

**California Regional Water Quality Control Board, Los Angeles Region  
City of Long Beach MS4 Permit  
Response to Comments on the Tentative Order**

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<b>Heal the Bay, NRDC, Los Angeles Water Keeper</b>	
1. We believe that the Draft Permit in many aspects either appropriately preserves requirements or improves upon requirements contained in the predecessor Long Beach MS4 Permit.	Comment noted.
2. We are concerned that in other critical aspects the Draft Permit fails to meet the requirements of the federal Clean Water Act and California Porter Cologne Act, and is otherwise inconsistent with both state and federal law. We urge the Regional Board to revise the Draft Permit in accordance with the legal requirements outlined in the comments we present below. Specifically, many of our concerns with the Los Angeles County MS4 NPDES Permit, which are articulated in a petition submitted to the State Water Resources Control Board are applicable to the Draft Long Beach MS4 Permit. Thus, our petition for review of the Regional Board's adoption of Order No. R4-2012-0175 is hereby incorporated and attached as Exhibit A.	<p>Comment noted. Responses to the commenter's specific comments are provided below.</p> <p>Comments concerning the Los Angeles County MS4 Permit are outside the scope of the Regional Board's action to renew the Long Beach MS4 Permit and therefore will not be responded to. To the extent the commenter has incorporated its petition on the Los Angeles County MS4 Permit to make specific comments on the Long Beach MS4 Permit, the Regional Board hereby incorporates by reference Part IV, Sections G.1, G.2, G.3, G.4, I.13, and I.14 of its consolidated response to the petitions on the Los Angeles County MS4 Permit, which responds to the specific contentions raised in the commenter's petition. The Regional Board's consolidated response is available on the Board's website.</p>
3. We are concerned that the Draft Permit in several aspects fails to meet the requirements of federal and state law, and is inadequate to control pollution and protect the region's waters.	The Regional Board disagrees. The draft permit meets the requirements of federal and state law, and is designed to control pollution from MS4 discharges in order to protect the region's waters. The permit advances regulation of MS4 discharges by: including rigorous requirements such as the incorporation of waste load allocations from 9 TMDLs; requirements for on-site retention of storm water runoff from new development and significant re-development; incentives for watershed collaboration to achieve cost effective solutions; and provisions to foster implementation of multi-benefit regional projects. To accomplish this, the draft permit provides clear compliance metrics and timeframes that are authorized under federal and state law.
4. The Draft Permit includes illegal safe harbors that attempt to excuse compliance with the Receiving Water Limitations provisions in some circumstances, in violation of federal anti-backsliding and antidegradation requirements.	The Regional Board disagrees that the draft permit includes illegal safe harbors that attempt to excuse compliance with the receiving water limitations provisions. The draft permit contains watershed management program (WMP) and enhanced watershed management program (EWMP) provisions that create a compliance mechanism for the City of Long

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<p>Safe harbors included in the Draft Permit violate federal anti-backsliding provisions because they render the RWLs less stringent than in the previous permit and do not qualify as exceptions to the federal Clean Water Act anti-backsliding rule. (See Environmental Groups’ Petition at 15-21.) The safe harbors also violate state and federal antidegradation requirements because they would lead to lower water quality in waters to which Long Beach discharges. (See Environmental Groups’ Petition at 24.) For these reasons, the Regional Board must remove the safe harbors in the Draft Permit.</p>	<p>Beach to implement the receiving water limitations (RWLs) provisions with a higher likelihood of success in a shorter period of time, and builds on information obtained over the last ten plus years. Consistent with federal law, the Regional Board has provided the flexibility on how to achieve and demonstrate compliance with the RWLs provisions through rigorous requirements. The WMP/EWMP provisions are designed to work in connection with the existing RWLs provisions, as well as the TMDL provisions and other programmatic sections of the permit. The WMP/EWMP approach allows permittees the flexibility to customize the programmatic elements of the permit based on the water quality outcomes that are required in the permit, which is compliance with water quality standards (i.e., RWLs) and applicable WQBELs. WMPs/EWMPs are subject to public review and ultimately approval by the Regional Board. The draft permit requires that WMPs/EWMPs ensure that discharges from the permittee’s MS4: (1) achieve applicable WQBELs in the TMDL provisions pursuant to the corresponding compliance schedules; (2) do not cause or contribute to exceedances of RWLs; and (3) do not include non-storm water discharges that are a source of pollutants. WMPs/EWMPs must also ensure that controls are implemented to the maximum extent practicable by implementing the minimum control measures that comprise a permittee’s baseline storm water management program. In sum, achieving RWLs remains the centerpiece of the WMP/EWMP approach and as implementation of the permit requires a continuation and enhancement of the City’s existing storm water management program, it will lead to high water quality in waters to which Long Beach discharges, not lower water quality.</p> <p>The commenters also downplay the amount of work that the permittee will have to do where it opts to develop and implement a WMP/EWMP to be deemed in compliance with the RWLs and/or WQBELs. In fact, the amount of work required by the permittee when opting to develop and implement a WMP/EWMP is extensive and more rigorous when compared to the 1999 Long Beach MS4 Permit. The WMP/EWMP provisions require the permittee to establish a clear linkage between its MS4 discharges and receiving water quality. The WMP/EWMP provisions provide much more specific language than that of State Water Board Order WQ 99-05, such as requiring an upfront quantitative “reasonable assurance” analysis (through modeling) that demonstrates</p>

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	<p>that the proposed actions will achieve the required water quality outcomes. Before the permittee starts implementing BMPs and control measures, it is required to do a technical analysis so that BMPs and control measures are selected and designed with the required water quality outcomes in mind. In this regard, this is not a strict “trial and error” approach. Rather, the permittee must evaluate, in advance, what approach it thinks will work and then target resources to implement those measures. The WMP/EWMP framework also requires clear, specific timeframes that are as short as possible and measurable milestones within the permit to ensure progress toward both TMDL related and non-TMDL related (i.e., other RWLs not addressed by a TMDL) water quality requirements.</p> <p>The permittee must also execute an integrated monitoring and assessment program to determine progress towards achieving RWLs and WQBELs. The WMP/EWMP provisions work in conjunction with outfall and receiving water monitoring to ensure that the program is resulting in the anticipated water quality outcomes and requires adaptive management when anticipated outcomes are not achieved. As part of the adaptive management process, the permittee must modify strategies, control measures, and BMPs, as necessary, based on analysis of monitoring data to ensure that applicable WQBELs and RWLs and other milestones set forth in the WMP/EWMP are achieved in the required timeframes.</p> <p>The WMP/EWMP compliance mechanisms are contingent upon the permittee being in <i>full compliance</i> with all requirements and dates for their achievement articulated in the permit and in an approved WMP/EWMP. If the permittee fails to meet any requirement or date for its achievement, the permittee is subject to the provisions of Part VI.A for the waterbody-pollutant combination(s) that were to be addressed by the WMP/EWMP. In sum, the WMP/EWMP approach allows the permittee to implement approved control measures that are reasonably expected to ultimately achieve WQBELs and RWLs and provides the permittee with the certainty that, if it does so in accordance with approved schedules, its interim actions will constitute compliance with applicable interim and, under certain conditions, final WQBELs and RWLs.</p> <p>Further, until a WMP/EWMP is approved by the Regional Board, the permittee must: (1) continue to implement watershed control measures in</p>

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	<p>its existing storm water management program, including actions within each of the six categories of minimum control measures consistent with 40 C.F.R. section 122.26(d)(2)(iv); (2) continue to implement watershed control measures to eliminate non-storm water discharges through the MS4 that are a source of pollutants to receiving waters consistent with Clean Water Act section 402(p)(3)(B)(ii); and (3) implement watershed control measures from existing TMDL implementation plans to ensure that MS4 discharges achieve compliance with interim and final trash WQBELs and all other final WQBELs and RWLs pursuant to Part VIII of the permit by the applicable compliance deadlines occurring prior to approval of a WMP/EWMP.</p> <p>Accordingly, the WMP/EWMP provisions do not create safe harbors that exempt compliance with RWLs, but rather are detailed, measurable provisions designed to ensure compliance with RWLs.</p> <p>The Regional Board disagrees that the WMP/EWMP provisions violate federal anti-backsliding and/or anti-degradation requirements. A detailed explanation has been added to the Fact Sheet in response to this comment.</p> <p>To the extent the commenter has incorporated portions of its petition on the Los Angeles County MS4 Permit to make specific comments concerning alleged “safe-harbors” and anti-backsliding/anti-degradation requirements on the Long Beach MS4 Permit, the Regional Board hereby incorporates by reference Part IV, Sections G.1., G.2, G.3, and G.4 of its consolidated response to the petitions on the Los Angeles County MS4 Permit, which responds to the specific contentions raised in the commenter’s petition. The Regional Board’s consolidated response is available on the Board’s website.</p>
<p>5. The Draft Permit fails to ensure compliance with all interim and final WLAs for TMDLs and incorporates illegal compliance schedules.</p>	<p>The Regional Board disagrees with the comment. The interim and final WQBELs established in the draft permit are consistent with the assumptions and requirements of all available wasteload allocations as required by 40 C.F.R. section 122.44 (d) (1) (vii) (B), including implementation schedules. The draft permit does not exempt compliance with final TMDL wasteload allocations. The draft permit provides the permittee with a means of demonstrating compliance with an applicable final WQBEL for the pollutant(s) associated with a specific TMDL</p>

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	<p>through an approved WMP/EWMP. In drainage areas where the permittee is implementing an approved EWMP, all non-storm water and storm water runoff up to and including the volume equivalent to the 85<sup>th</sup> percentile, 24-hour event must be retained for the drainage area tributary to the applicable receiving water to afford the permittee this means of demonstrating compliance. This compliance mechanism is supported by several years of research, demonstrating, for example, that retention of this storm water volume reduces annual pollutant loads by 94 percent. Notably, this compliance mechanism does not apply to final WQBELs for trash.</p> <p>Furthermore, the permittee must conduct monitoring to evaluate the effectiveness of its EWMP, including the effectiveness of retaining the 85<sup>th</sup> percentile, 24-hour event in conjunction with implementing the other required elements of their EWMP, including customized minimum control measures.</p> <p>Additional explanation has been included in the Fact Sheet supporting use of the retention metric of the volume associated with the 85<sup>th</sup> percentile, 24-hour event as a means of demonstrating compliance. See also response to USEPA comment 5.</p> <p>To the extent the commenter has incorporated portions of its petition on the Los Angeles County MS4 Permit to make specific comments on the Long Beach MS4 Permit, the Regional Board hereby incorporates by reference Part IV, Sections I.13 and I.15 of its consolidated response to the petitions on the Los Angeles County MS4 Permit, which responds to the specific contentions raised in the commenter’s petition. The Regional Board’s consolidated response is available on the Board’s website.</p>
<p>6. The Draft Permit fails to include interim numeric benchmarks for TMDL implementation to properly track TMDL compliance.</p>	<p>The Draft Permit includes all available interim WLAs expressed as interim WQBELs in order to track TMDL compliance. Where there are no final WQBELs and/or RWLs due within the permit term, the permit requires that the Permittee propose in its WMP/EWMP interim milestones and dates for their achievement within the permit term to track TMDL implementation. See Part VII.C.5.i, “Compliance Schedules,” of the Draft Permit.</p>
<p>7. There are inconsistencies between the Draft Permit and adopted</p>	

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<p>TMDLs for the Long Beach Region. We ask the Regional Board to modify the Draft Permit to ensure consistency with these TMDLs:</p> <ul style="list-style-type: none"> <li>• Long Beach City Beaches and Los Angeles River Estuary TMDL for Indicator Bacteria: The draft Permit does not specify how the geometric mean is derived. We suggest that the word “geometric mean” be changed to “rolling 30-day geometric mean” in tables K.1. and K.2. on page 105 of the permit for clarity and consistency with the adopted TMDL.</li> <li>• Los Angeles River Nitrogen TMDL: In the adopted Los Angeles River Nitrogen TMDL, MS4 permittees are required to comply with the one-hour average and thirty day average water quality-based effluent limitations for four forms of nitrogen. The TMDL states that “In addition, the highest four-day average within the 30-day period shall not exceed 2.5 times the 30-day average wasteload allocation” as it applies to ammonia. This additional requirement for ammonia is absent from the Draft Permit, and we ask for its inclusion on page 108 of the permit.</li> <li>• Los Angeles River Bacteria TMDL: The Los Angeles River Bacteria TMDL adopted in 2010 states that “The final WLAs for the geometric mean target during any time at any river segment and tributary in the Los Angeles River Watershed is zero (0) days of allowable exceedances.” We ask that the above requirement be added to page 108 of the permit to be consistent with the adopted TMDL.</li> <li>• Los Angeles River Trash TMDL: We request that the Draft Permit include tables 7.2-2 and 7.2-3 of the adopted Los Angeles River Trash TMDL to clarify how compliance points will be calculated, or, at a minimum include TMDL language in the tentative permit that describes</li> </ul>	<ul style="list-style-type: none"> <li>• With regards to the Long Beach City Beaches and Los Angeles River Estuary TMDL for indicator bacteria, the Regional Board recently reviewed the most robust statistical approach to calculating the geometric mean of bacteria data as part of its reconsideration of five bacteria TMDLs in the region. The revisions to these TMDLs are still moving through the approval process and, therefore, the Regional Board finds it appropriate to refer to the “geometric mean” and will then utilize the calculation approach selected as part of the bacteria TMDL reconsiderations, once it is fully approved for use in the context of bacteria TMDLs.</li> <li>• With regards to the Los Angeles River Nitrogen TMDL, while the commenter is correct that the revised TMDL includes the text, “[i]n addition, the highest four-day [ammonia] average within the 30-day period shall not exceed 2.5 times the 30-day average wasteload allocation,” it is inappropriate at this time to make the changes requested in the draft permit because USEPA has not yet approved the revised TMDL and it is, therefore, not yet in effect.</li> <li>• With regards to the Los Angeles River bacteria TMDL, the Regional Board agrees and has made the change in the draft permit by adding a column to the existing table clarifying that no exceedances of the geometric mean are allowed after the final compliance deadline.</li> <li>• With regards to the Los Angeles River trash TMDL, the trash effluent limitations in the Draft Permit were calculated as the 3-year rolling averages of the TMDL WLAs. The annual trash discharged from the City’s jurisdiction is then compared against this annual trash effluent limitation. Therefore, no explanation is necessary in the permit, since</li> </ul>

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<p>the calculation procedures (e.g. Compliance is XX% of the baseline load calculated as a rolling 3-year annual average).</p> <ul style="list-style-type: none"> <li>• Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL: It is imperative that the tables on pages 119 and 120 of the Permit be changed to reflect the correct final mass-based water quality-based effluent limitation for metals, PAHs, total DDT, and total PCBs. Please update the permit with the correct allocations.</li> </ul>	<p>the effluent limitations are already expressed as the 3-year rolling average of the TMDL WLAs.</p> <ul style="list-style-type: none"> <li>• With regards to the Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters toxic pollutants TMDL, the Regional Board has made the corrections to the existing table.</li> </ul>
<p>8. At the outset, we strongly support that the Draft Permit establishes requirements for new development and redevelopment projects to retain on-site the runoff from the 85th percentile, 24-hour rain event or the 0.75 inch, 24-hour rain event, whichever is greater.</p>	<p>Comment noted.</p>
<p>9. The applicability threshold for new development projects is set unjustifiably high and fails to meet MEP. In particular, the requirement that a project disturb 1-acre and additional add 10,000 square feet of impervious surface is unlawfully lenient in comparison with other Phase I permits in California. Moreover, the Draft Permit’s threshold for new development is entirely nonsensical and unsupported when compared with the permit’s applicability threshold for Redevelopment Projects. At a minimum, the applicability threshold for new development should be no less stringent than that set for redevelopment projects.</p>	<p>The Regional Board disagrees. First, it should be noted that the Draft Permit includes a total of eleven (11) categories of development projects subject to post-construction BMPs. The project thresholds for these categories reflect the potential of those projects to discharge pollutants at levels that would be detrimental to water quality. Of these, only one (1) project category includes the cited project threshold of “1 acre or greater... and adding more than 10,000 square feet”; the other categories use a single project size threshold of 10,000 square feet <i>or less</i>, without the 1-acre requirement. The commenter claims that other Phase I permits have implemented substantially lower threshold requirements. The commenter points out that the San Francisco Bay Region MS4 Permit uses a project threshold of 5,000 square feet for “Special Land Uses.” The Draft Permit includes four project categories that cover the identical “special land uses” included in the San Francisco Bay Region MS4 Permit (retail gasoline outlets, restaurants, parking lots, automotive service facilities) and also uses a project threshold of 5,000 square feet for these categories. Further, it should be noted that the San Francisco Bay Region MS4 Permit has an extensive credit system that allows for the possible <i>lowering of LID treatment requirements</i> under a number of circumstances; the Draft Permit does not contain such a credit system. Other project categories in the Draft Permit – including those for industrial parks, commercial malls, and street and road construction – have the single project threshold of 10,000 square feet without the 1-acre</p>

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	<p>qualification, as requested by the commenter. Another project category is assigned a threshold of just 2,500 square feet impervious area. The project thresholds included in the draft permit are consistent with the adopted Los Angeles County MS4 Permit and the Ventura County MS4 Permit, and with the majority of the MS4 permits in the State and reflect the projects' potential to discharge pollutants at detrimental levels. Second, the redevelopment threshold of 5,000 square feet applies to the same project categories established in the New Development section. The 5,000 square feet threshold is not a standalone trigger for post-construction BMP implementation for redevelopment projects; it only applies to project categories, including applicable thresholds, included in Part VII.J.2. The project thresholds are reasonable for these reasons and in light of the fact that the onsite retention requirement for project categories is as stringent as or more stringent than the retention requirements of any MS4 permit in the state and of most local LID ordinances. The applicability thresholds used in the Draft Permit are based on previous determinations by the Regional Board regarding the potential for various project categories to discharge pollutants at detrimental levels and the feasibility and cost of implementing LID for different types of projects and associated thresholds. The MEP standard considers multiple factors including technological feasibility and cost and the project categories and associated project thresholds included in the Draft Permit comply with the MEP standard. No change made.</p>
<p>10. The Draft Permit's Alternative Compliance Provisions for Biofiltration are Insufficiently Protective of Water Quality and Would Improperly Allow Use of Biofiltration Off-site, Even Where On-Site Retention or Biofiltration were Feasible. In contrast to retention practices, which ensure that 100 percent of the pollutant load in the retained volume of runoff does not reach receiving waters, biofiltration practices that treat and then discharge runoff through an underdrain result in the release of pollutants to receiving waters. Indeed, in order to achieve equivalent pollutant load reduction benefits to the use of on-site retention, biofiltration practices would have to be 100 percent effective at filtering pollutants from runoff, which they are invariably not. Thus, we are concerned that equivalent pollutant load reduction is not guaranteed by a biofiltration system even</p>	<p>The Regional Board required biofiltration BMPs to be sized at 1.5 times the storm water quality design volume based on reported BMP performance. To facilitate achieving the reported efficiencies the Regional Board included detailed design specifications to ensure that biofiltration BMPs would perform up to reported efficiency levels. The Regional Board included detailed underdrain requirements where nitrogen is a pollutant of concern based on biofiltration BMP performance studies. No change made.</p>

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<p>when treating 1.5 times the design stormwater runoff volume.</p>	
<p>11. Repaving of Greater than 10,000 Square Feet of Surface Area on Publicly Owned Streets or Parking Lots Should Trigger Requirements to Meet Post-Construction Low Impact Development Standards. We support the Draft Permit's requirement that new streets, roads, highways, and freeway construction must follow U.S. EPA guidance regarding green streets, but urge the Regional Board to require that roadway construction of this size should be required to meet the Draft Permit's otherwise applicable on-site stormwater runoff retention standards where technically feasible, and require offsite mitigation where it is not.</p>	<p>The Regional Board did not include a specific retention requirement for streets and roads due to the lack of detailed design specifications for roads integrating BMPs designed to infiltrate storm water runoff consistent with other projects. The USEPA Green Street Manual includes infiltration BMPs but the manual recognizes that appropriate design must be implemented to prevent flooding and ensure structural stability of streets and roads. Additionally, due to the linear nature of these projects and limited adjacent right-of-way area, it may not always be feasible to retain the design storm volume onsite; therefore, the reference to MEP is appropriate and aligns with the case specific nature of these projects. See also response to comment 9. No change made.</p>
<p>12. The Draft Permit should require infiltration or evaporation of the 85th percentile storm or 0.75 inch storm, whichever is larger, to the extent feasible at [road] projects creating 5,000 or more square feet of impervious surface.</p>	<p>See response to comment 9.</p>
<p>13. Projects that result in the reconstruction or resurfacing of greater than 10,000 square feet of street, road, highway, freeway, or parking lot surface (or resurfacing of more than 25 parking spaces) should, at minimum, be required to implement post-construction LID BMPs, such as curb cuts, swales, or other retention practices.</p>	<p>The draft permit exempts projects greater than 10,000 square feet of street, road, highway, freeway, or parking lot surface (or resurfacing of more than 25 parking spaces) <i>if the original grade and line are kept</i> because in order to ensure the soil has adequate infiltration capacity, it would mean that the soil underneath the surface would have to be amended and prepped to ensure adequate runoff capacity is available and geological stability is maintained. This would turn routine maintenance projects into major construction. Construction projects that go beyond maintaining the original line and grade are required to implement BMPs from the USEPA's Green Streets Manual. No change made.</p>

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<p>14. The Draft Permit’s Alternative Compliance Provisions Lack Clarity and Should Distinguish Between Groundwater Replenishment Facilities that Convey Runoff From the Project Site (Hydrologically Connected) and Those that Are Hydrologically Unconnected From the Project Site. The Regional Board must provide clarification whether it intends for the term to mean an “off-site” project that is hydrologically unconnected to the project site, or a “regional” (or off-site) project that may receive runoff conveyed to it from the project site. Conveying runoff from the project site to a regional groundwater replenishment facility that will retain that runoff, albeit at a different location, typically does not implicate significant water quality concerns. Where a project performs off-site mitigation at some other location within the same watershed or sub-watershed that is not hydrologically connected to the original project site, it raises substantial concerns as to whether the alternate location will provide equal or greater water quality benefits to the receiving surface water. Among the issues presented by this form of off-site mitigation are whether the off-site mitigation will be performed at a similar land use; whether the mitigation project will achieve equivalent pollutant load reduction; and if so, what pollutants it will be monitored for.</p>	<p>For offsite mitigation, the draft permit already specifies that the water quality benefits have to be equivalent to those achieved by onsite retention and the land uses in projects that are not hydrologically connected have to be similar to the land uses where the development project is located. The Draft Permit also already addresses the concern expressed about ground water replenishment projects by specifying that, “[t]o utilize alternative compliance measures to replenish ground water at an offsite location, the project applicant shall demonstrate (i) why it is not advantageous to replenish ground water at the project site, (ii) that ground water can be used for beneficial purposes at the offsite location, and (iii) that the alternative measures shall also provide equal or greater water quality benefits to the receiving surface water than the Water Quality/ Flow Reduction/ Resource Management Criteria applied onsite. These provisions are included to ensure that pollutant load and type of pollutants are consistent between the onsite and offsite areas. Finally, the draft permit requires a demonstration of infeasibility of onsite retention before alternative compliance measures can be utilized, with the exception of groundwater replenishment projects. No change made.</p>
<p>15. The Draft Permit should be revised to allow off-site mitigation or alternative compliance at a site hydrologically unconnected from the project site only when it is technically infeasible for the project to retain runoff on-site.</p>	<p>See response to comment 14.</p>
<p>16. Even if the Regional Board allows the use of biofiltration for compliance on-site in cases of technical infeasibility, there is no justification for the Board’s proposal to allow use of biofiltration to achieve compliance off-site at retrofit projects. (Draft Permit,</p>	<p>The Regional Board disagrees. Due to the space constraints imposed by retrofitting in an urban environment and the close proximity of groundwater to the surface in many areas of the City of Long Beach, the allowance for the use of biofiltration at offsite retrofit projects is</p>

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<p>at 66.) Where on-site retention is infeasible, off-site mitigation through retention of the design storm volume, including at a retrofit project, should be allowed, coupled with requirements that the project demonstrate equivalent off-site pollutant load reduction and perform on-site treatment of the design stormwater volume.</p> <p>It is unclear whether the Draft Permit's Offsite Project – Retrofit Existing Development, requires infeasibility for on-site retention in the first instance. In this connection, it would appear to allow biofiltration to be performed at an off-site retrofit project, even where on-site retention was feasible. This provision fails to meet MEP. The Draft Permit should be revised to explicitly state that biofiltration is not authorized as a method of alternative compliance at offsite locations under any circumstance where on-site compliance is feasible, and is likewise not authorized where biofiltration can be performed on-site where retention is infeasible.</p>	<p>appropriate. The draft permit requires the treatment of 1.5 times the runoff from the LID design storm for biofiltration and prescribes established design criteria for under drains where nitrogen is a pollutant of concern for offsite retrofit projects to achieve the equivalent pollutant reduction. Furthermore, the draft permit requires pollutant treatment of the storm water runoff from the project site in addition to the offsite mitigation. (See Draft Permit, Part VII.J.4.iii(4)(b).)</p> <p>Under the Alternative Compliance Measures provision, the draft permit states that technical infeasibility for onsite retention must be demonstrated before offsite retrofit of existing development can be used to comply with New Development/ Redevelopment requirements. No changes made.</p>
<p>17. The Draft Permit's Water Quality Mitigation Criteria should apply to all BMPs.</p>	<p>The draft permit's Water Quality Mitigation Criteria prescribes the BMP performance standards (i.e., benchmarks) that must be met by <b>any</b> treatment BMP employed in the case of projects that have demonstrated technical infeasibility for complying with onsite retention requirements. The treatment BMP values were based on the top six performing BMPs to ensure appropriate BMPs are used for the pollutants of concern from a particular project; however, the performance standards derived from this analysis apply to any treatment BMP that is selected regardless of whether it was one of the top six performing BMPs or not. This is important to ensure that these treatment BMPs are effectively treating discharges of pollutants from new and re-development where onsite retention is infeasible. The BMP performance benchmarks could also be used by permittees to assess the effectiveness of other BMPs implemented as part of their storm water management programs, but the Board does not believe that it is a necessary requirement as other aspects of the permit such as the reasonable assurance analysis and monitoring data will provide information on the overall effectiveness of BMPs. No change made.</p>
<p>18. The Draft Permit's Local Ordinance Equivalence Provision</p>	<p>The draft permit clearly states the City of Long Beach will only be</p>

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<p>Creates a Self-Regulatory Scheme in Violation of the Clean Water Act. The revised Long Beach Low Impact Development Standards do not meet the intent or requirements of the Draft Permit’s Planning and Land Development Program. For example, the 2013 revisions to the Standards include a “hardship determination.” This off-ramp does not ensure equivalency ... or meet the requirements of MEP. In addition, certain applicability thresholds in the Long Beach Standards are weaker than the Draft Permit requirements, especially for redevelopment sites. The Local Ordinance Equivalence provision has the potential to exempt development from participation in the Permit’s core requirements to prevent the discharge of pollutants to the MS4 system. These requirements, encompassing the permit’s on-site stormwater controls, LID requirements, alternative performance criteria, hydromodification controls, and other post-construction requirements, are necessarily reviewed through a public process in order to determine whether the permit meets the requirements of the Clean Water Act’s MEP standard. This determination lies properly with the Regional Board in the first instance, through the process of public review and hearing.</p>	<p>allowed to use its LID ordinance to meet the requirements of the permit if it demonstrates that its ordinance provides equal or greater reduction in pollutant loading and volume as would have been obtained through strict conformance with the Planning and Land Development permit provisions. Such a demonstration of equivalency has to be made before the City of Long Beach will be allowed to use their ordinance to demonstrate compliance with the Planning and Land Development Provisions of the Draft Permit. If equivalency is not demonstrated, then the City will either have to strictly follow the Planning and Land Development permit provisions, or amend its municipal code within one year to ensure equivalency. The permit requires that the equivalency demonstration is made through a public process; it will be publicly noticed and public comment will be solicited and then it must be approved by the Regional Board Executive Officer. No change made.</p>
<p>19. The Tentative MRP does not specify the required number of receiving water monitoring locations or exact monitoring locations. Instead, the Tentative MRP states that “[r]eceiving water monitoring shall be performed at all surface waters downstream of the Discharger’s MS4 discharges, and at TMDL receiving water compliance points as designated in TMDL monitoring plans approved by the Los Angeles Regional Water Board Executive Officer...” (Draft Permit at E-4.) The MRP should identify specific additional locations and include a map of all receiving water monitoring locations, including the existing mass emissions stations and TMDL receiving water compliance points.</p>	<p>Consistent with 40 C.F.R. section 122.41(j)(1), Attachment D Part III.A (Page D5), and Attachment E Part XIV.A.1.a (page E32) of the draft Monitoring and Reporting Program state that, “[s]amples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.” The draft permit does not specify the number of monitoring locations or exact monitoring locations to allow the discharger the opportunity to propose and demonstrate representativeness of the sampling locations. Part VI.B.c of Attachment E also requires an explanation of how and why monitoring at the proposed locations will provide representative measurement of the effects of the MS4 discharges on the receiving waters. No change made.</p>
<p>20. The Receiving Water Monitoring requirements contain an insufficient number of monitoring parameters and inappropriately focus on only known impairments, rather than a comprehensive assessment of the waterbody. Specifically the Tentative MRP requires monitoring for flow, known impairments, hardness, pH,</p>	<p>The Regional Board disagrees that there is insufficient number of monitoring parameters and that also disagrees that it is inappropriate to focus on known water quality impairments. Parts VI.C and D of Attachment E of the draft permit state that the receiving water shall be monitored a minimum of three times per year for all parameters except for</p>

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<p>dissolved oxygen, temperature, specific conductivity and toxicity. Additional “screening parameters” are required to be monitored during the first year, and if no hits are found, monitoring can be discontinued. Theoretically under this scenario, a waterbody may only be assessed once during the entire permit, which may extend beyond five years as history has shown, for pollutants such as metals, nutrients and pesticides which are often found at levels exceeding water quality standards in waterbodies throughout the county. TMDL monitoring certainly will not make up this gap. Instead, the Regional Board should maintain the parameters that are currently monitored in the receiving water. (See Order No. 99-060.) This is particularly important for assessing trends over time. This same list of parameters should be additionally be monitored as part of the outfall monitoring program.</p>	<p>aquatic toxicity, which must be monitored twice per year or more frequently if required by applicable TMDL monitoring plans. Because of the number of TMDLs and associated pollutants that apply to the City of Long Beach’s discharges, the City will be monitoring for many parameters throughout the permit term. Additionally, while the screening parameters in Table E-2 are initially only monitored during the first year of monitoring, if the parameter is detected above the lowest water quality objective, then the parameter shall be analyzed for the remainder of the permit at the receiving water stations where it was detected. Only if the screening parameter is not detected at the method detection limit for its respective test method or the result is below the lowest applicable water quality objective, is continued monitoring not required. The Regional Board believes this adaptive approach is reasonable and allows the permittee to focus resources and efforts on those parameters that are of concern to receiving water quality. No change made.</p>
<p>21. The Tentative MRP requires outfall based monitoring from “...at least one major outfall per subwatershed (HUC-12) drainage area, within the Permittee’s jurisdiction.” (Draft Permit at E-18.) However, this will not ensure that appropriate land-use categories are monitored in order to be able to more readily determine if a MS4 is causing or contributing to a water quality objective exceedance. We request that the Regional Board require monitoring from more than one outfall in each HUC-12. Drainages carrying stormwater from commercial, industrial, and high-use transportation should be prioritized.</p>	<p>The Regional Board disagrees. Part VIII.A2.a of the draft Monitoring and Reporting Program states that the storm water outfall based monitoring program should ensure representative data by monitoring <i>at least</i> one major outfall per subwatershed (HUC-12 or HUC-12 equivalent) drainage area within the permittee’s jurisdiction or alternate approaches as approved in an Integrated Monitoring Program or in a Coordinated Integrated Monitoring Program. Part VIII.A.2.b also states that the drainages of selected outfalls shall be representative of the land uses within the permittee’s jurisdiction. With these two requirements, and the fact that the permittee will need to obtain the Regional Board Executive Officer’s approval for the monitoring plan in which the permittee will need to demonstrate why and how the outfalls selected are representative of the land uses, the Regional Board believes the text in the draft permit is appropriate as-is. Note that this approach is the same as that employed in the Los Angeles County MS4 Permit. No change made.</p>
<p>22. The MRP should determine the quality of a Permittee’s discharge relative to water quality standards, not action level. The Regional Board has not provided any justification for using the 25th percentile standard [for Municipal Action Levels, MALs]. Moreover, the Tentative MRP only requires action (3 years later) “for those subwatersheds with a running average of twenty percent or greater of exceedances of the MALs in any discharge</p>	<p>The MRP requires that the Permittee’s discharge is compared against a number of metrics including WQBELs derived from TMDLs, RWLs and non-storm water actions levels, and MALs. The different metrics serve different purposes. Municipal action levels are one tool to aid the permittee in prioritizing management actions in drainage areas that are underperforming in terms of MS4 discharge quality. The MALs do not replace WQBELs but rather to serve as another tool in the permittee’s tool</p>

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<p>of storm water from the MS4.” (G-13). Instead, as was done in the Ventura MS4, the discharge should be compared to water quality standards, and the median performance values should be used for developing Treatment BMP Performance Standards.</p>	<p>box to use in prioritizing/sequencing implementation of best management practices. No change made.</p>
<p>23. The Tentative MRP “incorporates by reference” and simply lists the TMDL Monitoring Plans that have been approved in Table E-1. (Draft Permit at E-7). Referencing the Monitoring Plans makes review of the overall scope of the Tentative MRP monitoring program in conjunction with the TMDL monitoring plans extremely difficult, as the monitoring provisions are not described in the permit itself. It is difficult to discern if the TMDL monitoring programs are adequate for determining if water quality objectives are achieved in the receiving water. The Regional Board should include a summary of TMDL monitoring locations, frequencies and parameters in the MRP or Permit Factsheet.</p>	<p>The Regional Board disagrees. The monitoring locations, frequencies and parameters will be included in the integrated monitoring plans/coordinated integrated monitoring plans, which will be made available for the public to review and are subject to the Regional Board Executive Officer’s approval. No change made.</p>
<p>24. The Tentative MRP requires that the Permittees participate in the SMC Regional Monitoring Program (“SMC”) for bioassessment monitoring. The SMC recently updated their strategy for the coming five years. It is unclear if bioassessment will be part of this upcoming effort. Thus, the Regional Board should not count on SMC to develop and maintain an appropriate monitoring program.</p>	<p>Participation in the SMC Regional Monitoring Program is appropriate in characterizing the overall condition in watersheds in the Los Angeles Region. The draft permit requires the monitoring data be compared to WQBELs and respective water quality standards to determine compliance and to action levels to aid in prioritizing areas that are underperforming within the City of Long Beach. The Southern California index of biotic integrity (So Cal IBI) is an integrative index that is useful for characterization but the Board concludes that it is not necessary for each sampling location within the City of Long Beach. However, the State Board is currently developing biological objectives for California. When that process is completed, the Regional Board will include the appropriate biological objectives among the water quality standards to determine compliance in NPDES permits. No change made.</p>
<p>25. Further, the current SMC program is inappropriate for the purposes of the MS4. While the SMC Regional Monitoring Program is useful in measuring the overall health of Southern California watersheds, probabilistic monitoring does not provide adequate information on compliance or trends over time at specific sites.</p>	<p>The Regional Board agrees that the current probabilistic monitoring design does not provide the type of information to evaluate permit compliance at a particular discharge point. The probabilistic monitoring underway by the SMC was designed to determine overall watershed health. The SMC study, however, includes targeted sites, in addition to the probabilistic sites, that enable the SMC to determine trends overtime, and interannual variation at each of the sites. No change made.</p>
<p>26. In addition the Regional Board should discuss how the</p>	<p>Since the SMC bioassessment monitoring is not designed at this time to</p>

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<p>bioassessment results will be evaluated. If bioassessment results raise concern, when compared to the Southern California Index of Biological Integrity, for example, the Permittee should be required to assess the impact and determine the source of impairment. This is a critical component absent in the Draft MRP.</p>	<p>determine the permittee’s individual compliance with the draft permit, and indices based on bioassessment data have not yet been adopted as water quality objectives, it is premature to require the permittee to individually assess impacts and determine sources of impairment based on the SMC monitoring results. No change made.</p>
<p>27. We support the proposed aquatic toxicity monitoring in both dry and wet weather in the receiving water. We also support the three required monitoring events each year for receiving water monitoring. However, the Tentative MRP does not require outfall monitoring unless the TIE performed in response to a receiving water hit is inconclusive (E-20). Toxicity can be very fleeting. In order to ensure that toxic discharge is identified, the Regional Board should require outfall monitoring for toxicity three times per year, at a minimum, at the same time that the receiving water monitoring location is sampled. The toxicity tests should continue for the term of the permit. Outfall toxicity monitoring is important, as it characterizes the discharge without in-stream dilution. The Permittee should select dischargers that are chronically flowing and that represent high-impact land uses such as transportation and industrial.</p>	<p>The Regional Board agrees with the comment that toxicity in MS4 discharges can be transitory, and as a result, the requirements in the draft permit are aimed at addressing consistent episodes of toxicity that may be tracked and eliminated. Aside from complying with TMDL toxicity monitoring requirements, which must be adhered to, Part XII.J of the draft Monitoring and Reporting Program states that if toxicity is found in the receiving water, and a toxicant is identified through a TIE, the permittee must analyze the toxicant(s) during the next scheduled sampling event in the discharge from the outfall(s) upstream of the receiving water station. This will enable the permittee to determine if the outfall is contributing to the specific toxicants in the receiving water and thereby focus resources in the watershed to address the sources. No change made.</p>
<p>28. Consistent with the 2010 USEPA guidance, we urge the Regional Board to also require toxicity data be reported for the Test of Significant Toxicity (“TST”) statistical method (pass/fail and percent effected). This is also consistent with current drafts of the statewide Toxicity Policy.</p>	<p>Currently, the State Board is developing a statewide toxicity policy. The policy will prescribe the statistical approach that should be used to analyze toxicity data. The Regional Board will consider requiring the permittee to use the TST method once the State Board has adopted the toxicity policy. No change made.</p>
<p>29. The Tentative MRP states that “[m]onitoring shall commence within 30 days after approval of the IMP, or within 60 days after approval of the CIMP by the Executive Officer...” (E-9). How long does the Regional Board anticipate this approval process taking? We are concerned that the limited staff resources may significantly delay this approval process and inhibit adequate monitoring from taking place for an extended period of time.</p>	<p>The Regional Board anticipates that review and approval of the permittee’s IMP(s)/CIMP(s) will take several months. However, the current monitoring requirements under the previous permit and pursuant to approved TMDL monitoring plans will remain in place until the IMP(s) and/or CIMP(s) submitted as required by this permit are approved by the Executive Officer. No change made.</p>
<b>US EPA</b>	
<p>1. We are supportive of many aspects of the draft permit. For example, the draft permit's Planning and Land Development Program (section VII.J) contains valuable provisions for ensuring that when new development and redevelopment activities are planned there are</p>	<p>Comment noted.</p>

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<p>efforts to reduce pollutant impacts from impervious surfaces and make beneficial use of stormwater. We also strongly endorse the Public Agency Activities Program, which incorporates a requirement to develop an Inventory of Existing Development for Retrofitting Opportunities (section VII.K.4). We're also supportive of the draft permit's incorporation of TMDL Waste Load Allocations (WLAs) as numeric effluent limits (section VIII). In addition, we support the monitoring program (Attachment E), particularly the requirement for outfall monitoring in addition to instream monitoring since this will help identify which outfalls may be contributing to exceedances of WLAs or receiving water limitations. Finally, we support the watershed- based approach used in the permit (section VII.C) which we believe will maximize water quality improvement overall by ensuring that best management practices are appropriately customized to the needs of individual watersheds.</p>	
<p>2. Section VIII.F.1.d of the draft permit provides that a permittee implementing an enhanced watershed management plan (EWMP) will be deemed in compliance with applicable water quality-based effluent limits associated with TMDLs if the runoff from the 85th percentile 24-hour storm within drainages covered by the EWMP is retained. While we recognize the multiple benefits of retaining stormwater, we're concerned that this retention may not necessarily attain the water quality benefits associated with the incorporated TMDLs. Among our concerns are that retention facilities designed to retain the 85th percentile, 24-hour storm could be sited within drainage areas in locations that do not control runoff containing elevated pollutants, and therefore the water quality expectations established by TMDLs may not be achieved. Absent further justification or explanation in the fact sheet of how this retention can be relied upon to achieve the water quality benefits associated with the TMDLs, we recommend that section VIII.F.1.d of the draft permit be deleted.</p>	<p>The Regional Board disagrees that Section VIII.F.1.d should be deleted, but agrees that additional explanation in the Fact Sheet is warranted in response to this comment. In reviewing several of the approaches currently being taken to conduct reasonable assurance analyses under the Los Angeles County MS4 Permit, staff notes that the spatial scale of the modeled subwatersheds is critical with the typical scale being 1-2 square miles. At such a small scale, the commenter's concern that retention facilities could be sited within drainage areas in locations that do not control runoff containing elevated pollutants is unlikely. The hallmark of an EWMP is maximal implementation of regional multi-benefit retention projects that capture the runoff volume from the 85th percentile, 24-hour storm event, as well as all non-storm water that would otherwise discharge through the MS4 to receiving waters. However, an EWMP also must ensure that actions to comply with core MS4 management program requirements, including controls to reduce the discharge of pollutants in storm water to the maximum extent practicable and to eliminate non-storm water discharges of pollutants through the MS4, are achieved. Specifically, in addition to maximizing retention of runoff from the 85th percentile, 24-hour storm event, the EWMP must include actions to implement a MS4 management program consistent with Title 40, Code of Federal Regulations, section 122.26(d)(2)(iv)(A)-(D). These actions will augment the storm water management provided by the regional multi-</p>

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	benefit retention projects. Further, there is significant history associated with the development of this alternative. As stated earlier, the Regional Board has included additional information supporting this compliance mechanism in the Fact Sheet for the draft Long Beach MS4 Permit.
<p>3. Pursuant to section VII.C.1.d of the draft permit, a permittee is deemed to be in compliance with RWLs upon notification of the Regional Board that the permittee intends to develop and implement a watershed management plan (WMP) or EWMP. We would prefer retaining the RWLs language consistent with State Board WQ Order 99-05. However, we could accept an alternative in which a permittee would be deemed in compliance with RWLs after approval of a WMP or EWMP by the Regional Board. Such a provision was drafted and considered by the San Diego Regional Board for the San Diego Regional MS4 Permit (NPDES permit No. CAS0109266), but was ultimately not included in the final San Diego permit adopted in May 2013. We recommend that such a provision be included in the City of Long Beach permit (if the Regional Board deviates from the requirements of WQ Order 99-05). A permittee would be deemed in compliance with RWLs only after approval of a WMP or EWMP, since a much clearer picture of the path to ultimate compliance would be available at that time.</p>	<p>First, it is important to note that the draft permit includes RWLs language consistent with State Board WQ Order 99-05. The WMP/EWMP provisions simply create a separate compliance mechanism for the permittee to implement the RWLs provisions with a higher likelihood of success in a concrete period of time that is as short as possible, and builds on information obtained over the last ten plus years.</p> <p>Second, WMPs/EWMPs are comprehensive planning processes that are intended to address all the water quality issues in a given watershed in timeframes consistent with those adopted by the Board in TMDLs and that are as short as possible. In order for Long Beach to be able to commit the necessary resources to these programs, it must have the certainty of clear permit compliance mechanisms during both the planning and implementation phases of the WMPs/EWMPs. The Regional Board does not believe that reserving the compliance mechanism until the WMPs/EWMPs are approved will provide this certainty. Due to the extensive permit requirements, the draft permit includes a reasonable assurance approach for meeting water quality based effluent limitations (WQBELs) and a short, but reasonable, period of time to plan for comprehensive efforts under a WMP or EWMP. The WMP/EWMP provisions resolve the uncertainty that previously existed regarding compliance with water quality based requirements, while retaining the fundamental requirement to control MS4 discharges such that they will not cause or contribute to exceedances of water quality standards.</p> <p>This process is similar to but more robust and specific than the so-called “iterative process” for addressing exceedances of receiving water limitations. Further, the schedule to develop and receive approval for a WMP/EWMP that is included in the draft permit is significantly shorter than the one included in the recently adopted Los Angeles County MS4 Permit. This is because the City of Long Beach has already been collaborating with the ongoing WMP/EWMP process under the Los Angeles County MS4 Permit; therefore, many of Long Beach’s draft</p>

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	<p>WMPs will be submitted to the Board by June 28, 2014 – just three months after the anticipated effective date of the permit, instead of 12 to 18 months after the permit effective date as was provided in the Los Angeles County MS4 Permit. In sum, the draft permit provides clearer compliance metrics and timeframes and affords a very short, conditioned planning horizon to develop effective WMPs/EWMPs that will effectively address exceedances of RWLs. No change made.</p>
<p>4. The provisions in section VII.D.1 of the draft permit concern the timing for implementation of MCMs. If the City of Long Beach chooses not to implement a WMP or EWMP, the permit requires implementation of the permit's updated MCMs within six months of the permit's effective date. However, if the City of Long Beach chooses to develop a WMP or EWMP, only the BMPs required by the previous 1999 permit would be required pending approval of the WMP or EWMP by the Regional Board. To avoid delays in the implementation of updated MCMs, it's our preference that section VII.D.1.ii of the draft permit be revised to require implementation of the updated MCMs within six months of the effective date of the permit regardless of whether the City of Long Beach elects to develop a WMP or EWMP. We recognize that the City of Long Beach's circumstances will lessen some delays in the implementation of updated MCMs. For example, the fact that the City of Long Beach adopted a protective Low Impact Development Ordinance in November, 2010 means that there will not be a significant impact if implementation of the new permit's Planning and Land Development Programs is delayed. Also, we understand that the City of Long Beach is currently participating in the preparation of WMPs with permittees under the LA County MS4 permit which will be completed relatively soon, and therefore there may not be lengthy delays in implementation of updated MCMs for drainages covered by these WMPs. We recommend seeking means for ensuring that the outdated 1999 MCMs can be replaced by updated provisions as soon as is practical.</p>	<p>A significant part of the WMP/EWMP planning process involves evaluating and tailoring the minimum control measures (MCMs) to best address the water quality concerns within each watershed area. For this reason, full implementation of the MCMs in the new permit is aligned with the start of WMP/EWMP implementation. However, during the WMP/EWMP planning period, the City is required to continue to implement all of its existing MCMs and is also required to target its implementation of these MCMs to address known water quality concerns (e.g., exceedances of RWLs, TMDL implementation requirements/ deadlines). Additionally, as noted by the commenter, this concern regarding the timing of MCM implementation is ameliorated by the fact the City already has in place and is implementing a protective LID ordinance that addresses many requirements related to the Planning and Land Development MCM. Furthermore, because the City is participating in many watershed groups formed under the Los Angeles County MS4 Permit, the timing of WMP approval and therefore MCM implementation will be shorter than that under the Los Angeles County MS4 Permit (i.e., draft WMPs for significant portions of the City's area will be submitted by June 28, 2014 and will be finalized by early 2015 – less than one year from the effective date of the permit). No change made.</p>
<b>City of Signal Hill</b>	
<p>1. The City has requested on numerous occasions that the Board issue an individual permit to the City of Signal Hill. The City would</p>	<p>This comment is outside the scope of the Board's action to renew the City of Long Beach MS4 Permit and therefore no response is required. The</p>

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<p>prefer to be responsible for its own actions or inactions, and not those of other jurisdictions. It will continue to participate in watershed activities through current and future MOAs, and is willing to implement a comprehensive monitoring program to measure the effectiveness of its water quality improvement efforts. We also will continue to work with the City of Long Beach, which was originally granted a separate permit in 1999. Specifically, we will continue to work with the City of Long Beach on implementation of the Los Angeles River Metals TMDLs. The Los Angeles River Bacteria TMDL. The Los Angeles River Estuary Bacteria TMDL. the Los Cerritos Channel Metals TMDLs, and the Harbor Toxics TMDLs.</p>	<p>Regional Board, however, acknowledges this request from the City of Signal Hill and is willing to engage in a separate discussion on this matter at a later date. No change made.</p>
<p>2. This draft Permit and the new Los Angeles Permit are both inconsistent with Order 99-05 in that the iterative process is only included in the Receiving Water Limitations part of the Permit, instead of being included in both the Discharge Prohibition and the Receiving Water Limitations parts of the Permit. We appreciate that this issue is now before the State Water Board and hope that it can be resolved soon. Therefore, we encourage the Regional Water Board to work with the State Water Board to consider ways to strengthen the iterative process mandated by Order 99-05.</p>	<p>The commenter is confusing the reference to Discharge Prohibitions in Order 99-05, with the requirement to effectively prohibit non-storm water discharges in Clean Water Act section 402(p)(3)(B)(ii). Footnote 3 in Order No. 99-05 makes it clear that the reference to Discharge Prohibitions pertains to discharge prohibitions established in water quality control plans, which are established pursuant to California Water Code section 13243. No change made.</p> <p>Comments concerning the Los Angeles County MS4 Permit are outside the scope of the Board's action to renew the City of Long Beach MS4 Permit and therefore no response is required.</p>
<b>City of Long Beach</b>	
<p>1. In Section VII.J.5 of the tentative Order, replace the first sentence, and add the following changes as follows:  “ON NOVEMBER 16, 2010, THE CITY OF LONG BEACH ADOPTED LID REGULATIONS UNDER ORDINANCE NO. ORD-10-0035 AND MADE AMENDMENTS ON NOVEMBER 12, 2013 UNDER ORDINANCE NO. ORD-13-0024. THE ORDINANCE... <del>BMPS TO INCLUDE ALL DEVELOPMENT AND REDEVELOPMENT PROJECTS THAT CREATE, ADD, OR REPLACE 500 SQUARE FEET OR MORE OF ANY NEW DEVELOPMENT OR REDEVELOPMENT THAT RESULTS IN THE</del></p>	<p>The Regional Board agrees with the suggested change and has revised the draft permit.</p>

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REPLACEMENT OF MORE THAN FIFTY PERCENT (50%) OF AN EXISTING BUILDING STRUCTURE, OR IMPERVIOUS COVER. THE...”	
<p>2. In Attachment E – Monitoring and Reporting Program, we request that the LARWCB reconsider the 5 times per week sampling frequency. Can we consider language saying that we start with testing 3 times a week. If results show an exceedance then we go to 5 days of testing. Or if it is shown that there is not an exceedance can we reduce the testing from 5 times a week to 3 times a week?</p>	<p>The Regional Board has clarified the requirements regarding shoreline monitoring to state that, shoreline monitoring locations <i>associated with a MS4 outfall</i> and addressed by a TMDL, where water quality is poorer than the reference system criterion, shall be monitored 3-5 days per week and where water quality is better than the reference system criterion, shall be monitored weekly.</p>
<p>3. In Attachment G footnotes, bullet point number 5 lists the geomean for enterococcus as 104/100ml. The state standard for enterococcus geomean is 35/100ml.</p>	<p>The Regional Board agrees and will revise Attachment G.</p>
<p>4. Considering recent recommendations from the US EPA on water quality standards, would the state consider an enterococcus only test for determining compliance with the bacterial TMDL? Is the state considering allowing for molecular methods to comply with the bacterial TMDL?</p>	<p>The Los Angeles Regional Board’s Basin Plan requires compliance with the three indicator bacteria numeric objectives: Total coliform, fecal coliform, and enterococcus in marine waters designated for water contact recreations (REC-1). The Basin Plan also requires compliance with <i>E. coli</i> and fecal coliform numeric objectives in fresh waters designated for REC-1. Consequently, the use of only enterococcus to demonstrate compliance with water quality standards to protect REC-1 is not possible. With regards to the question about allowing for molecular methods to comply with the bacteria TMDL, currently neither the Basin Plan water quality objectives nor the TMDL waste load allocations distinguish the source of the bacteria (e.g. canine sources, human sources, avian sources) and therefore, these methods cannot be used to demonstrate compliance with the bacteria TMDL. However, the permittee may use the molecular methods to further identify the sources of bacterial contamination and thereby more effectively target implementation of best management practices to achieve the TMDLs. No change made.</p>
<p>5. In Section VI.K.9 of the tentative Order, item (8) discusses covering “cold-mix” asphalt with protective sheeting during a rainstorm. Is this referring to stockpiled “cold-mix” only? Will temporary trench backfill work need to be covered?</p>	<p>The Regional Board inserted the word “stockpiled” in Section VI.K.9 of the tentative Order to better clarify the intent of the provision.</p>
<p>6. In Section II.G, Table 5 Designated Beneficial Uses indicates that municipal and domestic water supply (MUN) beneficial uses apply only to Coyote Creek, Addressing the MUN beneficial use requires testing of analytes such as aluminum that often exceed drinking water standards during storm events due solely to sediment loads.</p>	<p>Comment noted.</p>

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<p>Each receiving water body is designated as having potential as a municipal and domestic water supply (P*). The asterisk refers to policies established in 1988 and 1989 under SB 88-63 and RB 89-03. These designations are expected to be considered for exemption at some later date.</p>	
<p>7. In Section VII.J.4.iii(7) Table 10 of the tentative Order, Benchmarks Applicable to New Development Treatment BMPs refers to treatment control BMP performance benchmarks for median effluent water quality from the six highest performing BMPs based upon accessing the storm water BMP database on September 25, 2012. The specific information used to develop benchmarks for each analyte should be provided in order to assess appropriateness of the BMPs for local use and allow for verification of the calculated benchmarks.</p>	<p>The Regional Board agrees with the comment; the information has been included in the Fact Sheet.</p>
<p>8. Section VII.K.7.i of the tentative Order, Landscape, Park and Recreational Facilities management (page 88 of 122). This refers to Table 11 but it appears to intend reference to Table 17?</p>	<p>The Regional Board agrees with the suggested change to Section VII.K.7.i of the tentative Order and has made the correction to the draft permit.</p>
<p>9. Section VII.K.8.x.(3)(d) on page 92 refers to Table 19. It appears that it should be Table 18?</p>	<p>The Regional Board agrees with the suggested change and has made the correction to the draft permit.</p>
<p>10. Section VIII.I.3 of the tentative Order, Water quality-based effluent limitations for Colorado Lagoon. (page 104 of 122). It should be noted that the Termino Ave. and Line M discharges to Colorado Lagoon were eliminated with construction of the Termino Drain Project.</p>	<p>Comment noted. Per Part VIII of the draft permit, the permittee may demonstrate compliance with water quality based effluent limitations established to implement a TMDL by demonstrating that there is no MS4 discharge from a source. No change made.</p>
<p>11. Attachment E – Monitoring and Reporting Program, Section V TMDL Monitoring Plans list the Los Angeles River Nitrogen Compounds and Related Effects TMDL Plan as being due on March 23, 2005. Section V TMDL Monitoring Plans lists the Los Angeles River Watershed Bacteria TMDL as having been due by March 23, 2013. The City of Long Beach is within Segment A of the Los Angeles River. The Load Reduction Strategy Work Plan for Segment A is due 4.5 years after the effective date of the TMDL (March 23, 2012). Program Receiving Water Monitoring Requirements.</p>	<p>Comment noted; the dates are correct. No change made.</p>
<p>12. Attachment E- Monitoring and Reporting Program, Section B.2.c (pages E-11 and E-12). This section indicates that shoreline monitoring stations monitored pursuant to a bacteria TMDL shall be</p>	<p>See response to the City of Long Beach’s comment number 2. No change made.</p>

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<p>conducted at a frequency of 5 times per week. The City's current AB411 monitoring program measures bacteria at shoreline stations at a frequency of once per week. These weekly data were used in the development of the TMDL and should provide sufficient data for compliance monitoring. This situation should be considered analogous to the approach used in the Los Angeles River since the River has been implicated as the major source of bacteria to the City beaches. Load reduction strategies in the River are starting in the upper portion of the urban watershed (Segment B). Load reduction strategies in the lower portion of the Los Angeles River (Segment A) start two years after activities are initiated in upstream waters. This approach recognizes that improvements in receiving waters of the lower watershed are dependent upon contributions from the upper portion of the urban watershed. Given the impacts that the Los Angeles River has on water quality along the City of Long Beach shoreline, weekly sampling should be continued until Load Reduction Strategies are implemented in both Segments A and B of the Los Angeles River.</p>	
<p><b>13.</b> Attachment E- Monitoring and Reporting Program, Chronic Toxicity Monitoring Programs Test Species Sensitivity Testing (page E- 31). Testing to determine the most sensitive test species indicates that screening should be conducted based upon two wet weather and two dry weather toxicity tests with a vertebrate, invertebrate and a plant. Screening is supposed to be conducted during the first year with rescreening during the fourth year of the permit term. This conflicts with the requirements of the monitoring program that requires toxicity testing during at least two wet weather events and one dry weather event. We expect that the intent is to perform screening during the first and fourth years using data from the two wet weather events and one dry weather event.</p>	<p>The Regional Board agrees with the comment. The Monitoring and Reporting program will be revised to require two wet weather toxicity tests and 1 dry weather toxicity test to screen for the most sensitive test species.</p>
<p><b>14.</b> Attachment E – Monitoring and Reporting Program, Data submittal guidelines (E-35) seem to present some conflicts. The draft M&amp;R indicates that data are to be submitted to the Board in the latest Southern California Municipal Storm Water Monitoring Coalitions (SMC) Standardized Data Transfer Formats (SDTFs) while on the same page indicating that data should be submitted in SWAMP format compatible with Microsoft Excel 2010 or newer version.</p>	<p>The Regional Board disagrees with the comment. Both data transfer format methods are identical. No change made.</p>

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<p>Similar programs conducted for the State Water Resource Control Board (SWRCB) are requiring submittal of data in CEDEN formats through the SCCWRP. Although data formats are similar, there are conflicts in standards that are available and some lack protocol suitable for all stormwater data.</p>	
<p><b>15.</b> Attachment E – Monitoring and Reporting Program, Page E-47. Reporting Requirements for the TMDL Monitoring – This table indicates that daily or systematic weekly sampling should be conducted for beach compliance monitoring. This language should be used to replace sampling frequencies requirements at the bottom of page E-11.</p>	<p>See response to the City of Long Beach’s comment number 2. No change made.</p>
<p><b>16.</b> Section VII.K.6.iii of the tentative Order states that new construction (including fire stations) must provide self-contained, apparatus wash water areas or sewers. This should read (excluding fire stations) similar to the verbiage in section 6iii on page 86.</p>	<p>The Regional Board agrees with the suggested change and has made the correction to Section VII.K.6.iii of the draft permit.</p>
<p><b>17.</b> Section IV.B.2 of the tentative Order appears to allow for discharges for firefighting, emergency response training, routine maintenance and hydrant and sprinkler testing activities. These activities are absolutely necessary to fire service training and preparedness and must be exempt from restrictions. This section is in conflict with section iv b.C (4) on page 18, which allows for discharges for emergency firefighting activities, but not for training, or hydrant and sprinkler testing and maintenance. To be clear, the fire department must have the ability to discharge water for emergency response and for training, hydrant testing and maintenance and sprinkler testing and maintenance.</p>	<p>These provisions are consistent with provisions in the recently adopted 2012 Los Angeles County MS4 Permit. Further, the BMPs required are reasonable and were taken from the CAL Fire Manual developed by Fire Departments. No change made.</p>
<p><b>18.</b> Section VII.K.6.i refers to a table 11. I believe this is in error and should be reflected as table 17. Table 11 refers to: applicable set of BMPs for all construction sites. Table 17 refers to: BMPs for public agency facilities and activities. The section 6i, refers to BMPs for public agency facilities and activities.</p>	<p>The Regional Board agrees with the suggested change and has made the correction to Section VII.K.6.i of the draft permit.</p>
<p><b>19.</b> In Section VII.J3.i(1) of the tentative Order, shouldn’t the reference to Part VII.J4 be to Part VII.J2 instead? J.2 refers to the list of development projects that redevelopment of should trigger compliance. J.4 is the performance criteria. Please provide clarification, definitions, and/or examples as to what constitutes “land disturbing activity.”</p>	<p>The Regional Board agrees with the reference change in Section VII.J.3.i(1) of the tentative Order and has made that correction to the draft permit. Land disturbing activities covered by the draft permit include, but are not limited to, grading, vegetation clearing, soil compaction, paving, re-paving and linear underground/overhead projects (LUPs).</p>

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<p><b>20.</b> In Section VII.J.4.i(a) and (b) of the tentative Order - based on the type of project and or location within the City, it may be difficult to comply with retaining onsite stormwater as outlined. Recommend further evaluation be done to determine how developers will be able to achieve compliance for several different types of projects.</p>	<p>The New Development/Redevelopment section includes several alternatives to onsite retention if technical infeasibility is demonstrated. Examples include, but are not limited to, offsite retrofit of existing development, biofiltration, and harvest and reuse. No change made.</p>
<p><b>21.</b> In Section VII.J.6.v of the tentative Order, the section sets out provisions that apply based upon the size of the construction site being less than or greater than 1 acre in size. Development and redevelopment both depend on land disturbing activities to determine whether a project should be held to the requirements. Shouldn't the size of the land disturbance be the key (not the overall construction site size) determining factor in which BMPs should be employed?</p>	<p>The Regional Board included the 1-acre threshold to be consistent with the requirements of the State Water Board's Construction Stormwater General Permit, which pertains to sites where land disturbance is one acre and above. Requirements for the draft permit and the Construction Stormwater General Permit are based on land disturbance. No change made.</p>
<p><b>22.</b> In Section VII.F of the tentative Order, the general public does not access the Harbor District regularly, and the Industrial facilities which compromise the vast majority of the Harbor District are covered under the Port's Industrial Stormwater Permit, so they already receive an abundance of outreach from the Port due to this program Exempt the Port of Long Beach Harbor District from the inapplicable PIPP requirements due to the non-public nature of the Port.</p>	<p>The PIPP requirements apply to and must be implemented throughout the entire jurisdiction of the City of Long Beach, including the Port of Long Beach Harbor District. However, the Harbor District inspection efforts could suffice to fulfill the Industrial/Commercial Education component within the Port of Long Beach. The following elements make up the core of the Industrial/Commercial Education component -track, educate, inspect, and ensure industrial and commercial facilities' compliance with municipal ordinances. Based on previous Regional Board inspections, these provisions appear to be already implemented by Harbor District staff. PIPP elements that do not apply to the Harbor District would not have to be conducted within that area of the City of Long Beach. No change made.</p>
<p><b>23.</b> In Section VII.J of the tentative Order, due to site conditions typically found in the Port of Long Beach Harbor District (HD), infiltration and other LID strategies are not only challenging to implement, but are often times an undesirable or inappropriate tool for handling stormwater runoff. The following briefly summarizes some of the challenges associated with implementing LID techniques in the Harbor District:</p> <ul style="list-style-type: none"> <li>• Depth to Groundwater: The water table is tidally influenced in the HD, and in many areas groundwater is at less than 5 feet BGS at high tide, making infiltration infeasible.</li> <li>• Construction on Fill Areas: Much of the HD is constructed on fill rendering infiltration BMPs infeasible.</li> </ul>	<p>The Harbor District is a department within the City of Long Beach and is subject to the same New/Redevelopment requirements. Depth to groundwater and geotechnical stability are included in the draft permit as factors under technical infeasibility and may therefore be used to exempt a project from onsite retention. The technical infeasibility criteria are applicable to the Harbor District. No change made.</p>

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<ul style="list-style-type: none"> <li>• Liquefaction: Soils in many areas the HD are subject to liquefaction, making infiltration infeasible.</li> <li>• Contamination: Many areas of the Port are impacted by legacy soil and groundwater contamination from the historical heavy industrial use of the area, making infiltration infeasible.</li> <li>• Groundwater recharge: Groundwater recharge is not necessary in the HD because groundwater in the HD has been de-designated as a source of drinking water.</li> </ul> <p>POLB developed the Post-Construction Stormwater Quality Guidance Document for the design of new and re-developed facilities incorporating post-construction control measures that embrace LID strategies appropriate for the Port setting. Allow the Port to use this Design Guidance Manual as an alternative way to satisfy the hydromodification and LID requirements in the Permit. (Due to size of the Design Guidance Manual, it will be sent in a separate emailed).</p>	
<p><b>24.</b> In Attachment C of the tentative Order, the POLB should be excluded from this map (see comment above).</p>	<p>The Regional Board disagrees with the suggested change. The Port of Long Beach is part of the City of Long Beach and therefore should not be excluded from the map or the provisions in the draft permit. No change made.</p>
<p><b>25.</b> In Attachment E, Monitoring and Reporting Program of the tentative Order, Receiving water monitoring requirements in the MS4 should correspond with the requirements for the TMDL monitoring to provide consistency and efficiency. To characterize the extent of stormwater and dry weather effluent impacts on receiving waters, a sampling approach should be applied that examines patterns on a large spatial and time scale throughout the entire San Pedro Bay area. Therefore, MS4 monitoring stations and frequency of sampling should be the same as the TMDL monitoring stations. Two wet weather monitoring events should be conducted per year instead of three per year. The need for a third wet weather monitoring event would be evaluated after the first 2 years of MS4 monitoring has been conducted. The recommended wet weather monitoring targets two large storms per year (greater than 0.25 inch of precipitation) in order for stormwater impacts that might occur within the waterbody to be discernible. The TMDL wet weather monitoring includes water column monitoring (physical parameters) at multiple depths, which</p>	<p>See response to the City of Long Beach’s comment number 2. No change made.</p>

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<p>combined with the spatial distribution of monitoring stations across the waterbody will provide a more complete understanding of stormwater impacts than surface sampling at a subset of locations after a smaller storm. Receiving water monitoring after two large storms per year instead of one large and two smaller storms will also decrease the probability of failed deployments of the sampling team i.e., the team deploys because of 0.1 inch recorded from 50% of Los Angeles County controlled the receiving water). Two wet weather sampling events should be defined as:- Minimum 0.25 inches with 70% probability 24 hours prior to storm - Sampling occurs 24 hours after main flow of rain event to maximize stormwater impact in receiving waters. Aquatic toxicity testing should not be included in the initial monitoring. The State's 303(d) List and recent Harbor Toxics TMDL do not list water column toxicity as an impairment in the Dominguez Channel Estuary, Consolidated Slip, Inner Harbor, Outer Harbor, Fish Harbor, Cabrillo Marina, or Inner Cabrillo Beach. In October 2003, the Regional Water Quality Control Board implemented a Surface Water Ambient Monitoring Program and performed toxicity testing at 30 stations within the Los Angeles/Long Beach Harbor waters. At 10 of these stations, near-bottom and bottom water samples were also analyzed for conventional water chemistry, metals, organics, and toxicity testing. No toxicity was observed in any water samples. MS4 sampling for Greater Harbor Waters will not include water column toxicity testing in the first wet weather event. However, if a California Toxics Rule exceedance is observed during either of these events, then water column toxicity testing at the station where the exceedance was observed would be conducted at the subsequent wet weather monitoring event. One dry weather event instead of two is recommended to correspond to the TMDL monitoring, which includes water column testing (physical parameters) at various depths. Given the multiple depths and monitoring at 22 stations across Greater Harbor Waters, a single dry event will provide a comprehensive evaluation of water quality.</p>	
<p><b>26.</b> In Attachment E, Monitoring and Reporting Program of the tentative Order, the Monitoring and Reporting Program requires PCB Aroclors. It is recommended that Total PCBs be calculated by</p>	<p>See response to the City of Long Beach's comment number 2. No change made.</p>

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<p>summing individual PCB congeners rather than Aroclors. The recommended analytical method for PCB congeners is USEPA 8270C SIM and is a more accurate, quantitative approach to calculating Total PCBs compared to USEPA 8082, the method used for the assessment of Aroclors, which is qualitative and subject to interpretation. USEPA 8270C SIM quantifies approximately 50 of the 209 total congeners, including measurement of key toxic risk drivers. USEPA 8270C SIM provides method reporting limits (MRLs) that are two orders of magnitude below USEPA 8082. Individual PCB congeners may be found in one or more Aroclor mixtures; as such, a Total PCB value derived from Aroclors is not representative of the existing concentration.</p>	
<p><b>27.</b> In Attachment E, Monitoring and Reporting Program, the LB MS4 Permit requires receiving water monitoring at TMDL receiving water compliance points. If the City of Long Beach is not able to participate in a coordinated monitoring program (due to only named Discharger in the Permit), it is not appropriate for the City of Long Beach to conduct receiving water monitoring at TMDL receiving water compliance points outside the City’s jurisdiction. Only 11 of the 22 TMDL receiving water compliance points are within the City’s jurisdiction. See comment on development of coordinated plans and programs.</p>	<p>The receiving water monitoring requirements are necessary to determine compliance with the terms of the permit. The purposes of receiving water monitoring are to measure the effects of a permittee’s storm water and non-storm water discharges from the MS4 to the receiving water, to identify water quality exceedances, to evaluate compliance with TMDL WLAs and receiving water limitations, and to evaluate whether water quality is improving, staying the same, or declining. The commenter seems to suggest that only permittees with receiving waters located within their jurisdiction should be responsible for receiving water monitoring. The Regional Board disagrees. A permittee may be required to compile and submit information based on monitoring of receiving waters regardless of whether those receiving waters are located within the jurisdiction of the permittee. Regardless of whether receiving waters are located within the jurisdiction of a permittee, a permittee is responsible for discharges from their MS4 and any resulting impacts to adjacent and downstream receiving waters. Accordingly, the receiving water monitoring requirements at TMDL receiving water compliance points are reasonable. No change made.</p>
<p><b>28.</b> In Section II.D.3.d, of Attachment E, the LB MS4 Permit requires a determination of annual load of pollutants from the MS4, and in II.D.4.e, the LB MS4 Permit requires a characterization of discharger’s quantity and quality of annual pollutant load. The TMDL Compliance Monitoring Program is focused on the receiving waters that are within the Greater Harbor Waters. As such, flow will not be measured due to multiple constraining factors (primarily tidal</p>	<p>See response to the City of Long Beach’s comment number 2. No change made.</p>

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<p>currents), and subsequently loadings cannot be calculated. If the receiving water monitoring locations that are downstream of the Discharger’s MS4 discharges within the City of Long Beach allow for the measurement of flow, loadings may be calculated; however results may be confounded by other upstream sources. Calculation of loadings is more appropriate at end of pipe.</p>	
<p><b>29.</b> In Section II.D.3.e of Attachment E, the LB MS4 Permit requires a determination of relationships between the range of concentrations of pollutants from storm size and intensity, elevation, watershed, and any other variables that may provide an insight on improving the stormwater program. Although this sounds straight forward, “environmental variability” will likely preclude any meaningful relationships between these data. For example, the very localized and patchy nature of storm duration, intensity, and location will mobilize and transport contaminants differently. There will be too many variables that cannot be quantified during monitoring events to develop these relationships.</p>	<p>The Regional Board disagrees with the comment that variability will preclude meaningful relationships in the data. The monitoring program has a critical role in the implementation of the stormwater program. As such, evaluating statistical relationships in the data will increase the available knowledge and understanding of the watersheds monitored, the sources, the receiving water’s response, and the selection of effective best management practices and the appropriate focus of permittee resources.</p>
<p><b>30.</b> In Section I, Table 3 is a list of sites that are recommended for removal from the list of major outfalls found in the Draft Tentative Order.</p> <ul style="list-style-type: none"> <li>- Three sites are located in the small open channel area of the Los Cerritos Channel next to the airport. The receiving waters need to be defined as starting at Clark and Spring Street, which is also listed as one of the outfall sites.</li> <li>- There are two other points that should be added: Add outfall definitions for the point where the Clark Channel enters the Los Cerritos Channel and where the Palo Verde Channel enters the Los Cerritos Channel. This will show that both these lines are part of the storm drain system, not receiving waters.</li> <li>- Similarly, the first three “outfalls” on the attached list do not go into receiving water bodies by definition. The outfalls appear to have been added because they contain industrial land use but these still need to be sites that discharge to receiving waters.</li> <li>- There are two outfalls on the listed as Coyote Creek, which is wrong. One outfall appears to be a Sanitation District Outfall and the other from a discharge site in Orange County?</li> <li>- The list included in the draft permit includes the Park Ave./4th</li> </ul>	<p>Comment noted. The Regional Board has revised the draft Long Beach MS4 Permit where the requested changes to the list of major outfalls were verified and appropriate.</p>

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<p>Street outfall that is no longer active. It was removed as part of the Termino Drain Project.</p> <ul style="list-style-type: none"><li>- The Clark Ave./Spring St. outfall is listed twice. There was a slightly different longitude, which could indicate a double box culvert. One of the outfalls should be deleted.</li></ul>	