Revise Table 2-1 to remove redundant pollutant listings (e.g., PCBs and DDTs are thrice listed under Category 1, while chlordane is twice listed under Category 1).
Section 2.2		Section 2.2 Water Quality Characterization only includes summary of pollutants listed in existing TMDLs and 303(d) listings. The prioritization process lists water body pollutants into Categories 1 and 2 only. Data and a justification must be added to this section to clarify why Category 3 WBPCs were not identified. (See information provided in Appendix 5. RAA Summary – Table 1, page 4.)
Section 2.2.3, Table 2-5		Table 2-5, which lists the water bodies and beneficial uses within the area addressed by the PV Peninsula EWMP Group needs to include “Coastal Streams of Palos Verdes,” “Canyon Streams of Palos Verdes,” and “Point Vicente Beach.” In addition, the revised EWMP needs to clarify if the first row “Los Angeles Coastal” is referring to the “Nearshore Zone” or the “Offshore Zone.” Both the Los Angeles County Coastal Nearshore Zone and the Los Angeles County Coastal Offshore Zone have designated REC1 and REC2 beneficial uses (BUs) as listed in Table 2-1a of the Water Quality Control Plan, Los Angeles Region (Basin Plan) and additional BUs as listed in Table 2-3 of the Basin Plan, and both should be included in Table 2-5.

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
Selection of Watershed Control Measures		
Section 3.1.3.1		<p>The EWMP states, “This provision [MS4 Permit §VI.D.9.h.vii.(1)] will be supplanted by the statewide trash amendments” (pg. 3-5). Note, however, that the statewide trash amendments are not self-implementing, and will therefore need to be incorporated into the LA County MS4 Permit before other related provisions are supplanted by the statewide amendments. Depending on the timing of final approvals of the trash amendments, their incorporation into the LA County MS4 Permit may not occur prior to the deadline to install trash excluders per Part VI.D.9.h.vii.(1). Therefore, the EWMP must include milestones and a schedule for installing trash excluders per the LA County MS4 Permit in the subwatershed area not addressed by a trash TMDL (i.e., the Los Angeles Harbor Subwatershed).</p>
Section 3.2.4.2.3		<p>Provide interim milestones and dates for their achievement to complete investigations of feasibility, cost-effectiveness and design for each proposed regional BMP in Section 3.2.4.2.3, in addition to the anticipated implementation dates provided in Table 5-4.</p>
Appendix 5, Section 4.3; and Section 3.2.2		<p>For each of the regional BMPs, articulate, and quantify where possible, the anticipated multiple benefits that will derive from the project with greater specificity than provided in Section 4.3.</p> <p>For the Green Building Ordinance implemented by Rancho Palos Verdes (pg. 3-23), articulate the specific water quality related components/benefits of the ordinance.</p>
Section 5.2.1		<p>Greater detail, including interim milestones and dates for their achievement, must be provided in the EWMP for each of the Planned Non-structural TCMs. The EWMP must indicate interim milestones and dates for their achievement for each Permittee in the WMG that will be implementing the planned non-structural TCM. For example, interim milestones and dates for their achievement should be included for:</p> <ul style="list-style-type: none"> • Municipal Landscape Retrofit Programs • Downspout Disconnect Programs • Private Road and Parking Lot Sweeping Ordinances • Clean Bay Restaurant Certification Programs (in Palos Verdes Estates & Rolling Hills Estates) • Xeriscaping & Turf Conversion Incentive Programs • Erosion Repair and Slope Stabilization Programs
Section 5		<p>The EWMP must more clearly link implementation milestones and schedules for Structural and Non-structural TCMs with TMDL compliance schedules. Additionally, the EWMP only includes final milestones for existing/planned BMPs (see Table 5-4, pg. 5-12). Table 5-4 should indicate which subwatershed each regional project will address, as done in Table 3-4, and indicate the TMDL</p>

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
		deadline that the project is targeted to address (from Table 5-2).
Section 5.2		The revised EWMP must specify a strategy to implement pollutant controls necessary to achieve bacteria WQBELs that have already passed (2012) and limitations have not been achieved (see data shown in Table 2-9, page 2-16).
Enhanced Watershed Management Program Provisions		
	Part VI.C.5.b.iv.(4)(e), page 65	The revised EWMP must identify each participating Permittee responsible for implementing the existing/ planned/or proposed BMPs (see tables 3-4 and 5-4). In Table 5-4, clarify whether the Permittees identified in the column "Jurisdiction" will be wholly responsible for the structural TCM or if all Permittees listed in the column "Percent Drainage Area Per Jurisdiction" will share responsibility for implementing the structural TCM.
	Part VI.C.5.b.iv.(5)(c), page 65	For Category 2 WBPCs, the revised EWMP does not demonstrate that the watershed control measures to be implemented will achieve applicable receiving water limitations as soon as possible. The revised EWMP must provide appropriate justification for the proposed BMP implementation schedule for Category 2 WBPCs.
	Part VI.C.5.c, page 66	The revised EWMP must incorporate interim milestones and dates for their achievement for structural and non-structural TCMs that will allow an assessment of progress during each adaptive management cycle (i.e., every two years). See previous comments.
Sections 3.2.2 and 9	Part VI.C.8, pages 68-70	<p>In Table 3-3, only Rancho Palos Verdes is identified as committing to enhanced tracking as part of reporting/adaptive management. All Permittees in the WMG must commit to enhanced tracking through the EWMP to support adaptive management (see section 3.2.2 "Reporting/Adaptive Management" and Table 3-3).</p> <p>Section 9 of the EWMP must also include a commitment to report on the status of multi-year/future regional BMPs, both planned and proposed, and the status of efforts to secure funding for structural TCMs both for capital investments and O&M through the adaptive management process.</p>
	Part VI.C.1.g.ii (page 49)	The revised EWMP must specify if it incorporated applicable State agency input on priority setting and other key implementation issues or if any State agency priorities are addressed (e.g., drought response, increased capture of stormwater for beneficial use per the Recycled Water Policy, Strategic Plan priorities, California Water Action Plan priorities, etc.). If so, elaborate.
Section 6	Part VI.C.1.g.vi (page 50)	The draft EWMP must state if the cost analysis done in the EWMP maximizes the effectiveness of funds through the analysis of alternatives and the selection and sequencing of actions needed to address human health and water quality related challenges and non-compliance. If so, elaborate.
Section 6.3	Part VI.C.1.g.ix	For the potential funding sources included in Section 6.3, specify

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision
	(page 50)	requirements and application deadlines if applicable and available. Additionally, elaborate on the challenges (if any)/feasibility of obtaining the potential sources of funding.
Section 6.3	Part VI.C.1.g.ix (page 50)	<p>The financial strategy discussed in Section 6.3 of the draft EWMP should include the following:</p> <ul style="list-style-type: none"> • A prioritization process for obtaining funding that includes the selection of financing strategies that best fit the Groups’ needs (e.g., step 1: apply for X grants, step 2: apply for loans, etc.). • A timeline to search for funding with consideration of the milestones indicated in the EWMP. • Articulation of who is responsible for seeking funding (e.g., the lead Permittee, all the group members). If most or all Group members will be seeking funding, please specify the responsibilities of those members. <p>It should also outline steps toward:</p> <ul style="list-style-type: none"> • development of a stormwater Capital Improvement Plan and/or asset management plan, • integration of proposed EWMP projects with other street/sewer/water CIPs and asset management plans (e.g., Pavement Management Systems, etc.) • steps to establish a constant revenue stream for the stormwater CIP/asset management plan, which may include rate studies.
Reasonable Assurance Analysis (RAA)		
Section 4 and Appendix 5	Part VI.C.5.b.iv.(5), page 65	The RAA is conducted and included in the EWMP. (Note that Section 4.2 of the EWMP references Appendix 6, but should reference Appendix 5.) See Enclosure 2 for detailed comments on the RAA.
Sections 3.1.3 and 5.2.1		Clarify the assumed load reduction from non-structural BMPs used by the WMG and use a consistent assumption throughout the EWMP. Section 3.1.3 indicates a 5% load reduction from “new and enhanced provisions of the MS4 Permit,” Section 5.2.1 indicates a 7% load reduction from non-structural BMPs, and Appendix 5, Table 11 indicates a 7.5% load reduction.
Appendix 5, Table 2		<p>Table 2 does not include bacteria in Wilmington Drain. Though it is a Category 2 WBPC, the permit includes Receiving Water Limitations as permit limits for Category 2 and Category 3 WBPCs; therefore, it must be included in Table 2 as well as other Category 2 WBPCs that are included in the RAA.</p> <p>Additionally, footnote 4 (pg. 8) in Appendix 5 must reference the freshwater reference system dataset used in the LA River Bacteria TMDL, not the Arroyo Sequit dataset.</p>

Los Angeles Regional Water Quality Control Board

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

Palos Verdes Peninsula Watershed Management Group Enhanced Watershed Management Program (EWMP)

Prepared by: C.P. Lai, Ph.D., P.E. and Thanhloan Nguyen

This memorandum contains the comments on Appendix 5, Reasonable Assurance Analysis (RAA) of the draft Enhanced Watershed Management Program (EWMP) report for Palos Verdes Peninsula Watershed Management Group dated June 26, 2015.

1. Appendix 5. Reasonable Assurance Analysis, Section 2.5 Wet Weather Baseline Loads and Target Load Reductions

Target load reductions of zero were set for PCBs and DDT for Santa Monica Bay with the explanation, “In Santa Monica Bay, zero target load reduction was set for PCBs and DDT, consistent with the USEPA TMDL, which sets MS4 waste load allocations based on baseline loads”. The assigned WLAs for DDT and PCBs were 27.08 and 140.25 g/yr, respectively. According to the USEPA TMDL for DDT and PCBs, existing stormwater loads from the watershed are lower than the calculated total allowable loads to achieve sediment targets; therefore, the waste load allocations for stormwater in the TMDL are based on existing load estimates. The Permittees will need to collect data through the Group’s CIMP to confirm that existing stormwater loads from the watershed are lower than the calculated allowable loads to achieve sediment targets.

RAA Modeling comments:

1. Provide a graph of the time series results, between 2001 and 2012, of modeled runoff volumes with observed runoff volumes and a statistical analysis of the comparison of modeled and observed values for runoff volume.
2. The model results of the baseline condition (loads are included in Table 5 of Appendix 5) in terms of runoff volume and pollutant concentration are not provided in the EWMP report. Per the RAA Guidelines, present the model results of the baseline condition for runoff volume, pollutant concentration and pollutant loadings based on the 90th percentile critical condition at each analysis region for each pollutant of concern.
3. The estimated allowable loads and required load reductions for each analysis region and each pollutant as provided in Table 5 of the Appendix 5 should be presented in terms of runoff volume, concentration and then pollutant loading.

4. Per the RAA Guidelines, the model results for the proposed control measures and potential BMPs should be provided to demonstrate the effectiveness of the proposed BMPs that would achieve the required pollutant load reductions and load reduction goals. However, as presented, the model results presented in Table 11 of Appendix 5 do not sufficiently demonstrate the effectiveness of the proposed BMPs. As such, the detailed reasonable assurance analysis (RAA) results for the proposed BMPs for each analysis region should be provided in terms of, where applicable: 1) influent volume, concentration and/or load; 2) treated volume, concentration and/or load; and 3) effluent volume, concentration and/or load through BMPs for the selected critical condition to demonstrate the effectiveness of the proposed BMPs.

5. An example illustrating the modeling results of pollutant concentrations in the receiving water for all pollutant of concern at the downstream outlet of the watershed system should be presented in the EWMP to demonstrate the effectiveness of all BMPs in place when compared with those of the baseline condition and to demonstrate the compliance with final water quality limits (WQL) during the critical condition.