## **ATTACHMENT 1**

Staff Response to Petitioners' Detailed Technical Comments in its Memorandum of Points and Authorities and Exhibit D

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	1	Lower Los Angeles Riv	
Part VI.C.5.b.iv.(4)(b)-(c)	"The MS4 Permit requires that the WMP provide specificity with regard to structural and non-structural BMPs, including the number, type, and location(s), etc. adequate to assess compliance. In a number of cases, additional specificityis needed[T]here should at least be more specificity on actions within the current and next permit terms."	The response, and other statements throughout the document, demonstrate that no commitments to "specificity or actions" or associated timelines are made.	The Revised WMP provided more specificity in Section 5 regarding structural and non-structural best management practices (BMPs). Regarding structural BMPs, the Revised WMP included a pollutant reduction plan in Section 5.4 (pg. 5-7) that indicates the BMP volume that each Permittee needs to install within its jurisdiction at 31%, 50%, and final milestone dates (these milestones occur in 2017, 2024, and 2028, respectively) and also identified regional projects that could support achieving the 31% and 50% milestones. Section 5.3 was revised to include a schedule of feasibility studies and site assessments for regional projects. Section 5.2 (pg. 5-4) listed structural low impact development (LID) BMPs that are to be constructed within this permit term. However, the Revised WMP did not contain definitive milestone dates, nor did it specify the Permittees responsible for the projects. The Executive Officer's approval letter included a condition that the Group add definitive dates for these LID BMPs. The Final WMP includes two new tables, Tables 5-2 and 5-3, which

<sup>&</sup>lt;sup>1</sup> For each comment, the Petitioners indicated that there was no requirement to address the comment on the draft WMP in the conditions set forth in the Executive Officer's approval letter. Where a condition was not included in the approval letter, it is because the Executive Officer determined that the comment had been adequately addressed, either in the revised WMP or through other means.

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
			provide detail on the Permittees responsible for each LID BMP, and the deadlines and status for the project tasks (pgs. 5-4 to 5-5).
			The compliance schedule for nonstructural BMPs contained in Table 5-1 (pg. 5-3) of the Revised WMP contained some indeterminate milestone dates and in the case of TCM-RET-1 "Encourage Downspout Disconnects," no interim milestones or milestone dates. The Executive Officer's approval letter included a condition that the Group modify the milestones for these BMPs. The Final WMP addresses this condition by including additional milestones and dates for their achievement. These details on structural and non-structural BMPs
			adequately addressed the Board staff's comment.
Part VI.C.5.b.iv.(4)(b)-(c)	"the WMP should at least commit to the construction of the necessary number of projects to ensure compliance with permit requirements per	No change was made in the document in response to the comment.	As originally contained in the draft WMP, Section 5.4 (pg. 5-7) lists the BMP volume capacities that each Permittee needs to install to comply with milestones in 2017, 2024, and 2028. These BMP capacities are taken directly from the WMP's reasonable assurance analysis (RAA) analysis.
	applicable compliance schedules."		If a Permittee does not achieve these BMP volume capacities by a milestone date, they are not in compliance with their WMP.
			Further, as stated above, Section 5.2 (pg. 5-4) lists structural LID BMPs that are to be constructed within this permit term. Section 5.3 (pg. 5-4) was revised to

- 2 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
			include a schedule of feasibility studies and site assessments for regional projects. However, the Revised WMP did not contain definitive milestone dates, nor did it specify the Permittees responsible for the LID BMPs. The Executive Officer's approval letter included a condition that the Group add definitive dates for these LID BMPs. The Final WMP includes two new tables, Tables 5-2 and 5-3, which provide detail on the Permittees responsible for each LID BMP, and the deadlines and status for the project tasks (pgs. 5-4 to 5- 5).
			The Group has conveyed to Board staff that the information contained in Section 5 is the maximum practicable given uncertainties and that greater certainty will be provided through the adaptive management process.
			This adequately addressed Board staff's comment.
Part VI.C.5.b.iv.(5)	"The RAA should clarify that sufficient sites were identified so that the remaining necessary BMP volume can be achieved by those sites that were not 'excluded	No change was made in the document in response to the comment.	The Group has indicated to Board staff that the complete list of potential sites — including the sites that were "excluded for privacy" — provide the necessary BMP volume, and that the "excluded for privacy" sites should be considered since they are still potential regional BMPs sites within the watershed.
	for privacy."		Section 5.4 (pgs. 5-7 through 5-15) lists potential regional BMPs that each Permittee may implement to achieve their 2017 and 2024 milestones. The regional BMPs listed in this section consist of public parks and do not include sites with addresses that were "excluded

- 3 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
			for privacy." Since the Group's Pollution Reduction Plan is an "initial scenario" that may adapt over time by substituting BMPs that produce an equivalent volume reduction, the above information given by the Group is sufficient. For example, through adaptive management, the RAA (Appendix A-4-1, pg. 64) notes that a jurisdiction may "increase implementation of green streets and reduce implementation of regional BMPs." This adequately addressed Board staff's comment.
Part VI.C.5.b.iv.(5)	"The RAA identifies zinc as the limiting pollutant and notes that this pollutant will drive reductions of other pollutants. If the Group believes that that [sic] this approach demonstrates that activities and control measures will achieve applicable receiving water limitations, it should explicitly state and justify this for each category 1, 2, and 3 pollutant."	No change was made in the document in response to the comment.	The Group has added additional clarification on its limiting pollutant approach in Section 5 (pg. 5-1) of the WMP and in Section 5.3.1 of the RAA (Appendix A-4-1, pg. 38). The revised WMP does not state and justify this approach for each category 1, 2, and 3 pollutant; however, this is not necessary given the Group's limiting pollutant approach. This adequately addressed Board staff's comment.

- 4 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
Part VI.C.5.b.iv.(5)	"We note that modeling was not conducted for organics (DDT, PCBs, and PAHs). It is not clear why these pollutants were not modeled or why previous modeling of these pollutants could not be usedAn explanation for the lack of modeling is needed."	No change was made in the document in response to the comment.	The Group has clarified that the Harbor Toxics TMDL did not directly model these pollutants, but instead used sediment as a surrogate. To establish baseline pollutant loading, the Group uses the 90 <sup>th</sup> percentile of observed concentrations for DDT, PCBs, and PAHs. This adequately addressed Board staff's comment.
Part VI.C.5.b.iv.(5)	"the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL was [sic] appears to be completely omitted from the draft WMP."	No change was made in this section of the document and there is no inclusion of analysis of pollutant controls, as requested.	On pgs. 38-39 of Appendix 4, A-4-1, Reasonable Assurance Analysis, the Group demonstrates that their limiting pollutant approach takes into account the Harbor Toxics TMDL by evaluating DDT, PCB, and PAHs in its RAA. The Group states that implementing control measures that control zinc will achieve the load reductions required to achieve the water quality based effluent limitations (WQBELs) of the Harbor Toxics TMDL. This is a reasonable assumption and consistent with the Harbors Toxics TMDL, in which the Board acknowledges that implementation of other TMDLs in the watershed may contribute to the implementation of the Harbors Toxics TMDL.

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
Part VI.C.5.b.iv.(5)	"Pursuant to Section VI.C.5.a., the WMP should be revised to include an evaluation of existing water quality conditions, classify them into categories, identify potential sources, and identify strategies, control measures, and BMPs as required in the permit for San Pedro Bay unless MS4 discharges from the LLAR WMA directly to San Pedro Bay are being addressed in a separate WMP."	There is only one reference in the document to San Pedro Bay, and it remains unchanged from the 2014 version of the WMP.	The Group explained to Board staff that discharges to San Pedro Bay will be addressed by the City of Long Beach's WMP, which is currently under review by Board staff. As a note, the City of Long Beach is the only Group member adjacent to San Pedro Bay; however, the portion of Long Beach included in the Lower LA WMP Group is primarily adjacent to the LA River Estuary, not San Pedro Bay. As the original comment notes, this approach is appropriate. Therefore, no condition was included in the Executive Officer's approval letter to address this comment.
Part VI.C.5.b.iv.(4)(c)	"The draft WMP appears to rely mostly on the phase-out of copper in automotive brake padsto achieve the necessary copper load reductions[O]ther structural and non- structural BMPs may still be needed to reduce Cu loads sufficiently to achieve compliance deadlines for interim and/or final WQBELs."	No change was made in the document in response to the comment.	The RAA's approach of using zinc as a limiting pollutant, while anticipating copper reductions through Senate Bill 346 is an adequate approach to compliance with copper WQBELs. Therefore, no condition was included in the Executive Officer's approval letter to address this comment The WMP Group has explained its approach and estimates of copper reductions under Senate Bill 346 have been provided since issuance of comments on the draft WMP. This adequately addressed Board staff's comment.

- 6 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
Part VI.C.5.b.iv.(5)(c)	"For waterbody-pollutant combinations not addressed by TMDLs, the MS4 Permit requires that the plan demonstrate using the reasonable assurance analysis (RAA) that the activities and control measures to be implemented will achieve applicable receiving water limitations as soon as possible[The RAA] does not address the question of whether compliance with limitations for pollutants not addressed by TMDLs could be achieved in a shorter time frame."	No response identified.	<ul> <li>The revised WMP (pg. 5-1) includes new language that clarifies the Group's strategy:</li> <li>Meeting the load reductions determined by the RAA results in an aggressive compliance schedule in terms of the technological, operational, and economic factors that affect the design, development, and implementation of the necessary control measures.</li> <li>The revised WMP provides an estimate of the cost of structural BMPs and based on this estimated cost, reiterates the financial difficulties and uncertainties of implementing the WMP (particularly the lack of funding sources for controls), and concludes that the compliance schedule is as short as possible to allow time to both address technological and operational challenges and to secure the necessary funding to implement the watershed control measures in the WMP.</li> <li>This additional clarification is a sufficient response to the comment. The Group's existing strategy to control pollutants "as soon as possible" is sound.</li> </ul>

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
Part VI.C.5.b.iv.(5)	"The WMP assumes a 10% pollutant reduction from new non-structural controlsadditional support for this assumption should be provided, or as part of the adaptive management process, the Permittees should commit to evaluate this assumption during program implementation and develop alternate controls if it becomes apparent that the assumption is not supported."	No change was made in the document in response to the comment.	<ul> <li>The revised WMP now includes Section 4.3 (pg. 4-4), which discusses non-modeled controls, including the 10% pollutant reduction from new non-structural controls.</li> <li>Section 4.3 also clarifies the support for the 10% pollutant reduction and commits to a reevaluation of the assumption: "Agencies will evaluate this assumption during Program implementation and develop alternate controls if it becomes apparent that the assumption is not supported."</li> <li>This adequately addressed Board staff's comment.</li> </ul>
Part VI.C.5.b.iv.(5)	"the predicted baseline concentrations and loads for all modeled pollutants of concern, including TSS, should be presented in summary tables for wet weather conditions."	No change was made in the document in response to the comment.	<ul><li>Table 5-6 of the RAA (Appendix A-4-1, pg. 40) reflects baseline loads for organics, metals, and bacteria.</li><li>Although TSS is not included, the sediment associated pollutants are included (DDT, PCB, and PAH).</li><li>This adequately addressed Board staff's comment.</li></ul>
Part VI.C.5.b.iv.(5)	"The report presents the existing runoff volumes, required volume reductions and proposed	No change was made in the document in response to the comment.	Attachment B to the revised WMP includes detailed jurisdictional compliance tables that include runoff volumes, required volume reductions, and proposed volume reductions for each subwatershed.

- 8 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	<ul> <li>volume reductions from BMP scenarios to achieve the 85th percentile, 24-hour volume retention standard for each major watershed areaThe same informationalso needs to be presented for each modeled subbasinAdditionally, more explanation is needed as to what constitutes the 'incremental' and 'cumulative' critical year storm volumes in table 9- 4 through 9-7 and how these values were derived from previous tables.</li> <li>"The report needs to present the same information, if available, for nonstormwater runoff."</li> </ul>		Language was added in section 9.2.1 of the RAA (Appendix, pg. 55) that clarifies the incremental and cumulative columns in Tables 9-4 through 9-7. Section 4.2 of the revised WMP commits to re-calibrate the RAA based on data collected through the monitoring program (which includes the non-stormwater outfall screening and monitoring program). This adequately addressed Board staff's comment.

- 9 -

Permit Citation	Regional Board	Environmental Groups'	Regional Board Staff's Assessment of Revised
	Comment on Draft	Analysis of Revised WMP	WMP Responsiveness to Comments and/or Final
	WMP	Responsiveness to	WMP Responsiveness to Conditions of Approval
		Regional Board Comment <sup>1</sup>	
		Lower San Gabriel Rive	er
Part VI.C.5.b.iv.(4)(b)-(d)	"the WMP should at least commit to the construction of the necessary number of projects to ensure compliance with permit requirements per applicable compliance schedules."	The response implies no commitment beyond good intentions and a willingness to track progress (or its lack thereof) through the permit cycle.	The Petitioners' comment and Board staff's assessment is similar to that made on the LLAR WMP. As originally contained in the draft WMP, Section 5.4 (pgs. 5-7 through 5-20) lists the BMP volume capacities that each Permittee needs to install to comply with milestones in 2017, 2020, and 2026. These BMP capacities are taken directly from the WMP's RAA analysis. If a Permittee does not achieve these BMP volume capacities by a milestone date, they are not in compliance with their WMP. Section 5.2 (pg. 5-4) lists structural LID BMPs that are to be constructed within this permit term. Section 5.3 (pg. 5-4) was revised to include a schedule of feasibility studies and site assessments for regional projects. However, the Revised WMP did not contain definitive milestone dates, nor did it specify the Permittees responsible for the LID BMPs. The Executive Officer's approval letter included a condition that the Group add definitive dates for these structural BMPs. The Final WMP includes two new tables, Tables 5-2 and 5-3, which provide detail on the Permittees responsible for each LID BMP, and the deadlines and status for the project tasks (pgs. 5-4 to 5-5). The Group has conveyed to Board staff that the information contained in Section 5 is the maximum
			practicable given uncertainties and that greater

- 10 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
			certainty will be provided through the adaptive management process.
			This adequately addressed Board staff's comment.
Part VI.C.5.b.iv.(4)(d)	"The MS4 Permit requires that the WMP provide specificity with regard to structural and non-structural BMPs, including the number, type, and location(s), etc. adequate to assess compliance. In a number of cases, additional specificityis neededthere should at least be more specificity on actions within the current and next permit terms to ensure that the following interim requirements are met"	The response, and other statements throughout the document, make it clear that no commitments to "specificity or actions" or associated timelines are made. There is also no cross- walk between scheduled completion dates and interim compliance deadlines. Given the vague nature of nearly all of the "milestones," it's not surprising that there is no direct linkage between actions, meeting interim requirements, and the schedule.	The Petitioners' comment and Board staff's assessment is similar to that made on the LLAR WMP. The Revised WMP provided more specificity in Section 5 regarding structural and non-structural BMPs. Regarding structural BMPs, the Revised WMP includes a pollutant reduction plan in Section 5.4 (pg. 5-7) that indicates the BMP volume that each Permittee needs to install within its jurisdiction at 10%, 35%, and Final milestone dates (these milestones occur in 2017, 2020, and 2026, respectively) and also identifies regional projects that could support achieving the 10% and 35% milestones. As stated above, Section 5.2 (pg. 5-4) lists structural LID BMPs that are to be constructed within this permit term. Section 5.3 was revised to include a schedule of feasibility studies and site assessments for regional projects. However, the Revised WMP did not contain definitive milestone dates, nor did it specify the Permittees responsible for the projects. The Executive Officer's approval letter included a condition that the Group add definitive dates for these LID BMPs. The Final WMP includes two new tables, Tables 5-2 and 5- 3, which provide detail on the Permittees responsible for each LID BMP, and the deadlines and status for the project tasks (pgs. 5-4 to 5-5).

- 11 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
			The compliance schedule for nonstructural BMPs contained in Table 5-1 (pg. 5-3) of the Revised WMP contained some indeterminate milestone dates and in the case of TCM-RET-1 "Encourage Downspout Disconnects," no interim milestones or milestone dates. The Executive Officer's approval letter included a condition that the Group modify the milestones for these BMPs. The Final WMP addressed this condition by including additional milestones and dates for their achievement. These details on structural and non-structural BMPs adequately addressed Board staff's comment.
Part VI.C.5.b.iv.(5)	"The RAA identifies zinc as the limiting pollutant and notes that this pollutant will drive reductions of other pollutants. If the Group believes that that [sic] this approach demonstrates that activities and control measures will achieve applicable receiving water limitations, it should explicitly state and justify this for each category 1, 2, and 3	The draft WMP does not appear to have been modified in response to this comment.	The Petitioners' comment and Board staff's assessment is similar to that made on the LLAR WMP. (Note: The RAA for LLAR, LSGR, and the Los Cerritos Channel WMP Groups were contained in a 347-page attachment that covered all three watersheds.) The Group has added additional clarification on its limiting pollutant approach in Section 5 (pg. 5-1) of the WMP and in Section 5.3.1 of the RAA (Appendix A-4-1, pg. 38). The revised WMP does not state and justify this approach for each category 1, 2, and 3 pollutant; however, this is not necessary given the Group's limiting pollutant approach. This adequately addressed Board staff's comment.

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	pollutant."		
Part VI.C.5.b.iv.(5)	"We note that modeling was not conducted for organics (DDT, PCBs, and PAHs). It is not clear why these pollutants were not modeled or why previous modeling of these pollutants could not be usedAn explanation for the lack	No change was made in the document in response to the comment.	The Petitioners' comment and Board staff's assessment is similar to that made on the LLAR WMP. The Group has clarified that the Harbor Toxics TMDL did not directly model these pollutants, but instead used sediment as a surrogate. To establish baseline pollutant loading, the Group uses the 90th percentile of observed concentrations for DDT, PCBs, and PAHs. This adequately addressed Board staff's comment.
Part VI.C.5.b.iv.(4)(c)	of modeling is needed." "The draft WMP appears to rely mostly on the phase-out of copper in automotive brake padsto achieve the necessary copper load reductions[O]ther structural and non- structural BMPs may still be needed to reduce Cu loads sufficiently to achieve compliance deadlines for interim and/or final WQBELs."	No change was made in the document in response to the comment.	<ul> <li>The Petitioners' comment and Board staff's assessment is similar to that made on the LLAR WMP.</li> <li>The RAA's approach of using zinc as a limiting pollutant, while anticipating copper reductions through Senate Bill 346 is an adequate approach to compliance with copper WQBELs. Therefore, no condition was included in the Executive Officer's approval letter to address this comment.</li> <li>The WMP Group has clarified its approach and estimates of copper reductions under Senate Bill 346 have been provided since issuance of comments on draft WMP.</li> <li>This adequately addressed Board staff's comment.</li> </ul>

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
Part VI.C.5.b.iv.(5)(c)	"For waterbody-pollutant combinations not addressed by TMDLs, the MS4 Permit requires that the plan demonstrate using the reasonable assurance analysis (RAA) that the activities and control measures to be implemented will achieve applicable receiving water limitations as soon as possible[The RAA] does not address the question of whether compliance with limitations for pollutants not addressed by TMDLs could be achieved in a shorter time frame."	There is no response to this comment.	<ul> <li>The Petitioners' comment and Board staff's assessment is similar to that made on the LLAR WMP.</li> <li>The revised WMP (pg. 5-1) includes new language that clarifies the Group's strategy: <ul> <li>Meeting the load reductions determined by the RAA results in an aggressive compliance schedule in terms of the technological, operational, and economic factors that affect the design, development, and implementation of the necessary control measures.</li> </ul> </li> <li>The revised WMP provides an estimate of the cost of structural BMPs and based on this estimated cost, reiterates the financial difficulties and uncertainties of implementing the WMP (particularly the lack of funding sources for controls), and concludes that the compliance schedule is as short as possible to allow time to both address technological and operational challenges and to secure the necessary funding to implement the watershed control measures in the WMP.</li> <li>This additional clarification is a sufficient response to the comment. The Group's existing strategy to control pollutants "as soon as possible" is sound.</li> </ul>
Part VI.C.5.b.iv.(5)	"The draft assumes a 10% pollutant reduction from new non- structural controlsadditional support for this	There was no substantial advance over what was previously included, though the issue is acknowledged explicitly.	The Petitioners' comment and Board staff's assessment is similar to that made on the LLAR WMP. The revised WMP now includes Section 4.3 (pg. 4-4), which discusses non-modeled controls, including the

- 14 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	assumption should be provided, particularly since the group appears to be relying almost entirely on these controls for near-term pollutant reductions to achieve early interim milestones/deadlines."		<ul> <li>10% pollutant reduction from new non-structural controls.</li> <li>Section 4.3 also clarifies the support for the 10% pollutant reduction and commits to a reevaluation of the assumption: "Agencies will evaluate this assumption during Program implementation and develop alternate controls if it becomes apparent that the assumption is not supported."</li> <li>This adequately addressed Board staff's comment.</li> </ul>
Part VI.C.5.b.iv.(5)	"Based on the results of the hydrology calibration shown in Table 4- 3, the error difference between modeled flow volumes and observed data is 19%The higher error percentage could be due to the exclusion of contributions of flow volume from upstream. For calibration purposes, upstream volume should be includedOnce model calibration has been completed, the upstream flow volume can then be excluded"	Between the 2014 and 2015 RAA's, the % error improves from -19.0% to -3.31%. There is no text change to explain this difference, nor any difference in the graphed monthly hydrographs for observed and modeled flows.	The Group has clarified that upstream flows were taken into account in the RAA. Additionally, the Group has also clarified that the tables in Sections 4.1.1 and 4.1.2 have been updated to show the modeled versus observed volume error for the daily calibration results as opposed to the monthly calibration results used in the draft WMP. This addressed Board staff's comment.

Permit Citation	Regional Board	Environmental Groups'	Regional Board Staff's Assessment of Revised
	Comment on Draft	Analysis of Revised WMP	WMP Responsiveness to Comments and/or Final
	WMP	Responsiveness to	WMP Responsiveness to Conditions of Approval
		Regional Board Comment <sup>1</sup>	
Part VI.C.5.b.iv.(5)	"the predicted baseline	No change in the RAA to	The Petitioners' comment and Board staff's assessment
	concentrations and loads	address this comment.	is similar to that made on the LLAR WMP.
	for all modeled		
	pollutants of concern,		Table 5-6 of the RAA (Appendix A-4-1, pg. 40) reflects
	including TSS, should be		baseline loads for organics, metals, and bacteria.
	presented in summary tables for wet weather		Although TCC is not included, the application
	conditions."		Although TSS is not included, the sediment associated pollutants are included (DDT, PCB, and PAH).
	conditions.		
Part VI.C.5.b.iv.(5)	"The report presents the	The request for a series of	The Petitioners' comment and Board staff's assessment
	existing runoff volumes,	tables by subbasin has not	is similar to that made on the LLAR WMP.
	required volume	been met; an added sentence	
	reductions and proposed	defines the terms used but	Attachment B to the revised WMP includes detailed
	volume reductions from	not how the values were	jurisdictional compliance tables that include runoff
	BMP scenarios to	derived from previous tables.	volumes, required volume reductions, and proposed
	achieve the 85th	No new information	volume reductions for each subwatershed.
	percentile, 24-hour	addressing comment about	
	volume retention	non-stormwater runoff.	Language was added in section 9.2.1 of the RAA
	standard for each major		(Appendix A-4-1, pg. 55) that clarifies the incremental
	watershed areaThe		and cumulative columns in Tables 9-4 through 9-7.
	same informationalso		Explanation for how the values were derived from
	needs to be presented		previous tables is unnecessary since Section 7.11 of
	for each modeled		the RAA (Appendix A-4-1, pg. 46) describes how
	subbasinAdditionally,		incremental volume reductions for milestones were
	more explanation is needed as to what		calculated.
	constitutes the		Regarding non-stormwater runoff, the revised WMP
	'incremental' and		does not include the same information for non-
	'cumulative' critical year		stormwater runoff, however it includes additional
	storm volumes in table 9-		information to support the assumptions used in its dry
	6 and 9-7 and how these		weather analysis:
	values were derived from		- 10% nonstructural BMP assumption in Section

- 16 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	previous tables. "The report needs to present the same information, if available, for non-stormwater runoff."		<ul> <li>4.3</li> <li>25% irrigation reduction assumption in Section 4.2.1</li> <li>Section 4 of the WMP, the Group commits to recalibrate its modeling as data is collected through its monitoring program (which includes the non-stormwater outfall screening and monitoring program).</li> <li>As explained in Section 7.1.2. of the RAA (Appendix A-4-1, pg. 51), for non-stormwater flows, the Group assumes a 10% load reduction from nonstructural BMPs and a 25% reduction in irrigation, which leads to another modeled load reduction. The remaining load reduction required for dry weather is assumed to be addressed by structural BMPs.</li> <li>Since the Group is committed to recalibrate modeling with new monitoring data and evaluate the above assumptions, the revised WMP adequately addressed Board staff's comment.</li> </ul>
		Los Angeles River Upper Re	each 2
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	There is no evidence that this comment was considered or addressed.	Section 2.4 of the Revised WMP was revised to clarify that Category 2 and Category 3 pollutants were well represented by Category 1 pollutants (see Table 2-7). For example, "coliform bacteria," a Category 2 pollutant, is represented by E. coli, a Category 1 pollutant, while various metals identified as Category 3 pollutants are represented by other metals that are Category 1 pollutants. This adequately addressed Board staff's comment.

- 17 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	surrogates for each Category 2 and Category 3 waterbody-pollutant combination."	Regional Board Comment <sup>1</sup>	
Part VI.C.5.a.iii	"the WMP should utilize General Industrial Storm Water Permittee monitoring resultsto assess and potentially refine estimates of pollutant loading from the identified "non-MS4" areas.	The recommended action was not done.	Section 2 of the revised and final WMP was amended to include details on the Group's analysis of non-MS4 industrial stormwater data. The following discussion was included on page 30 both the revised WMP and final WMP: Monitoring data, from non-MS4 Permittees in the LAR UR2 WMA [watershed management area], were also reviewed, however of 161 General Industrial Permittees within the WMA, only 35 were found to have submitted data to the State Storm Water Multiple Application and Report Tracking System (SMARTS) website. Initially, this data was briefly reviewed and appeared to have little diagnostic value in predicting pollutant sources or loads. Following receipt of the Board WMP comment letter, the analysis was repeated and again the data was found to be of limited value in guiding either current pollutant sources assessments or developing credible industrial land use pollutant EMCs. In the majority of cases, the monitoring data appeared variable and inconsistent, reported with mistaken concentration units, and the analytical parameters tracked were unrelated to likely facility pollutants or observed watershed

- 18 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
			impairments. A determination was made that this data did not meet the RAA Guideline criteria for being sustentative and defensible. In addition, the current versions of Permit approved RAA models are limited to less than 20 land use categories, preventing the application of SMARTS Monitoring Data to individual Industrial Permittees.
			The approach in the final WMP is reasonable in light of this analysis.
Part VI.C.5.a.iii	"The draft WMP should consider existing TMDL modeling data, where available, when refining the source assessment.	There is no evidence that this comment was considered or addressed.	The Group and Board staff discussed the existing TMDL modeling and found it too general to refine the Group's source assessment for its watershed area. The Group did, however, add detail to the discussion of TMDL source assessments in Section 2.3 of its Revised WMP, including consideration of recent TMDL monitoring data. This is appropriate as the comment was for the Group to consider existing TMDL modeling data.
Part VI.C.5.a.iii	"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."	There is no evidence that this comment was considered or addressed.	The Group clarified that some of the required spatial information was presented in the Coordinate Integrated Monitoring Program (CIMP). For the remainder, the Group committed to developing it as it implements its illicit connection/illicit discharge activities, non- stormwater screening and prioritization, and source identification.

- 19 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
Part VI.C.5.b Part VI.C.5.b.iv.(5)	"The draft WMP does not clearly specify a strategy to comply with the interim WQBELs for the LA River metals TMDLFurther	There is no evidence that this comment was considered or addressed.	Sections 4 and 5 of the Revised WMPs were revised to add clarity and specificity to the Group's phased implementation schedule relative to interim TMDL compliance deadlines. The Revised WMP also summarizes monitoring data
	discussion of current compliance with the LA River nitrogen compounds TMDL, for which there is a final compliance deadline of 2004, is also needed"		from the LA River Metals TMDL coordinated monitoring program, which indicate that metals rarely exceed receiving water limitations during dry-weather at monitoring stations adjacent to the LAR UR2 watershed management area. (The interim compliance deadline of 2020 for metals in dry weather is one of the nearer term deadlines for the Group.) Regarding compliance with the LA River nitrogen compounds TMDL, the Group included an expand discussion in the RAA explaining that no nitrogen pollutant reduction was required. The Group will further evaluate whether past interim and final deadlines have been met as data are collected
			through the Group's CIMP.
Part VI.C.5.b	"the specific LID street projects and their locations are not identified. The draft WMP should provide as much	Section 4.3.3.2 identifies on proposed LID street BMP in Vernon and one completed and one potential LID street BMP in Commerce. It went on	Table 4-10 of the revised and final WMP lists the extent of LID streets that will be required within the jurisdiction of each LAR UR2 Permittee. Additionally, Section 4.3.3.2 (Revised WMP) and Section 4.5.2 (Final WMP) state:
	specificity as feasible in describing the potential locations for LID streets. Additionally, the permittees that would be responsible for	to give some budgetary rationalizations. Mere mention of three LID street BMPs, only one finished or with a solid commitment, is unresponsive.	they [LID streets] will be located near runoff collection or discharge points where their benefit is most easily accessed and quantifiable. LID Streets were applied to treat 25 percent of commercial and residential land uses in areas that were not tributary to

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	implementing LID street projects should be specified."		proposed regional BMPs on the Los Angeles River side of LAR UR2 WMA. The revised WMP identifies three near-term LID street BMPs in Section 4.3.3.2. The approval letter included a condition, directing the Group to provide interim milestones for LID Street implementation associated with the areas identified in Table 4-10. The Final WMP provides additional interim milestones for both specific projects and overall green street implementation in Table 5-1. The Final WMP also includes additional detail in Section 3.3.3 on green street projects in progress or recently completed with the LAR UR2 WMA, and greater detail in Section 4.5.2 on the type, location and treatment scale of planned green street projects. The additional detail and commitments adequately addressed Board staff's comment.
Part VI.C.5.b	"The WMP assumes a significant reduction in copper based on the phase-out of copper in automotive brake padsto achieve the necessary copper load reductions[A]dditional structural BMPs may still be needed to reduce copper loads prior to entering receiving waters and eliminate copper exceedances of RWLs."	Section 3.3.2 reasons that the phase-out is ahead of schedule and that other copper reductions will be afforded by source controls for zinc. Section 4.3.2.2 also discusses the issue but with nothing beyond the content of the draft WMP. The WMP shows no analysis of other sources and their magnitudes, how the accelerated phase-out might affect copper concentrations	The RAA's approach of using zinc as a limiting pollutant, while anticipating copper reductions through Senate Bill 346 is an adequate approach to compliance with copper WQBELs. Therefore, no condition was included in the Executive Officer's approval letter to address this comment. The WMP Group has clarified its approach and estimates of copper reductions under Senate Bill 346 have been provided since issuance of comments on the draft WMP. Specifically, the Revised WMP provided detail on expected reductions in copper runoff under various implementation scenarios at TMDL compliance milestones (Section 4.3.2.2, Table 4-8, pg. 87).

- 21 -

Permit Citation	Regional Board Comment on Draft	Environmental Groups' Analysis of Revised WMP	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final
	WMP	Responsiveness to Regional Board Comment <sup>1</sup>	WMP Responsiveness to Conditions of Approval
		and loadings, or how source controls for zinc will affect copper. Sources of zinc and copper are not necessarily coincident, and frequently are not.	This adequately addressed Board staff's comment.
Part VI.C.5.b.iv.(5)	"Table 1-5 should be updatedThe concentration-based WQBELs for metals on page 78 are incorrect"	There is no evidence that this comment was considered or addressed.	The revised WMP did not correct the error. However, during a subsequent meeting, Board staff directed the Group to correct Table 1-5 to reflect the correct effective date for the Los Angeles River Nitrogen Compounds and Related Effects TMDL. The final WMP has the correct date in Table 1-5. During the same meeting, Board staff directed the Group to revise the concentration-based WQBELs for metals, which were presented as water effects ratio (WER)-adjusted WQBELs, as the recently adopted WERs are not yet in effect. The final WMP was revised to present the currently applicable WQBELs.
Part VI.C.5.b.iv.(5)	"The differences between baseline concentrations/loads and allowable concentrations/loads should be presented in a time seriesand then as a summary of 90th percentile of the differences between pollutant concentrations/loads and allowable	There is no evidence that this comment was considered or addressed.	Section 4.4 (Modeling Output) of the Revised WMP and Section 4.5 (Modeling Output) of the Final WMP states: [t]he following tables present individual and summed BMP load reductions for fecal coliform, copper, and zinc for the Los Angeles River and Rio Hondo drainage areas. The following tables will follow the units presented in Attachment O of the MS4 Permit. Bacteria loads will be presented in MPN/day, and metal loads will be presented in kg/day. Bacteria load reduction results (Table 4-20 and Table 4-21) are shown for the final wet-weather bacteria TMDL compliance date of 2037, modeled

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	concentrations/loads for wet weather periods, in units consistent with the applicable WQBELs and Receiving Water Limitations"		<ul> <li>using rainfall data from the 90th percentile year based on wet days (2011). Metals load reduction results (Table 4-22 and Table 4-23) are shown for the final wet-weather metals TMDL compliance date of 2028, modeled using rainfall data from the 90th percentile year based on rainfall (1995). Average (mean) load reduction results are shown, as well as the interquartile ranges (25th to 75th percentiles), to reflect model output variability, which is primarily driven by land use EMC variability.</li> <li>Time series data were provided in model output files. Total BMP load reductions that exceed the target load reductions indicate that reasonable assurance (of meeting the permit limits) has been demonstrated for that pollutant for that drainage area. The tables in combination with the model output files adequately addressed Board staff's comment.</li> </ul>
Part VI.C.5.b.iv.(5)	"a detailed explanation should be provided of the calculations used to derive the target load reductions."	There is no evidence that this comment was considered or addressed.	Section 4.3.1, Target Load Reductions, details how the Target Load Reductions were calculated. The Group provided model input and output files that allowed Board staff to verify the calculated Target Load Reductions. The Groups' explanation adequately addressed Board staff's comment.
Part VI.C.5.b.iv.(5)	"Model output should also be provided for phased BMP implementation to demonstrate that interim	There is no evidence that this comment was considered or addressed.	The Group submitted the model input and output file in in response to Board staff's request. The revised WMP relies on a storm water volume capture approach to demonstrate compliance with WQBELs and receiving water limitations. The modeling calculated the

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
	WQBELs for metals and bacteria will be met."		necessary volume capture to achieve compliance with WQBELs and receiving water limitations. Section 4.3.1, Target Load Reductions, includes the calculated volume capture of the BMPs that need to be implemented to achieve compliance. Table 5-1 of the revised WMP identifies the proposed control measure implementation schedule based on the phasing needed to achieve compliance with interim and final compliance targets for both bacteria and metals. The final WMP was revised in response to a condition in the Executive Officer's approval letter to modify the title of Table 5-1 to Control Measure Implementation Schedule, removing the word "tentative" from the title.
Part VI.C.5.b.iv.(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 subwatersheds within the watershed area that are simulated in the LSPC model."	There is no evidence that this comment was considered or addressed.	The Group provided the subwatershed ID numbers as well as submitted the model input and output files in response to Board staff's request.

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
Part VI.C.5.b.iv.(5)	"The flow, runoff volume and water qualitytime series output at the watershed outlet as well as for each modeled subbasin should be provided using the 90th percentile critical conditionsto 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"	There is no evidence that this comment was considered or addressed.	The Group submitted the model input and output files in in response to Board staff's request. The time series output is contained within the submitted model files.
Part VI.C.5.b.iv.(5)	"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 presentation does not demonstrate that the choice of critical years given in Table 4-2 is correct. The analysis and graphing are not for precipitation frequency, as requested by the comment, but flow rate frequency. The addition to the WMP is thus unresponsive.	Section 4.3.1, Target Load Reductions, of the revised WMP clearly states LACFCD's South Gate Transfer Station (D1256) rain gauge is associated with the largest unit area within the WMA, as demonstrated in Figure 4-4 and was therefore assumed to be representative of atmospheric conditions for the sub- region. The period of record for the gage is 1986-2011. The final WMP was revised to include Table 4-1, which lists the annual rainfall depth, for each year, for the period of 1989 to 2011. The comment was appropriately addressed.

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
Part VI.C.5.b.iv.(5)	"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."	Two paragraphs were added to the WMP in section 4.3 reasoning that the approved models are not applicable to dry weather. Yet the consultant who prepared the Lower San Gabriel River RAA developed methodology to simulate dry weather conditions and to develop dry-weather pollutant reduction targets.	The models identified in the Los Angeles County MS4 Permit for use in conducting Reasonable Assurance Analysis were selected because they can represent rainfall and runoff processes of urban and natural watershed systems. The models were designed to model rain events and the resulting pollutant loads based on predictable rainfall-runoff relationships. While several Groups used the models to strategically plan dry weather compliance, they did so in a novel manner by modeling irrigation flow as a simulated rain event. This approach was taken by watershed groups where the Permittees determined that irrigation flow may be a significant source of dry weather pollutant loading in their watershed. Generally, modeling of non-stormwater discharges is not conducted due to uncertainties in predicting dry- weather runoff volume, which is driven by variable and unpredictable human activities rather than climatic factors. As such, dry weather compliance strategies are generally more conceptual, targeting reduction in non- stormwater discharges through implementation of illicit discharge elimination programs and BMPs for stormwater runoff that can have the added benefit of addressing dry-weather runoff as well. Section 4.3, Modeling Process, of the revised WMP states in part, "[a]Ithough model simulations for dry weather are not included, dry weather compliance is demonstrated by the Los Angeles River Bacteria TMDL Load Reduction study, Los Angeles River Metals TMDL CMP Annual Reports, and will continue to be assessed through

- 26 -

Permit Citation	Regional Board Comment on Draft WMP	Environmental Groups' Analysis of Revised WMP Responsiveness to Regional Board Comment <sup>1</sup>	Regional Board Staff's Assessment of Revised WMP Responsiveness to Comments and/or Final WMP Responsiveness to Conditions of Approval
			CIMP implementation, particularly dry-weather receiving water monitoring and non-stormwater outfall screening, source assessments, and monitoring" (pg. 75).
			The approval letter also included a condition, requiring the Group to include reference to the LA River Bacteria TMDL dry-weather load reduction strategy (LRS), submitted by the Group in December 2014, and the specific steps and dates for investigating outlier outfalls as set forth in the LRS. The Final WMP includes a new section 3.1.5.3 and revisions to Table 1-6, which identify steps and dates for investigating outlier outfalls as required by the condition in the approval letter (pg. 41). The dry weather RAA approach is appropriate.