

Reference Number	EWMP Reference	MS4 Permit Provision	Comment and Necessary Revision	Input	Response or Discussion	Responsibility
1	EWMP, Page 12		Correct omission of REC-1 and REC-2 designations in Table 2-1 Beneficial Uses of Water Bodies and Coastal Features Designed [sic] in the Basin Plan for Santa Monica Bay- Nearshore Zone, which should have been assigned "E" for the REC-1 and REC-2 beneficial uses.		"E" has been assigned to REC-1 and REC-2 for Santa Monica Bay – Nearshore Zone	MWH
2	EWMP, Page 54		On Figures 4-12 to 4-14 (EWMP, pages 54-56) there are two colors of blue in the key and it is hard to differentiate in the figure which of the two blues is being used and if there is an overlap of colors. Revise maps for clarity. Also, storm drain/line labels on some maps are hard to read due to the font size & color. Please check other figures for legibility as well.		Maps have been revised for clarity. Items not used in the map have been removed from the key. Labels have been moved and increased in sized for clarity.	MWH
3	Appendix G		Proofread and correct grammatical and punctuation errors in Appendix G.	El Segundo will review the source of the document and provide MWH with a word file if appropriate	The plastic pellet memo was corrected for grammatical and punctuation errors.	MWH
4	EWMP, page 68		Correct the header on pages 69-76. It says "EWMP Implementation Costs and Financial Strategy," but that section is Section 7, which begins on page 77.		Header has been changed	MWH
5	EWMP, page 73		Under Section 5.5, for clarity, create a sub-header for compliance with the debris TMDL and one for the SMB TMDL for DDTs and PCBs.		Sub-headers have been created	MWH
6	EWMP, All Appendices		Put appendix letter in either footer or header so it is easier to find the appendix the reader needs. It is very difficult to navigate as is. In addition (if possible) please put in page numbers within each Appendix (e.g. for Appendix A, A-1, A-2, etc.) so that pages can be referenced in the review process.		Appendix letter and page number has been added to footer	MWH
7	EWMP, Appendix A, page 31 and other pages with similar maps		The drainage area of RBMP23 2-2 Parking Lot is very hard to distinguish (Figure 7, Appendix A, page 31). Check all maps with this same color for legibility (i.e., a light orange color)		Each figure showing the drainage area of regional BMPs has been updated to better distinguish these areas. Additional clarification has also been added to the legend to distinguish between drainage areas and BMP footprints.	Geo
8	EWMP, Appendix A, Section 4.3, page 59		Regarding debris, the XXX should be replaced with the actual numbers of the catch basins.	All WMG will provide the number of catch basins in their TMRP	From MWH: Section 4.3 has been edited to state that compliance with Debris TMDL will be met through a phased retrofit of all catch basins throughout the SMB EWMP area . Criteria for catch basins exempt from retrofitting has also been added.	Geo
9	EWMP, page 7	NA	Regarding page 7 of the EWMP, the first and second paragraph discuss the compliance deadlines associated with the Trash and Bacteria TMDLs. Reference or provide these dates and specify whether the dry weather bacteria TMDL compliance dates are for summer or winter. Table 2-3 should also be referenced for completeness. In addition, eliminate redundancy in paragraphs 1 and 2 regarding the discussion of final compliance. Additionally, correct the title of Table 1-3.		The text was updated to clarify that dry weather refers to both "summer and winter." Reference to the compliance deadlines in Table 2-3 was added and the redundancy	Geo

					between paragraphs was removed.	
10	EWMP, Table ES-5, page xvi; EWMP Table 2-3, page 13 and EWMP, Appendix A, Table 1	NA	In Table ES-5 (EWMP, page xvi), Table 2-3 (EWMP, page 13) and Table 1 in Appendix A correct the winter dry weather bacteria final compliance date to read November 1, 2009 and not July 15, 2009. (Final Basin Amendment Santa Monica Bay Beaches Bacteria of Resolution R12-007 (page 8)). Also correct footnote 2 in each and the discussion on page xiii; the TMDL revisions became effective on July 2, 2014.		Tables have been corrected to reflect the November 2009 winter dry weather bacteria final compliance date	MWH
Water Quality Characterization						
11	EWMP, Pages 14-16	Part VI.C.5.a.i.	The EWMP provides some information on the sources of bacteria, PCBs & DDTs, and lead, and the relative contribution of these sources, but the EWMP does not provide any numeric information in terms of loading or concentration data. Where data or studies are cited and contain loading or concentration data, a summary of the data must be provided.		When data or studies were referenced in this section, numeric data were inserted when available and where applicable. Note that some studies discuss the relative magnitude of concentrations but do not provide specific numerical values or only provide graphical representation. Numerical data from these studies were not included.	Geo
12	EWMP, Figure 2-1, page 11	Part VI.C.5.a.iii .(1)(b)	More clearly delineate the boundaries of J2/J3 in Figure 2-1 Receiving Waters in the SMB EWMP Group Area). A dark black outline around the borders of the J2/J3 boundaries would be helpful		A dark black outline was added to the border of the J2/J3 boundary for clarity	Geo
Water Body Classification						
13	EWMP, pages 10-16	Part VI.C.5.a.ii	It is not clear from the EWMP what analysis was conducted to identify potential Category 3 pollutants (those which are not 303(d)-listed, but which exceed applicable receiving water limitations contained in the Permit and for which MS4 discharges may be causing or contributing to the exceedance). Explain what process/analysis was used to reach each conclusion that there were no pollutants to be placed in Category 3.		Text has been added to the introduction of this section to include the monitoring data referenced in the categorization of pollutants. Additional text was added to explain that while SWAMP data were reviewed to evaluate potential Category 3 pollutants, data were insufficient to characterize the sampled water bodies due to the limited quantity of data.	Geo
Source Assessment						

<p>14</p>	<p>EWMP, page 16</p>	<p>Part VI.C.5.a.iii .(1)(a)(v)</p>	<p>DDT and PCB</p> <p>The EWMP states: "With respect to stormwater, the TMDL does not specifically characterize MS4 loadings, though it does recognize that "DDT and PCBs are no longer detected in routine stormwater sampling from Ballona Creek or Malibu Creek." However, the TMDL also states that current detection limits¹ used to analyze DDT and PCB concentrations are too high to appropriately assess the water quality. Stormwater inputs are assumed to come from urban areas, as the TMDL specifically states that rural areas in NSMBCW are not likely to be a major source of PCBs or DDT (USEPA, 2012)."</p> <p>Provide justification why DDT and PCB do not need to be addressed based on USEPA's Santa Monica Bay Total Maximum Daily Loads for DDTs and PCBs (Pages 32-34 and 37).</p> <p>Data that must be considered from the USEPA TMDL are:</p> <ol style="list-style-type: none"> 1. Sampling data at MS4 monitoring sites located at Ballona Creek (since 1994) and Malibu Creek (since 1997). 2. DDT and PCB loading data from the early 70s through around 2006. Report the average concentrations estimated by Curren et al. (2010)- 6.2 g for DDT and 32.9 g for PCBs. (Both of these estimates are for Ballona Creek only, which is adjacent to SMB J2/J3). 3. Use the estimated loads of DDT and PCBs from all urban areas to Santa Monica Bay calculated by USEPA's DDT/ PCB TMDL for Santa Monica Bay (28 g/yr for DDT and 145 g/yr for PCBs) as a guide in developing the appropriate loads to the J2/ J3 area. 4. Sediment data from the, the City of LA presented in Table 4-3 (page 34 of the SMB DDT and PCBs TMDL). (in conjunction with the method outlined in #5 above) to estimate the PCB and DDT average loads to J2/J3. <p>(#1-4 above came from the Santa Monica Bay Total Maximum Daily Loads for DDTs and PCBs, pages 32-34)</p> <p>Because of the conclusion in the USEPA SMB TMDL for DDTs and PCBs, as indicated above, the EWMP group must collect data under its CIMP to assess contributions of DDTs and PCBs from the J2 & 3 EWMP area to Santa Monica Bay, and re-evaluate the categorization and prioritization of DOTs and PCBs on the basis of the CIMP data. See also comments on RAA regarding DDTs and PCBs, below.</p>		<p>As made clear in the TMDL, data related to DDT and PCB loading in stormwater is scarce. At this time, insufficient data is available to conduct a RAA using typical EWMP modeling techniques. In addition, the TMDL WLAs are based on estimated existing loads throughout SMB: "Because existing stormwater loads from the watersheds are lower than the calculated total allowable loads to achieve sediment targets, the waste load allocations for stormwater in this TMDL are based on existing load estimates of 28 g/yr for DDT and 145 g/yr for PCBs." In other words, the WLAs for MS4 discharges is effectively an anti-degradation based WLA, and it can be assumed that existing loads from the MS4 are in compliance with the TMDL. Monitoring under the CIMP will be conducted, and adaptive management will be used based on monitoring results to update the EWMP, as necessary. Text has been added to the Source Assessment and RAA sections to clarify.</p>	<p>Geo</p>
<p>15</p>	<p>EWMP, Page 16</p>	<p>Part VI.C.5.a.iii .(1)(a)(v)</p>	<p>Lead must continue to be monitored under the CIMP to assess whether it is meeting WQBELs. While lead is a Category 2 pollutant in Santa Monica Canyon Channel and it was determined through an RAA calculation to require a TLR of 0, it is a metal that is characteristically derived from urban watersheds.</p> <p>Reference the TMDL for Metals in Ballona Creek and the following findings which may be applicable to the SMB J2&J3 EWMP area:</p> <ol style="list-style-type: none"> 1. During wet weather, runoff from industrial sites has the potential to contribute metals loadings to the creek. This finding is supported by Stenstrom et al. in their final report on the industrial storm water monitoring program under the existing general permit. The report found that the mean value for lead was 2960 ug/L (Stenstrom et al., 2005). 2. The most prevalent metals in urban stormwater are consistently associated with suspended solids (Sansalone and Buchberger 1997, Davis et al. 2001). These metals are typically associated with fine particles in storm water runoff (Characklis and Wiesner 1997, Liebens 2001), and have the potential to accumulate in estuarine sediment posing a risk of toxicity (Williamson and Morrisey (2000). 3. During 1991-1996 92% of lead annual watershed loads came from wet-weather runoff. (Ballona Creek Metals TMDL, pages 27-28) 	<p>City of verify that there is no data to report at this time</p>	<p>Will reference, as appropriate, for Santa Monica Canyon Channel. However, to clarify, the findings from the Ballona Creek TMDL for Metals are not applicable throughout the entire EWMP area, since lead is not a pollutant of concern except in the Santa Monica Canyon subwatershed.</p> <p>Text has been added to indicate that lead will be monitored and water quality characterization and the RAA will be updated if WQBELs are not being met. The references noted have also been added to the text. Please note that</p>	<p>Geo</p>

					these references and this discussion is specifically for Santa Monica Canyon (2-7), which is the only location with lead as a POC.	
16	NA	Part VI.C.5.a.iii .(1)(a)(vii)	Include all available data and conclusions on DDTs or PCBs from Permittee(s)' monitoring program		All of the relevant data have been included. See previous comment related to DDTs and PCBs. No additional text edits have been made.	Geo
Selection of Watershed Control Measures						
17	EWMP, page 30	Part VI.C.5.b	Clarify the relationship between Section 4.1 and Appendix F, Section 6 and reference Appendix F, Section 6 as appropriate in the main body of the EWMP. In addition, clarify whether the bulleted items on pages 33-34 of Appendix F of the EWMP are meant to summarize the MCMs required until the EWMP is approved (2001 MCMs) or the MCMs required after the EWMP is approved (2012 MCMs). If the former, add a parallel bulleted list that summarizes the additional MCM elements that will be implemented after EWMP approval.		<p>The following sentence has been added to Section 4.1: "A detailed discussion of tasks within these six MCM categories can be found in Appendix F."</p> <p>The following sentence has been added to Section 6.1: "Additional details outlining the customization process of specific MCMs can also be found in Appendix F."</p> <p>The following sentence has been added to Section 6.1: "As a result, outlining an effective adaptive management process is critical for implementation of the EWMP."</p> <p>Clarifying language has been added to Appendix F and a parallel bulleted list summarized examples of additional MCM elements to be implemented post EWMP approval has been included.</p>	MWH
18	EWMP, page 39	Part VI.C.5.b.iv .(4)(a), page 64	<p>A total of 36 regional/centralized BMPs required for compliance were outlined in Table 4-6.</p> <p>Of the 36 projects, it appears that 17 were mentioned in the SMB Bacteria TMDL Implementation Plan, while 10 do not appear in the Plan and it is uncertain whether 9 appear in the plan or not. Indicate which of the projects were derived from the SMB Bacterial TMDL Implementation Plan and which are newly identified projects.</p>		Footnote has been added to indicate which projects were derived from the SMB Bacterial TMDL Implementation Plan	Geo
19	Various	Part VI.C.5.b.iv .(4)(e)	Ensure that the plan clearly identifies the responsibilities of each participating permittee for each watershed control measure, including non-structural BMPs (e.g., programmatic, institutional, source control, etc.)			LASAN
20	EWMP, Appendix A, page 17	Part VI.C.5.b.iv .(5)(c)	Show work for deriving the modeled 90th percentile daily concentration of 21 ug/L for lead.		The raw daily concentration data produced from SBPAT (consisting of 10,000 monte carlo daily storm simulations) that were used to determine	Geo

						the 90th percentile daily lead concentration will be supplied in the electronic data files provided with this EWMP. A footnote to this section has been added to explain this.	
Adaptive Management Provisions							
21	Section 6		Itemize specific analyses that will be reevaluated as data become available and during adaptive management, which may include but are not limited to: water quality calibration; PCB baseline loading and target load reductions; and Pb baseline loading and target load reductions in Santa Monica Canyon.			Text has been added to the Adaptive Management Process section explaining these analyses as potential future updates to the RAA.	Geo
Enhanced Watershed Management Program Provisions							
22	Section 4.2.4		Provide a description/itemization of the anticipated multiple benefits of each of the eight regional BMPs.			Table 4-9 Summary of Anticipated Benefits for Regional EWMP Projects has been added.	MWH
23	EWMP, page 20, EWMP, Appendix A, page 4	Part VI.C.1.g.iv, page 49	As the RAA approach for dry weather relies on a demonstration of certain conditions at CMLs and their drainage areas, such as "there no MS4 outfalls owned by the SMB EWMP Group agencies within the CML's drainage area" and "there are no non-stormwater MS4 outfall discharges within the CML's drainage area," substantiate these findings for each CML with a map of the drainage areas associated with each CML that includes all MS4 outfalls (major and minor) and observations conducted at CMLs and MS4 outfalls.			Dry weather methodology has been re-worded for clarification. Only one CML utilized the condition of no non-stormwater MS4 outfall discharges within the CML's drainage area. A map for this CML (Figure 23) has been added to Appendix A.	Geo
24	EWMP, page 20	Part VI.C.1.g.iv, page 49	Ensure that the CMLs subject to the antidegradation provisions per the SMB Beaches Bacteria TMDL (Resolution No. R12-007) are clearly identified in the EWMP			The following footnote has been added to the third bullet in Section 3.2.1: "SMB 2-11, 2-13, and 3-6 are all antidegradation-based CMLs for dry weather."	MWH
25	EWMP, Appendix F, page 29	Part VI.C.1.g.vi, page 50	Table 5-1- Regional Project Evaluation Criteria, in a memo entitled "Existing and Potential Control Measures Technical Memorandum" provides different criteria for consideration in evaluating the Regional projects to propose. Criteria include: cost effectiveness (capital cost, funding options), stormwater capture goals (water quality, volume of water captured), environmental, public policy institutional issues (political constraints, partnerships), land ownership (public vs. private), ease of implementation (permitting, constructability). Provide ranking of potential regional projects, including those proposed in the EWMP and others that were evaluated but not selected for inclusion in the EWMP, if any, per these evaluation criteria.			Additional information has been added to section 4.2.3 detailing the Regional Project Initial Screening process.	MWH
26	NA	Part VI.C.1.g.vi ii, page 50	Provide a clear discussion of how the program ensures existing requirements to comply with technology based effluent limitations and core requirements (e.g., prohibiting non-stormwater discharges of pollutants in stormwater to the MEP) are not delayed.	City will investigation comment and either reach out to RWQCB for clarification or provide direction		Text in section 4 has been revised to address these comments.	LASAN
27	EWMP, pages 79-80	Part VI.C.1.g.ix, page 50	Document existing sources of funding more precisely at the Permittee level (see Table 7-4). Include data/information for El Segundo, which is currently missing from Table 7-4. In addition, clarify the column "Existing Utility" in Table 7-4			Text in this section has been substantially revised to address these comments	LASAN
28	EWMP, Section 7.1		Provide documentation on how centralized and distributed projects will be integrated into or aligned with, existing CIPs for each Permittee. Indicate whether this alignment could off-set capital costs (such as for			Text in this section has been substantially revised to address	LASAN

			green streets) and, if so, by how much.		these comments	
29	EWMP, Section 7.4.4		Provide timeframe(s) for developing a more detail financial plan to implement the EWMP.		Text in this section has been substantially revised to address these comments	LASAN
30	EWMP, Table 4-6	Part VI.C.4.b.iii .(5),page 56	Clarify the completion date for RBMP10_PenmarPh2 and define the "" associated with this project in Table 4-6		The following text has been added to define the "" : The incremental load reduction between Penmar Phase I (existing) and Penmar Phase II (planned) is negligible. Therefore, the full load reduction applicable to Penmar Phase II has been applied to the interm compliance deadline/target."	MWH
31	EWMP, page 6	NA	In Table 1-2 303(d)- Listed Water Bodies in the SMB Watershed (EWMP, page 6) it says the pollutant "debris" in Santa Monica Bay Offshore/ Nearshore is addressed by the "Trash TMDL". Revise the last column "Notes" for accuracy to state that it is addressed by the "Debris TMDL."		Notes has been changed to "Debris TMDL"	MWH
Reasonable Assurance Analysis (RAA)						
32	Executive Summary	Part VI.C.5.b.iv .(5)(page 65)	<p>The draft EWMP, in Section 5.5, states the following: <i>"Therefore, consistent with the TMDL, it is assumed that there is a zero load (page 65) reduction required for PCBs and DDTs in MS4 discharges, and reasonable assurance is demonstrated."</i></p> <p>However, the SMB DDTs/PCBs TMDL on page 49 states the following: <i>"The estimates of total suspended solids (TSS) are based on LSPC model outputs for the years 2000 to 2010 based on Ackerman and Schiff (2003). Using this method the theoretical maximum allowable stormwater loads would be 506 g/yr for DDT and 154 g/yr for PCBs (Table 6-3). However, estimates of current stormwater loads are much lower. Estimates based on the median value from Curren et al. (2011) extrapolated to the other watersheds based on percent urban area were 28 g/yr for DDT and 145 g/yr for PCBs. The highest loadings were from Bollana Creek, Hermosa Beach and Santa Monica Canyon watersheds. These three watersheds are highly urbanized and combined they represent 94% of the developed area draining to Santa Monica Bay. With the exception of PCBs from these three watersheds, all other estimates of current loading are lower than the allowable loadings."</i></p> <p>For PCBs, an RAA must be conducted to estimate the pollutant load reduction for PCBs. Using TSS as a surrogate pollutant for PCBs is an acceptable approach for the purposes of conducting an RAA. Note that the WLA for PCBs (140.25 g/yr) applies to the entire Santa Monica Bay Watershed. The Group is subject to a proportional percentage of the WLA relative to the percent area within the watersheds draining to Santa Monica Bay. If a pollutant load reduction is required for PCBs, additional BMPs must be proposed to address it. Revise relevant tables and text as applicable.</p> <p>The Group must also, during the adaptive management process, commit to re-evaluating DDT and PCB loadings using data from the CIMP (from receiving water and/or outfall monitoring sites) and subsequently conducting an RAA with the available data.</p>		<p>See previous related comment/response (No. 21).</p> <p>No additional text updates have been made.</p>	Geo
33	Appendix F, Section 5		Include full citation for Thoe et al. 2015 in Reference section, or correct date of publication. Citation on page 4 of Appendix F does not match citation in Reference section.		It is our assumption that this and the following comments are referring to Appendix A and not Appendix F. The Reference in Appendix A has been changed to 2015 to match the citation.	Geo

34	Appendix F, Figure 1		Clarify distinction between S-2-15 and SMB-2-15 and W-2-01 and SMB-2-01 analysis regions.		Additional lines have been added to this figure to clarify where these regions are located.	Geo
35	Appendix F, Table 15, footnote **		Fill in dates of observations in table note ""**".		The dates have been added beneath this table.	Geo
36	Appendix F, Table C-4		Correct title of table		This table title is correct. The numbers shown are the arithmetic irreducible of BMP effluent concentrations, or in other words, the minimum BMP effluent concentration expected based on statistical analysis of BMP effluent data.	Geo
37	Section 3.1		<p>Section 3.1 Modeling System to be used for RAA and BMP Selection</p> <ul style="list-style-type: none"> In Section 3.1 of the main body of the EWMP, provide reference to Appendix A, section 2.3.3, including Tables 3 and 4 and Figure 4, which describes the analysis conducted to select the critical condition for the RAA Model simulation integrates Monte Carlo methods that rely on repeated random sampling to calculate a distribution of outcomes. Describe how this is used relative to evaluation of required water quality outcomes under critical conditions as well as average conditions. 		Text was added to Section 3.2.2 (as opposed to section 3.1) to reference Appendix A Section 2.3.3 including Tables 3 and 4 and Figure 4. This section describes the RAA approach and not the selected model, which is why the text was added here. Text was also added to Section 3.1 and Section 3.2.2 explaining that the Monte Carlo methodology is the same for the average and critical years and that analyzing the critical year is more conservative than the average year.	Geo
38	Section 3.2.2		Revise the RAA process described in Section 3.2.2 of the draft EWMP consistent with the revised Figure (from the EWMP Work Plan) to provide a clear RAA process to ensure required reductions shall be met.		Text has been added to this section to include selecting the model, performing model calibration, and estimating baseline loads. With these additions, this section is now consistent with the referenced figure.	Geo

39	RAA Modeling Comment		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.			The annual calibration results were also provided in a flow duration curve format. Reference to this figure was also called out in the text.	Geo
40	RAA Modeling Comment		The model results of the baseline condition (loads are included in Table 10 of Appendix A) in terms of runoff volume and pollutant concentration are not provided in the EWMP. 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).			Table 10 has been revised to include the runoff volume, concentration, and load associated with the allowable conditions. However, it should be noted that for purposes of compliance modeling, only the TLR in terms of load was evaluated. The corresponding runoff volume and concentration are provided for informational purposes only. Detailed model output for all conditions is provided in the RAA data folder (submitted electronically).	Geo
41	RAA Modeling Comment		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 (as described in Appendix A and presented in Table 11 and Table 12). As such, the detailed reasonable assurance analysis (RAA) results for the proposed BMPs specifically for each analysis region should be provided in terms of 1) influent volume, concentration and load; 2) treated volume, concentration and load; and 3) effluent volume, concentration and load through BMPs in the EWMP report to demonstrate the effectiveness of the proposed BMPs.			Due to the robust size of the data requested, the runoff/concentration/load values have been included in the RAA data folder for each BMP condition and each analysis region. The text of the EWMP has been revised to direct readers to these data files.	Geo
42	RAA Modeling Comment		An example illustrating the modeling results of the bacteria in the receiving water at the downstream outlet of the watershed system should be presented to demonstrate the effectiveness of all BMPs in place (when compared with those of the baseline condition, for which all BMPs are not in place) and to demonstrate the			An example as requested has been included in Appendix A of	Geo

Regional Board Comments dated 10/26/2015

Review of the Santa Monica Bay Jurisdictional Group 2 and 3 Draft EWMP

Pursuant to Part VI.C of the Los Angeles County MS4 Permit (NPDES Permit No. CAS004001; Order No. R4-2012-0175)

			compliance with final water quality limits (WQL) under the selected critical year.		the EWMP.	