

Los Angeles Regional Water Quality Control Board

October 27, 2014

Los Angeles River Upper Reach 2 Watershed
Management Group
(See Distribution List)

REVIEW OF THE LOS ANGELES RIVER UPPER REACH 2 WATERSHED MANAGEMENT GROUP'S DRAFT 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 Los Angeles River Upper Reach 2 Watershed Management Group:

The Regional Water Board has reviewed the draft Watershed Management Program (WMP) submitted on June 26, 2014 by the Los Angeles River Upper Reach 2 Watershed Management 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 either a Watershed Management Program (WMP) or Enhanced Watershed Management Program (EWMP) to implement permit requirements on a watershed scale through customized strategies, control measures, and best management practices (BMPs). Development of a WMP or EWMP is voluntary and may be developed individually or collaboratively.

The purpose of a WMP or EWMP is for a Permittee 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. If a Permittee opts to develop a WMP or EWMP, the WMP or EWMP must meet the requirements, including conducting a Reasonable Assurance Analysis (RAA), of Part VI.C (Watershed Management Programs) of the LA County Permit and must be approved by the Regional Water Board.

As stated above, on June 26, 2014, the Los Angeles River Upper Reach 2 Watershed Management Group submitted a draft Watershed Management Program (WMP) for their entire jurisdiction to the Regional Water Board pursuant to Part VI.C.4.c of the LA County MS4 Permit.

The Regional Water Board has reviewed the draft WMP and has determined that, for the most part, the draft WMP includes the elements and analysis required in Part VI.C of the LA County MS4 Permit. However, some revisions to the Los Angeles River Upper Reach 2 Watershed

Management Group's draft WMP are necessary. The Regional Water Board's comments on the draft WMP, including detailed information concerning necessary revisions to the draft WMP, are found in Enclosure 1 and Enclosure 2, respectively. The specific Permit provisions cited in the enclosures refer to provisions in the LA County MS4 Permit. The LA County MS4 Permit includes a process through which necessary revisions to the draft WMP can be made (Part VI.C.4 in the LA County MS4 Permit). The process requires that a final WMP, revised to address Regional Board comments identified in the enclosures, must be submitted to the Regional 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 WMP as identified in the enclosures to this letter and submit the revised WMP as soon as possible and no later than **January 27, 2015**.

The revised WMP must be submitted to losangeles@waterboards.ca.gov with the subject line "LA County MS4 Permit – Revised Draft LA River Upper Reach 2 WMP" with a copy to Ivar.Ridgeway@waterboards.ca.gov.

If the necessary revisions are not made, the Los Angeles River Upper Reach 2 Watershed Management Group will be subject to the baseline requirements in Part VI.D of the Order 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 O and P pursuant to subparts VI.E.2.d.i.(1)-(3) and VI.E.2.e.i.(1)-(3), respectively.

Until the draft WMP is approved, the Los Angeles River Upper Reach 2 Watershed Management 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) Implement watershed control measures to ensure that MS4 discharges are achieving compliance with final WQBELs for the Los Angeles River Nitrogen Compounds and Related Effects TMDL, and interim and final WQBELs for the Los Angeles River Trash TMDL pursuant to Part VI.E and set forth in Attachment O consistent with the compliance deadlines therein.

In addition on June 26, 2014, the Los Angeles River Upper Reach 2 Watershed Management Group submitted a draft Coordinated Integrated Monitoring Program (CIMP) to the Regional Water Board pursuant to Part IV.C of Attachment E of the LA County MS4 Permit. The Regional Water Board review and comments on the draft CIMP will be provided under separate cover.

If you have any questions, please 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:

Attachment 1 Comments and Necessary Revisions to Draft WMP
Attachment 2 Comments on Reasonable Assurance Analysis for the Los Angeles River
Upper Reach 2 Watershed Management Group

cc: Mr. Gerry Greene, CWE

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Los Angeles Regional Water Quality Control Board

Attachment to October 27, 2014 Letter Regarding the Los Angeles River Upper Reach 2 Watershed Management Group's Draft Watershed Management Program (WMP) Submittal Pursuant to Part VI.C of the LA County MS4 Permit (Order No. R4-2012-0175)

Comments and Necessary Revisions to Draft WMP

Issue and MS4 Permit Provision (Permit Page Number)	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.a.ii. Waterbody-Pollutant Classification (page 59)</p>	<p>The Group must identify and address Category 3 Waterbody-Pollutant Combinations (WBPCs). The water quality monitoring data from the sites located downstream is appropriate to use to characterize the receiving water quality in the vicinity of the Group's watershed area. The Group can use its monitoring data once available to confirm whether the Category 3 WBPCs are appropriate or whether the list should be modified. Regional Water Board staff note that Table 2-7 identifies several pollutants as Category 3; however, the reasonable assurance analysis (RAA) does not address these nor does the draft WMP analyze load reductions for these pollutants from the proposed watershed control measures. The revised WMP must include a discussion of the Category 3 pollutants identified in Table 2-7, and provide a similar analysis to what is provided for Category 1 pollutants.</p>
<p>Part VI.C.5.a.iii. Source Assessment (page 59-60)</p>	<ul style="list-style-type: none"> • The draft WMP, including the RAA, excludes stormwater runoff from non-MS4 facilities within the WMA from the stormwater treatment target. While the draft WMP inventories General Industrial Facilities within the watershed management area, the WMP should utilize General Industrial Storm Water Permittee monitoring results (available from SMARTS) to assess and potentially refine estimates of pollutant loading from the identified "non-MS4" areas. In addition to General Industrial Storm Water Permittee monitoring results, Permittees should also review their inspection findings, including past violations and enforcement actions, of Industrial/Commercial facilities to assess potential pollutant sources. • Although the RAA includes modeling to assess existing loads overall, the source assessment (Section 2.3) does not use modeling to evaluate specific sources. The draft WMP does refer to statements included in the various TMDLs applicable to the watershed area, but there is no indication that the model results from the different TMDLs were used in the pollutant source assessment. The draft WMP should consider existing TMDL modeling data, where available, when refining the source assessment. • A process and schedule for developing the required spatial information on catchment areas to major outfalls should be proposed, if this information does not already exist. (Regional Water Board staff note that Figure 1-5 in the CIMP provides a map of the MS4 including some outfalls. Additional information on outfalls and controls is provided in Appendices A and B of the CIMP as well as Appendix G to the draft WMP itself; this appears to be a good start in responding to the permit requirements. If additional information such as the catchment areas for the major outfalls still needs to be developed, the process and schedule for developing this should be indicated.)
<p>Part VI.C.5.a.iv. Prioritization (page 60)</p>	<p>While Table 2-7 acknowledges the past due dates for the Los Angeles River Nitrogen Compounds and Related Effects TMDL and final deadlines for the LA River Metals TMDL, LA River Bacteria, and other TMDLs, the LA River Metals TMDL includes interim dry and wet weather limitations with a deadline (2012) that has passed. The WMP needs to specify why this TMDL is not included in Table 2-7 in the priority 1a category (highest priority), since some compliance deadlines have already passed.</p>


Issue and MS4 Permit Provision (Permit Page Number)	Regional Water Board Staff Comment and Necessary Revision
<p>Part VI.C.5.b. Selection of Watershed Control Measures (pages 61- 64)</p>	<p><u>Selection of Watershed Control Measures to Comply with Interim WQBELs and Associated Compliance Deadlines</u></p> <ul style="list-style-type: none"> The draft WMP does not clearly specify a strategy to comply with the interim WQBELs for the LA River metals TMDL (January 11, 2012; January 11, 2020 and January 11, 2024 deadlines). Table 3-1 presents a phased implementation plan, which suggests that Phase 2 activities will be conducted to meet the 2020 deadline and Phase 3 activities, to meet the 2024 deadline; however, the draft WMP needs to be revised to include documentation that the 2012 past deadlines have been achieved or specify an appropriate strategy for achieving compliance with the past due interim WQBELs. Further discussion of current compliance with the LA River nitrogen compounds TMDL, for which there is a final compliance deadline of 2004, is also needed, since this is a priority 1a pollutant in Table 2-7. Section 1.3.3 of the CIMP notes that MS4 discharges appear to comply with applicable loads already, but additional discussion and support for this assertion should be included in the WMP itself. The draft WMP is unclear on a schedule for BMPs implemented to comply with the LA River Trash TMDL. The draft Plan states, Most of the cities are 90 percent or more compliant with the trash TMDL and are investigating opportunities to complete this implementation effort. The draft WMP needs to include a firm schedule for the implementation of Trash TMDL BMPs. <p><u>Support for Use of Limiting Pollutants</u></p> <ul style="list-style-type: none"> The draft WMP states, “[t]he limiting pollutant used to control the implementation efforts of the LAR UR2 WMA is bacteria for the area draining to the Los Angeles River and metals for the area draining to the Rio Hondo.” The draft WMP needs to clarify and provide support for the assumption that Category 2 and Category 3 pollutants will be addressed by focusing on these limiting pollutants. Alternatively, if Category 2 and 3 pollutants will not be addressed by focusing on the limiting pollutants, identified above, the WMP must separately address Category 2 and Category 3 pollutants. <p><u>Specificity of Proposed Watershed Control Measures</u></p> <ul style="list-style-type: none"> Although the draft WMP includes several specific regional BMPs (Section 4.3.3.3) the specific LID street projects and their locations are not identified. The draft WMP should provide as much specificity as feasible in describing the potential locations for LID streets. Additionally, the permittees that would be responsible for implementing LID street projects should be specified. Specificity is particularly important where LID streets are relied upon to achieve some of the pollutant reductions necessary to achieve interim WQBELs with compliance deadlines in this permit term and the next permit term. <p><u>Legal Authority</u></p> <ul style="list-style-type: none"> The draft WMP asserts that the “legal authority demonstration in respect to the WMP appears more specific than that required in the Annual Report.” The Plan appears to acknowledge appropriate legal authority to construct most projects but note that some of the proposed projects are located within property easements owned by other entities. The draft WMP needs to provide greater detail regarding the Group’s legal authority. <p><u>Adaptive Management Process</u></p> <ul style="list-style-type: none"> While the draft WMP notes revisions will occur as part of the “Adaptive Management Process” in referral to multiple proposed actions it does not include a comprehensive strategy for the Adaptive Management process. The draft WMP should provide more detail on how the “Adaptive Management Process” will be implemented.

Issue and MS4 Permit Provision (Permit Page Number)	Regional Water Board Staff Comment and Necessary Revision
<p><i>Part VI.C.5.b. Selection of Watershed Control Measures (pages 61-64)</i></p>	<p><u>Assumptions regarding Non-structural BMPs and Source Control Measures</u></p> <ul style="list-style-type: none"> • The draft WMP assumes a 5% load reduction from non-structural BMP enhancements. However, Section 3.3.1 of the WMP only indicates that such enhancements would be considered, and a firm commitment to implement them is lacking. The draft WMP needs to include specific commitments to implement the non-structural BMP enhancements, or it should not rely upon the 5% load reduction anticipated from these non-structural BMP enhancements to meet compliance deadlines in this permit term or the next permit term. • The WMP assumes a significant reduction in copper based on the phase-out of copper in automotive brake pads, via approved legislation SB346, to achieve the necessary copper load reductions. Given the combination of other copper sources identified in various LA TMDLs such as building materials, other vehicle wear, air deposition from fuel combustion and industrial facilities, and that SB346 progressively phases out copper content in brakes of new cars (5% by weight until 2021, 0.5% by weight until 2025), additional structural BMPs may still be needed to reduce copper loads prior to entering receiving waters and eliminate copper exceedences of RWLs. <p><u>Assumptions regarding Pollutant Loading from Permitted Industrial Facilities</u></p> <ul style="list-style-type: none"> • The draft WMP, including the RAA, excludes stormwater runoff from non-MS4 facilities within the WMA from the stormwater treatment target. In particular, industrial facilities that are permitted by the Water Boards under the Industrial General Permit or an individual stormwater permit were identified and subtracted from the treatment target. Regional Water Board staff recognizes that this was done with the assumption that these industrial facilities will eliminate their cause/contribution to receiving water exceedances, as required by their respective NPDES permit. However, it is important that the Group's actions under its Industrial/Commercial Facilities Program—including tracking critical industrial sources, educating industrial facilities regarding BMP requirements, and inspecting industrial facilities—ensure that all industrial facilities are implementing BMPs as required.
<p>Reasonable Assurance Analysis – Category 1 Pollutants Part VI.C.5.b.iv.(5)</p>	<p>See attached memorandum with specific comments on the Group's Reasonable Assurance Analysis for Category 1 pollutants.</p>

Issue and MS4 Permit Provision (Permit Page Number)	Regional Water Board Staff Comment and Necessary Revision
Reasonable Assurance Analysis – Categories 2 and 3 Pollutants Part VI.C.5.b.iv.(5)	The WMP did not model any pollutants in Categories 2 and 3. These pollutants or surrogates need to be included in the RAA, or supported justification for the use of the proposed limiting pollutants as surrogates for each Category 2 and Category 3 waterbody-pollutant combination.

Los Angeles Regional Water Quality Control Board

TO: Los Angeles River Upper Reach 2 Watershed Management Group

FROM: C.P. Lai, Ph.D., P.E. and Thanhloan Nguyen 
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

DATE: October 27, 2014

SUBJECT: COMMENTS ON SECTION 4, REASONABLE ASSURANCE ANALYSIS, OF
THE DRAFT WATERSHED MANAGEMENT PROGRAM FOR THE LOS
ANGELES RIVER UPPER REACH 2 WATERSHED MANAGEMENT AREA

This memorandum contains comments on Section 4, Reasonable Assurance Analysis, of the draft Watershed Management Program, dated June 26, 2014, which was submitted by the Los Angeles River Upper Reach 2 Management Group.

- A. General comments on the draft Reasonable Assurance Analysis (RAA) section of the Watershed Management Program.
1. The LA County MS4 Permittees in the Los Angeles River Upper Reach 2 Watershed Management Area are subject to interim and final water quality-based effluent limitations pursuant to Attachment O, Part A "Los Angeles River Watershed Trash TMDL", Part B "Los Angeles River Nitrogen Compounds and Related Effects TMDL", Part C "Los Angeles River and Tributaries Metals TMDL", and Part D "Los Angeles River Watershed Bacteria TMDL". Note that Table 1-5 on page 15 of the draft WMP should be updated to include the effective date for revisions to the Los Angeles River Nitrogen Compounds and Related Effects TMDL, which is August 7, 2014.
 2. The water quality monitoring data for the Los Angeles River Upper Reach 2 water body segments were gathered, assessed, and analyzed for both wet and dry weather in the draft WMP. Selected monitoring sites include LAR 008 30, LAR1-9, LAR1-10, and LALT500 which are located in Los Angeles River Reach 2, near or below confluence of Rio Hondo Reach 1 and above the confluence of Compton Creek. These sampling locations are suitable to represent the receiving water quality for the Los Angeles River Upper Reach 2 watershed management area. All data were analyzed to identify exceedances of water quality objectives and should be used to identify Category 3 priority pollutants. The draft WMP should be revised to include Category 3 waterbody-pollutant combinations based on the data that were already analyzed in the draft WMP. Pursuant to Section VI.C.5.a., the WMP should identify potential sources, strategies, control measures and BMPs to address Category 3 priority pollutants, as required. Category 3 WBPCs can be revised once monitoring data have been collected, through the adaptive management process.

The concentration-based WQBELs for metals listed on page 78 of the WMP are incorrect and should not be used to set allowable loads. The correct concentration-based WQBELs for metals, which can be used in lieu of calculating allowable loads during dry weather, are identified in Attachment O, Part C.2.c. The load-based WQBELs for metals applicable during wet weather, which are identified in Attachment O, Part C.2.d of the permit should be used to calculate the allowable load and required reduction for metals during wet weather conditions. In summary, allowable pollutant loadings should be calculated separately for wet and dry weather using the WQBELs listed in Attachment O, Parts C.2.c and C.2.d of the permit. Loads must be expressed as daily loads, consistent with the expression of the WQBELs; Table 4-4 should be revised to specify that the loads presented are daily loads.

3. Allowable loads for metals based on the required WQBELs and potential WER / SSO values for copper and lead should be presented clearly and separately in Section 4.3.1.3 of the WMP, since the copper WERs and recalculated lead values have not been approved by the Regional Water Board as of this time. If concentration-based WQBELs are selected to be used to calculate the allowable loads, and these allowable loads are different from the mass-based WQBELs listed in Attachment O, the WMP should provide a clear explanation on how the proposed concentration-based WQBELs and allowable loads were derived from the WQBELs in Attachment O.

B. Modeling comments regarding analysis of copper, lead, zinc, nitrogen and bacteria concentrations/loads:

1. The model predicted loads presented in Table 4-3 for the baseline condition are not consistent with those results directly from model output (see Figures A and B, for example). These discrepancies could be due to the usage of the 90th percentile year for the predicted results of pollutant loads. Further, all model results of pollutant loads are presented in terms of lbs/year in Table 4-3 through Table 4-6. However, the results for the RAA should be presented in units consistent with the expression of each of the WQBELs in Attachment O of the MS4 Permit.
2. For the baseline condition, the model predicted runoff volume and the concentrations for copper, lead, zinc, nitrogen, and bacteria should also be presented in Table 4-3 for the wet weather condition. For cadmium, no model results are included in Table 4-3. An explanation is needed for the exclusion of cadmium from the modeling, or alternatively, supporting documentation/analysis to demonstrate that the model results for copper, lead and zinc or total sediment adequately represent the baseline condition and required reduction for cadmium.
3. The differences between baseline concentrations/loads and allowable concentrations/loads should be presented in a time series for each pollutant under long term continuous simulation and then as a summary of 90th percentile of the differences between pollutant concentrations/loads and allowable concentrations/loads for wet weather periods, in units consistent with the applicable WQBELs and Receiving Water Limitations (e.g., mass or number per day), instead of using the predicted results of selected year presented only as an annual reduction in load to represent for load reduction target. In addition, a detailed explanation should be provided of the calculations used to derive the target load reductions.

4. The report used a pollutant load-based approach to evaluate BMP performance and compliance with applicable WQBELs for wet weather conditions. However, the report should also provide predicted concentrations in the receiving water or at the downstream outlets under the BMP scenarios. Additionally, Table 4-17 to Table 4-20 need to be revised to clarify the units for the values presented in each table. Finally, it appears that model output is only provided for final compliance deadlines. Model output should also be provided for phased BMP implementation to demonstrate that interim WQBELs for metals and bacteria will be met.
5. The ID number for each of the 50 subwatersheds from the model input file should be provided and be shown in the simulation domain to present the geographic relationship of the subwatersheds within the watershed area that are simulated in the LSPC model.
6. The flow, runoff volume and water quality (pollutant concentration and pollutant mass) time series output at the watershed outlet as well as for each modeled subbasin should be provided using the 90th percentile critical condition consistent with the expression of the WQBELs in Attachments N and O to estimate the baseline condition. In addition, per RAA Guidelines, the model output should include stormwater runoff volume and pollutant concentration/load at the outlet and for each modeled subbasin for each BMP scenario as well (see Table 5. Model Output for both Process-based BMP Models and Empirically-based BMP Models, pages 20-21 of the RAA Guidelines).
7. Model simulation for copper, lead, zinc, nitrogen, and bacteria under the dry weather condition was not included in the Report and needs to be addressed.
8. The report did not describe how the model was calibrated, including calibration results compared to calibration criteria in Table 3.0 of the RAA Guidelines, and no historical hydrology and water quality monitoring data were used for comparison with the model results for the baseline prediction. According to Part G, pages 12-13 of the RAA Guidelines, model calibration is necessary to ensure that the model can properly assess all the variables and conditions in a watershed system.
9. The identification of the 90th percentile years in Table 4-2 needs to be supported by presenting historical hydrological data to demonstrate the selected critical period will capture the variability of rainfall and storm sizes/conditions. The input rainfall should be also presented in the report along with the historical precipitation frequency analysis for wet days and rainfall depth.