

Response to Regional Board Comments on June 2016 Draft of the Upper LA River EWMP

EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision	Response / Considerations
(1) Section 3	Part VI.C.5.a	<p><u>Water Body-Pollutant Combinations</u></p> <p>Revise Section 3 of the draft EWMP:</p> <ul style="list-style-type: none"> • Include the Water Body-Pollutant Categories summary tables from Appendix 3.A (i.e. Tables 3-6) 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. 	<ul style="list-style-type: none"> • Added Water Body-Pollutant Categories summary tables from Appendix 3.A to the main EWMP document. • Incorporated references for Category 1 interim and final WQBELs into the main EWMP document and added tables identifying receiving water limitations utilized to identify Category 2 and 3 pollutants in Appendix 3.A.
(2) Section 3, Table 3-5, Table 3-6, and Appendix 3.A	Part VI.C.5.a	<p><u>Compliance Schedule for Dioxin</u></p> <p>Revise the dry weather and wet weather compliance schedules for 2, 3, 7, 8-TCDD (dioxin) in LA River Reach 3 and Burbank Western Channel.</p> <p>The compliance schedules for these water body-pollutant combinations should reflect the 2024/2028 compliance schedule given to dioxin in LA River Reach 6 (Table 14).</p>	<ul style="list-style-type: none"> • Revised per request.
Selection of Watershed Control Measures			
(3) Section 4.3	Part VI.C.5.b	<p><u>Relative Capacities of Control Measures:</u></p> <p>Address the following inconsistency in Section 4:</p> <ul style="list-style-type: none"> • Section 4-3 states that “as shown in Figure 4-3, regional projects on public land make up 26% of the total control measure capacity in the EWMP. Regional projects on private land make up an additional 31% of the EWMP capacity.” However, Figure 4-3 lists regional BMPs on public land as 29% of the relative capacity (by adding Very High, High, and Medium projects) and regional BMPs on private land as 27% of the relative capacity. The Group must clarify this discrepancy. • Include the relative capacities and number of public and private regional projects needed for the 2037 compliance date (as opposed to only discussing the 2028 compliance date). • Figure 4-3 must indicate the estimated acreage required for projects that comprise the “Regional BMPs (private)” control 	<p>Language was also added to Section 4.2 regarding regional BMPs on private land and their challenges and potential opportunities to avoid them. The relative percentages were corrected. The equivalent private regional BMP acreage is now provided as a note associated with Figure 4-3. The footnote also explains the difference in private regional BMP capacity for the 2028 and 2037 milestones.</p>

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		<p>measure category in lieu of the number of projects provided for other Regional BMPs categories.</p>	
(4) Section 4.3 and Section 7.2	Part VI.C.5.b	<p><u>Regional Projects on Private Parcels</u></p> <p>In the Group’s EWMP Implementation Strategy, regional projects on private parcels make up 31% of the control measure capacity to be implemented by 2028. Furthermore, as noted in Figure 7-4, additional regional projects on private parcels are needed for final EWMP compliance in 2037.</p> <p>The Group needs to elaborate on the feasibility of such a strategy and detail its process for implementing these BMPs. The Group must explicitly describe any difficulties or issues that may be faced with this strategy and these types of projects.</p> <p>Furthermore, in the case where implementing the number of regional projects on private parcels as indicated in the EWMP Implementation Strategy is found to be infeasible, the Group shall 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 31% 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? 	<p>Language regarding private regional BMP implementation was added to Section 4.2 and 8.2.4.</p>
(5) Section 4.5	Part VI.C.5.b	<p><u>Signature Regional Projects</u></p> <p>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; 	<ul style="list-style-type: none"> • Specific planning milestone dates are now provided for regional projects. • As appropriate, the requested information was added to Table 4-1. The tabulated recommended BMP volumes represent the storm water runoff volume associated with each project under the assumption that the facility is empty.

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		<ul style="list-style-type: none"> Identify the responsibilities of each participating Permittee for each project; Clarify and/or correct the signature project fact sheets for Freemont Park and Sierra Vista Park (Figures 4-13 and 4-20), which appear to incorrectly list the Design Storm Event for these projects as “85th Percentile, 24 hr.” 	<ul style="list-style-type: none"> The EWMP Group Members contributing runoff to each candidate project were identified, and the Group Member with jurisdiction over the candidate site was listed first. During the delineated pre-design milestones, the specific responsibilities of each Group Member will be defined. Project fact sheets were revised per these comments
(6) Section 5.3	Part VI.C.5.b	<p><u>Green Streets</u></p> <p>The “green street volume utilization” is either 50-75% or 75-100% 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. 5-5), the Group notes that “[d]ata limitations currently hamper decision making.” The Group must elaborate on these limitations and how these limitations will be addressed.</p>	<ul style="list-style-type: none"> Language was provided describing the extent of the green street programs that are reflected by the EWMP – please see next bullet. “Data limitations” were clarified in the text, including uncertain drainage patterns, underground utilities, road data, etc., which will be refined during upcoming planning milestones.
(7) Section 7.5	Part VI.C.5.b	<p><u>Additional Institutional Control Measures</u></p> <p>Revise Table 7-4 to include milestones and dates for achievement for the following controls measures</p> <ul style="list-style-type: none"> Train staff to facilitate LID and Green Streets implementation Adopt Sewer System Management Plan (SSMP) Incentives for irrigation reduction practices Encourage retrofitting of downspouts (downspout disconnect) Refocused outreach to target audiences and water quality priorities 	<ul style="list-style-type: none"> Revised Table 7-4

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		<p>Additionally, address concerns related to the following control measures:</p> <ul style="list-style-type: none"> • Adopt Sewer System Management Plan (SSMP): Most public agencies that own/operate sanitary sewer systems should be enrolled under the Waste Discharge Requirements for Sanitary Sewer Systems, and should have already adopted and be implementing an SSMP. The EWMP should remove the listing of this as an additional institutional control or it must clearly demonstrate why these specific agencies should get credit for their SSMPs. • Incentives for irrigation reduction practices: Detail whether the City of South Pasadena is doing anything beyond the Metropolitan Water District program and provide rationale why the city should specifically get credit for an additional institutional control measure (as compared to other EWMP Group Members that are Member Agencies). 	<ul style="list-style-type: none"> • Removed SSMP from Table 7-4 • Revised Table 7-4 to include specific activities by the City of South Pasadena that extend beyond the MWD program
(6) Section 7.4	Part VI.C.5.b	<p><u>Non-Stormwater Strategy and Control Measures</u></p> <p>Include additional information on the Group’s dry-weather strategies:</p> <ul style="list-style-type: none"> • Clarify whether the elimination of non-stormwater flows includes authorized and exempt non-stormwater discharges through the MS4. • Clarify how the non-stormwater elimination will be achieved as indicated in Figure 7-25 and Figure 3-2 of Appendix 6.B. It is unclear if the 100% reductions for the 2037 compliance date are solely based off of routing the dry weather runoff time series through the EWMP Implementation Strategy’s BMP network. The Group should clearly state any assumptions it is making for this 100% reduction projection. 	<ul style="list-style-type: none"> • Clarifying language was added to Section 7.4.1 as follows: <ul style="list-style-type: none"> ○ The reductions shown in Figure 7-15 are wholly based on wet weather BMP effectiveness. ○ The wet weather control measures will address all dry weather runoff , both authorized and exempt.
Enhanced Watershed Management Program Provisions			
(7) Section 4.4	Part VI.C.1.g	<p><u>Retention of NSW runoff and 85th percentile:</u></p> <p>The Group identifies which of the signature regional projects are able to retain the 85th percentile, 24-hour storm event.</p>	

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		<p>For the remaining regional projects, clarify in Section 4.4 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>	<ul style="list-style-type: none"> Language was added to the footnote in Section 4.3 regarding the timeline for evaluating feasibility in detail.
(8) Section 9.2		<p><u>EWMP Implementation Costs</u></p> <p>Clarify how the estimated EWMP implementation costs for regional projects are divided among Permittees—e.g. are costs split percentage-wise based on contributing drainage areas?</p>	<ul style="list-style-type: none"> The costs and capacities for regional projects were split based on contribution impervious drainage area. If a jurisdiction drains to a regional BMP, then the EWMP Implementation Strategy for that jurisdiction includes regional BMP capacity even if the <i>footprint</i> for the regional BMP is located in a different jurisdiction. The costs are split in the same manner.
(9) Section 9.3	Part VI.C.1.g.ix	<p><u>Financial Strategy</u></p> <p>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 EWMP Group as a whole, as well as individual Group members are currently prioritizing and selecting the specific financing strategies that best fit their needs.” The revised EWMP must include this prioritization and selection of specific financing strategies, or provide a timeframe for completing the 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 identifies 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 must include an update on what progress the Group has made on achieving these identified financial plan components. 	<ul style="list-style-type: none"> The EWMP was revised to include a prioritization of financing strategies. The EWMP was revised to provide more detail on the potential funding sources as well as to identify potential challenges, feasibility of developing the funding source, and a general quantification of funding available from each source. The EWMP was revised to provide updates where available and clarify potential future steps.

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		<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The EWMP was revised to more clearly outline potential funding sources for signature projects. Although funding for design and construction has not been identified for all signature projects the process for securing the funding is outlined.
(10) Appendix 4.B		For the Appendix C (Optimization Results by TetraTech) to Appendix 4.B, provide a definition for the term “PDR” used in the <i>Summary of Recommended Solutions</i> tables.	<ul style="list-style-type: none"> PDR means Point of Diminishing Return, where the cost-benefit of additional capacity is low.
Reasonable Assurance Analysis (RAA)			
(11) Section 6.2.5.1 and Figure 6-6	Part VI.C.5.b.iv.(5)	<p><u>90th Percentile Exceedance Volume</u></p> <p>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. 	<ul style="list-style-type: none"> A new Appendix 6-I was created to provide additional information requested by the Regional Board including information on the Exceedance Volume calculation methodology.
(12) Sections 7.1, 8.1., and 8.2		<p><u>EWMP Implementation Strategy Compliance</u></p> <p>In explaining its EWMP Implementation Strategy, the Group states:</p> <p>“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</p>	<ul style="list-style-type: none"> Additional explanation of the equivalency calculations and approaches was added to Section 8.2.4.

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		<p>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 or methodology to go along with the scenarios described in Section 8.2.4.</p>	
(13) Section 7, Appendix 7.A, and Appendix 7.C		<p><u>EWMP Implementation Plan and Strategy for Lakes</u></p> <p>It isn't clear which subwatershed IDs in the EWMP Implementation Plan (Appendix 7.A) are associated with Lake Calabasas, Echo Park Lake, and Legg Lake. Furthermore, the EWMP Implementation Strategy (as presented in Figures 7-5 through 7-21 and Appendix 7.C) does not appear to include control measure scheduling for these lakes. Revise these sections to address these water bodies. As noted in the EWMP, these water bodies are subject to TMDLs.</p>	<ul style="list-style-type: none"> Appendix 6-I contains additional information regarding the RAA and strategy for urban lakes including subwatershed IDs.
Other			
(14) Appendix 6H		<p><u>Miscellaneous</u></p> <p>Clarify the following:</p> <ul style="list-style-type: none"> Page 6.H.4 appears to have been inadvertently added to the EWMP (e.g. Table 6H-1). 	<ul style="list-style-type: none"> Fixed

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1.	The model results of hydrology calibration as shown in Table 6-1 indicated that the difference between modeled and observed values of annual storm volume is 22.go/o for the LA River at Wardlow Avenue, while the difference between modeled and observed values for the highest 10% of flows is -21.1% for Santa Anita Wash and 20.4% for Compton Creek. Provide additional discussion regarding these differences - i.e., the over-prediction of annual storm volume in the LA River at Wardlow and in Compton Creek, and the under-prediction of the highest flows in Santa Anita Wash.	<ul style="list-style-type: none"> • Additional discussion added to Section 6.2.2. • Also, please note the changes to Table 6-1 and 6-2. A model update in early 2015 had not been captured in the calibration metrics table (the metrics still reflected an older model version). The tables now reflects the calibration metrics for the latest version of the model that was used for the June 2016 draft EWMP. All other results in the EWMP and the model files transmitted to the Regional Board reflect the correct version of the model used for the EWMP.
2.	Explain the difference between the scale of normalized streamflow (e.g., Figure A-12 and similar figures) and the x-axis and y-axis scales of modeled and observed streamflow in the regression graph for the same stream gage. ¹	<ul style="list-style-type: none"> • Language added to Appendix 6A to explain the difference.
3.	For water quality calibration, the differences in modeled and observed values for total zinc, total lead and E. coli are -27.7%, -32.5% and -32.1%, respectively. Provide additional discussion regarding the error between modeled and observed values for total zinc, total lead, and E. coli and potential explanations for the under-prediction of the modeled load relative to the observed load. Further, identify the data needed to improve model calibration for total zinc, total lead, and E. coli and include a commitment to collect the necessary data to refine the RAA through the CIMP and adaptive management process.	<ul style="list-style-type: none"> • Language was added to Section 6.2.2 regarding additional data to be considered during future baseline model updates.
4.	For zinc and other metals, the critical condition is defined as the goth 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 (zinc) load to demonstrate that the EV approach is protective relative to other metrics including the goth percentile pollutant load.	<ul style="list-style-type: none"> • Added bar graph comparing 90th percentile conditions for total zinc with the EV approach in new Appendix 6-I
5.	Note that many of the text references to tables and figures in Appendix 6.A are not properly linked to the table or figure (i.e., "Error! Reference source not found" was observed in several places throughout the appendix). Please correct.	<ul style="list-style-type: none"> • Fixed.
6.	Provide the model results for the proposed control measures and potential BMPs to demonstrate the effectiveness of the proposed BMPs relative to the required pollutant load reductions and load reduction goals.	<ul style="list-style-type: none"> • Added tables summarizing model results including BMP effectiveness by assessment area in new Appendix 6-I
7.	Provide an example validation for a representative waterbody within the ULAR or in another EWMP area where a similar RAA approach is being 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, the RWLs will be achieved.	<ul style="list-style-type: none"> • Added example regional validation discussion in Appendix 6-I