

**Response to Comments**  
**Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL Reconsiderations**  
**Comment due date: November 14, 2013**

1. City of Beverly Hills
2. City of Culver City
3. City of Los Angeles Bureau of Sanitation (Ballona Creek Metals TMDL)
4. City of Los Angeles Bureau of Sanitation (Ballona Creek Estuary Toxics TMDL)
5. County of Los Angeles Department of Public Works
6. Heal the Bay and Los Angeles Waterkeeper

<b>No.</b>	<b>Author</b>	<b>Comment</b>	<b>Response</b>
1.1	City of Beverly Hills	<p>The City of Beverly Hills ("City") submits the following comments to the Los Angeles Regional Water Quality Control Board's ("Regional Board") proposed amendment ("Proposed Amendment") to the Water Quality Control Plan for the Los Angeles Region to Revise the Total Maximum Daily Loads for Metals in Ballona Creek and the Total Maximum Daily Loads for Toxic Pollutants in the Ballona Creek Estuary ("Ballona Creek TMDLs").</p> <p>The City reserves the right to make additional legal comments on the Proposed Amendment prior to the close of the public hearing to adopt the Amendment and at the public hearing itself.</p> <p>The City of Los Angeles has submitted comments regarding the Proposed Amendment which the City joins and incorporates herein, except that: 1) the City supports the Regional Board staff recommendation that selenium not be listed in the Ballona Creek Metals TMDL; and (2) the City is concerned about the standard of liability proposed to be imposed on the Ballona Creek MS4 Permittees.</p> <p>On behalf of the City of Beverly Hills, we hereby submit the following additional comments on the Proposed Amendments:</p> <p><b>1. Selenium Should Be Removed from the Ballona Creek Metals TMDL</b></p> <p>The City supports the Regional Board staff recommendation that selenium be removed from the Ballona Creek Metals TMDL, especially given that "[r]ecent data indicate that selenium is not present at levels exceeding existing numeric targets and is not impairing the designated beneficial uses."</p>	Comment noted.

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		<p>Attachment A to Resolution No. R13-XXX, p. 2.</p> <p>As the September 2013 Regional Board Staff Report indicates on page 12:</p> <p>"Since the adoption of the 2002 303(d) List, the State Water Resources Control Board adopted the Water Control Policy for Developing California's Clean Water Act Section 303(d) List, 2004 (Listing Policy). The Listing Policy uses a weight of evidence approach to evaluate whether to place waters on, or remove waters from, the 303(d) List (SWRCB, 2004).</p> <p>The re-examined data, described above, satisfies the data quality requirements of sections 6.1.4 and 6.1.5 of the Listing Policy and the frequency of exceedance, 9 exceedances out of 130 samples, does not exceed the allowable frequency listed in Table 4.1 of the Listing Policy. Table 4.1 is the "Maximum Number of Measured Exceedances Allowed to Remove a Water Segment from the Section 303(d) List for Toxicants." <b><u>The data quality and the limited exceedances of the criteria would allow selenium to be delisted based on Table 4.1.</u></b>"</p> <p>Emphasis added.</p> <p>It is entirely appropriate to remove selenium given that it meets the State Water Resources Control Board's Listing Policy for delisting a toxicant. The removal of selenium from the Ballona Creek Metals TMDL will enable the City, and its fellow permittees, to focus its limited resources on those pollutants that require the most immediate attention in the ongoing effort to improve the water quality of Ballona Creek.</p>	
1.2	City of Beverly Hills	<p><b>2. The Proposed Amendment's Imposition of Joint Liability for MS4 Permittees Should be Deleted</b></p> <p>The Proposed Amendment improperly imposes joint and several liability for exceedances under the Ballona Creek TMDLs. Rather than setting specific numeric limits for each individual permittee, the proposed Ballona Creek Metals TMDL sets a waste load allocation for groups of permittees, including a group termed the "Ballona Creek MS4 permittees." Attachment A to Resolution No. R13-XXX at p. 5 (Waste Load Allocations (for point sources)). This language should be changed to provide for</p>	<p>The Proposed Amendment does not modify the existing TMDL with regard to joint responsibility except by adding the Los Angeles County Flood Control District to the list of entities subject the MS4 permit. The MS4 responsible parties are subject to Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the</p>

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		<p>individual Waste Load Allocations for each specific permittee, not a "group" allocation. Thus, the "dry weather" Waste Load Allocation should be segregated between CalTrans and each specific MS4 permittee. A similar rule should apply to the "wet weather" Waste Load Allocations, which should be segregated between CalTrans and each specific (not a group) MS4 permittee which drains (partially or completely) into Ballona Creek.</p> <p>The Proposed Amendment for the Ballona Creek Metals TMDL specifies that:</p> <p>"The County of Los Angeles, Los Angeles County Flood Control District, City of Los Angeles, Beverly Hills, Culver City, Inglewood, Santa Monica, and West Hollywood <b><u>are jointly responsible for meeting the mass-based waste load allocations</u></b> for the MS4 permittees."</p> <p><i>Id.</i> at p. 11; Attachment B to Resolution No. R13-XXX at p. 8, emphasis added.</p> <p>The Proposed Amendment further emphasizes the joint obligations of the MS4 permittee "group" by stating that: "The MS4 storm water NPDES permittees <b><u>are jointly responsible for assessing the progress in reducing pollutant loads to achieve the TMDL</u></b>. Attachment A to Resolution No. R13-XXX at p. 13, emphasis added.</p> <p>The references to "jointly responsible" should be deleted in both the Proposed Amendment to the Ballona Creek Metals TMDL and to Taxies TMDL.</p> <p>The establishment of a group standard applicable to all Ballona Creek MS4 permittees is problematic because the Proposed Amendment essentially adds a joint and several liability provision, thereby exposing each individual permittee to uncertain legal liability from third parties. All Ballona Creek MS4 permittees are "jointly" responsible for the total waste load allocation. The Proposed Amendment makes the City liable for any other permittee's violation.</p> <p>As an example, in the proposed Ballona Creek Metals TMDL, the "effectiveness monitoring" provision states that MS4 permittees will be</p>	<p>City of Long Beach, Order No. R4-2012-0175 (Los Angeles County MS4 permit). The Los Angeles County Flood Control District is being added to the TMDL because it is a permittee of the Los Angeles County MS4 permit.</p> <p>The Los Angeles County MS4 permit makes clear that individual co-permittees are not responsible for the operations of other co-permittees. MS4 permittees are responsible for implementing programs in their respective jurisdictions to meet the waste load allocations in the co-mingled system, unless the discharger demonstrates that its discharge did not cause or contribute to the exceedance.</p> <p>The TMDL is consistent with the Los Angeles County MS4 permit and staff proposes no change to the Proposed Amendment.</p>

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		<p>found to be meeting the dry-weather waste load allocations if the "load at the first downstream monitoring point" is less than or equal to the waste load allocation. Attachment A to Resolution No. R13-XXX at p. 5. In other words, if one municipal permittee causes an exceedance at the first downstream monitoring point, then a third party could potentially sue any of the MS4 permittees and allege a violation of the MS4 permit.</p> <p>It is both unlawful and inequitable to make a permittee liable for the actions of other permittees over which it has no control. A party is responsible only for its own discharges or those over which it has control. <i>Jones v. E.R. Shell Contractor, Inc.</i>, 333 F. Supp. 2d 1344, 1348 (N.D. Ga. 2004). Because the City cannot prevent another permittee from failing to comply with the Ballona Creek TMDLs, the Regional Board cannot, as a matter of law, hold the City jointly or jointly and severally liable with another permittee for TMDL violations.</p> <p>This Board should not underestimate the ability and desire of various third-parties to seek to impose liability upon a single permittee. <i>Cf. Natural Resources Defense Council, Inc. v. County of Los Angeles</i>, 725 F.3d 1194 (9th Cir. 2013) (decision after remand from U.S. Supreme Court). Such litigation shifts valuable (but limited) municipal resources to defending court actions, rather than focusing on innovative and constructive ways to improve water quality in Ballona Creek.</p>	
2.1	City of Culver City	<p>City of Culver City has reviewed the technical comment letters prepared by the City of Los Angeles on the Reconsideration of the Ballona Creek Metals and Estuary Toxics TMDLs, dated November 14, 2013. Culver City concurs with the comments conveyed in these letters.</p>	<p>Comment noted.</p>
3.1	City of Los Angeles	<p><b>1. CONSISTENT WITH THE STATE IMPLEMENTATION POLICY, DRY WEATHER TRANSLATORS SHOULD BE BASED ON THE MEDIAN TRANSLATOR</b></p> <p>The 2005 California State Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) dictates how a translator (i.e., conversion factor) is derived for a location based on the set of ratios calculated:</p> <p>"The translator shall be derived using the median of data for</p>	<p>Section 1.4.1 of the state's Policy for Implementation of Toxics standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2005) (SIP) describes the derivation of site-specific translators for a total recoverable effluent limits. In addition, USEPA's <i>The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion</i> (1996), suggests that the use of the 90<sup>th</sup> percentile value to establish a</p>

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3.2	City of Los Angeles	<p>translation of chronic criteria and the 90th percentile of observed data for translation of acute criteria."</p> <p>The TMDL currently uses the 90th percentile of the observed data for both the chronic (dry weather) and acute (wet weather) translators. Given that the chronic criteria were the basis for the dry-weather numeric targets, State guidance indicates the conversion factor shall be derived using the median of data for translation of the dry-weather numeric targets, not the 90th percentile.</p> <p><b>Requested Actions:</b> <i>Revise the calculations for the dry weather translators to be based on the median of the data for consistency with State guidance.</i></p> <p><b>2. SITE-SPECIFIC TRANSLATORS SHOULD BE CALCULATED FROM DATA THAT REFLECT CURRENT CONDITIONS WITHIN BALLONA CREEK</b></p> <p>Based on an analysis of the data used to calculate data, it is recommended that only data from October 2005-2012 be used in calculating the dry and wet weather translators for the following two reasons: 1) the more recent data are more reliable and 2) the more recent data are representative of current conditions.</p> <p>As a first step in calculating translators, all data are reviewed and those data that are not acceptable to calculate translators are excluded. The Regional Board staff excluded three categories of data: 1) either the dissolved or total metal result was reported as less than the reporting limit; 2) both the dissolved and total metal result was reported as less than the reporting limit, and 3) the dissolved metal result was reported as greater than the total metal result. The remaining data are considered usable for calculating translators. As shown in <b>Table 1</b>, there are significant differences in the percent of usable data for the 1995-2005 period (early) and the 2005-2012 period (recent), with the more recent data having higher percentages of usable data. The largest differences between the early and recent datasets were in the high percentages of data below reporting limits for lead and zinc. The high percentages of data below reporting limits for lead and zinc are indicative of poor overall data quality which calls into question the validity of the early data for the purpose of calculating representative translators. This is not unexpected as reporting limits, have improved significantly since 1996 (the</p>	<p>translator is appropriate to provide a margin of safety. The TMDL itself does not include an explicit margin of safety and use of the 90<sup>th</sup> percentile value serves as an implicit margin of safety. This is necessary since other implicit margins of safety are not included such as a water column toxicity TMDL expressed in as a numeric target/allocation in toxicity (TUc) units.</p> <p>Regional Board disagrees. In reconsidering the Ballona Creek Metals and Ballona Creek Estuary Toxics TMDLs, staff examined historic data used to develop the TMDL as well as more recent data generated since the TMDLs were developed. Staff acknowledges that stakeholders have made improvements to their testing of metals resulting in lower detection limits since adoption of the TMDLs. Staff also acknowledges that for the purposes of translator calculations, portions of the older data were excluded. The commenter does not provide a persuasive argument nor provides credible justification for excluding the older data from translator development. In addition, conditions in the waterbody, and conditions in the watershed, have not been significantly altered since development of the TMDL. A longer data set, including many years of data, is of particular value considering the highly variable interannual rainfall patterns in Southern California. Use of all readily available is consistent with other State policies and actions, including State's Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List, and is a more inclusive and conservative</p>

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		<p>first year of data considered in the translator calculations). For example, the reporting limits for copper, lead, and zinc have decreased from 5 µg/L to 0.5 µ/L for copper and lead, and 50 µg/L to 10 µg/L for zinc. These ten-fold and five-fold decreases in reporting limits would be similarly reflected in decreases in detection levels. The high rates of exclusions significantly bias the distribution of translator results for these data sets.</p> <p><b>[See comment letter for tables]</b></p> <p>The early and recent data sets were also tested for differences. The recent data period had significantly lower mean translator values (<math>p &lt; 0.05</math>) for wet and dry events for lead and zinc, and for wet events for copper. These differences are also reflected in the 90<sup>th</sup> percentile values used as final translators. The differences in translator data are illustrated with box plots for all three metals (<b>Figure 1</b>).</p> <p><b>[See comment letter for figure]</b></p> <p>The recent data set is representative of current conditions and is clearly of more reliable quality for calculating translators than the early data. Additionally, the CTR criteria of interest are established as dissolved metals criteria as the dissolved metal more closely approximates the bioavailable fraction of the metal in the water column than does the total recoverable metal. The number of exceedances observed when comparing dissolved metals data against the dissolved metals target is the criteria which best demonstrates whether or not the water body is truly impaired by each metal. However, it is understood that the Environmental Protection Agency's National Pollutant Discharge Elimination System regulations require that limits for metals in permits be stated as total recoverable in most cases (see 40 CFR 122.45(c)) except when an effluent guideline specifies the limitation in another form of the metal, the approved analytical methods measure only dissolved metal, or the permit writer expresses a metal's limit in another form (e.g., dissolved, specific valence, or total) when required to carry out provisions of the Clean Water Act. As such, the BC Metals TMDL uses translators to convert the dissolved metals target to a total metals target.</p> <p><b>Table 2 and Table 3</b> present a comparison of the available data to TMDL targets using the proposed TMDL translators and the translators based on the more recent data set, respectively. As shown in <b>Table 2</b> and <b>Table 3</b>, the</p>	<p>approach.</p> <p>In respect to allowing demonstration of compliance by meeting the dissolved targets instream, the Los Angeles County MS4 permit already includes provisions for demonstrating compliance in stream which would allow for meeting the dissolved criteria.</p>

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		<p>number of exceedances observed when comparing dissolved data against a dissolved target is generally significantly lower than the number of exceedances observed when comparing total metals data against a total target. Furthermore, there are significantly more exceedances when using the proposed translator (<b>Table 2</b>), as compared to a translator based on the more recent data set (<b>Table 3</b>). Thus, the choice of data in selecting site-specific translators is important.</p> <p><b>[See comment letter for tables]</b></p> <p><b>Requested Actions:</b> <i>Use only the recent data set (October 2005-2012) when calculating wet and dry weather translators for copper, lead, and zinc and revise the dry-weather and wet- weather numeric targets as follows:</i></p> <p><b>[See comment letter for tables]</b></p> <p>If translators based on the more recent data set are not included in the TMDL, incorporate language into the Implementation section and Implementation Schedule (Table 7-12.2) allowing compliance with the interim and final milestones to be demonstrated by meeting the dissolved CTR criteria instream. This step will ensure that if the Permittees' actions result in attainment of the CTR criteria (which are dissolved criteria) they will not be out of compliance because of the translator.</p>	
3.3	City of Los Angeles	<p><b>3. THE PERCENT REDUCTION INTERIM COMPLIANCE MILESTONES SHOULD RELATE TO "BASELINE" CONDITIONS RATHER THAN "CURRENT" CONDITIONS</b></p> <p>The Bureau appreciates the inclusion of an approach that allows for compliance with interim allocations to be based on load reduction in addition to the percent area approach. The addition of this approach is important as the purpose of the TMDL is to reduce the loading of metals to Ballona Creek and BMPs are selected and located within the watershed based on their efficiency and effectiveness at reducing pollutant loadings. However, it is requested that the term "current loading" be replaced with "baseline loading". This would help to avoid confusion on the intent of the load reduction approach. The goal of the TMDL is to reduce loadings from the "baseline" that existed when the impairment was identified to meet the TMDL targets and attain the beneficial uses.</p>	<p>Staff agrees. The BPA and staff report have been clarified to address this comment.</p>

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3.4	City of Los Angeles	<p><b>Requested Action: Replace "current loading" with "baseline loading" throughout the BPA and Staff Report. Comments #10 and #11 of Attachment 1 present locations within the BPA that are requested for revision.</b></p> <p><b>4. ADDITIONAL COMPLIANCE LANGUAGE SHOULD BE INCLUDED FOR CONSISTENCY</b></p> <p><u>Language Should Indicate Multiple Methods for Demonstrating Compliance and Be Consistent throughout the BPA</u></p> <p>The Ballona Creek Estuary Toxic Pollutants TMDL included multiple methods for demonstrating compliance with interim and final WLAs. Similar methods should be included for the Metals TMDL. In addition, compliance with the interim and final milestones in the Implementation Schedule (Table 7-12.2) should provide mechanisms for compliance that are consistent with the language on page 12 of the BPA.</p>	<p>The Ballona Creek Estuary Toxics TMDL includes multiple methods of demonstrating compliance with <i>sediment</i> allocations and the Ballona Creek Metals TMDL includes only <i>water</i> allocations and so cannot include the same compliance methods.</p> <p>On the further request for compliance options (detailed in comments 3.13 and 3.14, below), these sorts of conditions have been addressed in the MS4 permit for Los Angeles County. This approach allows for greater detail and consistency among other similar TMDLs within the region.</p>
3.5	City of Los Angeles	<p><u>BMP Based Compliance Should Apply to Dry and Wet Weather</u></p> <p>The ability to demonstrate compliance via the development of a watershed management program that provides a quantitative demonstration that control measures and BMPs will achieve WLAs per the TMDL schedule and is approved by the Executive Officer should be applicable to both wet and dry weather WQBELs. Permittees that make a good faith effort to implement measures and BMPs that are expected to result in attainment of the WQBELs should not be found in violation as they adaptively manage their programs consistent with an approved process.</p> <p><b>Requested Action: Incorporate strikeout-underline language found in comments #8, #9, #14, and #15 of Attachment 1 into the Implementation section of the BPA and the BPA Implementation Schedule (Table 7-12.2).</b></p>	<p>The BMP-based approach applies to wet weather allocations because in MS4 permits a BMP based approach is intended for <i>stormwater</i> discharges per federal regulations.</p>
3.6	City of Los Angeles	<p>Exclusion of selenium from Metals TMDL</p> <p>The Bureau greatly appreciates the revisions to the Metals TMDL based on recent data that indicate that selenium is not present at levels exceeding existing targets and is not impairing the designated beneficial</p>	<p>Comment noted.</p>



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3.7	City of Los Angeles	<p>The WER term should be included for consistency with the CTR and LA River Metals TMDL.</p>	<p>The BPA has been modified to address this comment and provide additional clarification.</p>
3.8	City of Los Angeles	<p>Dry weather translator should be based on median consistent with the State Implementation Policy</p>	<p>See response to comment 3.1.</p>
3.9	City of Los Angeles	<p>Apparent error in calculation of dissolved numeric targets</p>	<p>Regional Board disagrees. CTR provides a default conversion factor, which is conservative. Use of a site-specific conversion factor to calculate the numeric target is appropriate and consistent with the Los Angeles River Metals TMDL.</p>

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3.10	City of Los Angeles	<p>Site-specific translators should be calculated from data that reflect current condition</p>	<p>expressed as dissolved metals. Site-specific conversion factors are used to convert the dissolved CTR criteria to total criteria not to revise the dissolved CTR criteria. As such, the following changes are requested: <b>[See comment letter for tables]</b></p>
		<p>Based on an analysis of the data used to calculate data, it is recommended that only data from October 2005–2012 be used in calculating the dry and wet weather translators for the following two reasons: 1) the more recent data are more reliable and 2) the more recent data are representative of current conditions. As a first step in calculating translators, all data are reviewed and those data that are not acceptable to calculate translators are excluded. The Regional Board staff excluded three categories of data: 1) either the dissolved or total metal result was reported as less than the reporting limit, 2) both the dissolved and total metal result was reported as less than the reporting limit, and 3) the dissolved metal result was reported as greater than the total metal result. The remaining data are considered usable for calculating translators. As shown in <b>Table 3</b>, there are significant differences in the percent of usable data for the 1995–2005 period (early) and the 2005–2012 period (recent), with the more recent data having higher percentages of usable data. The largest differences between the early and recent datasets were in the high percentages of data below reporting limits for lead and zinc. The high percentages of data below reporting limits for lead and zinc are indicative of poor overall data quality which calls into question the validity of the early data for the purpose of calculating representative translators. This is not unexpected as reporting limits, have improved significantly since 1996 (the first year of data considered in the translator</p>	<p>See response to comment 3.2.</p>

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		<p>calculations). For example, the reporting limits for copper, lead, and zinc have decreased from 5 µg/L to 0.5 µg/L for copper and lead, and 50 µg/L to 10 µg/L for zinc. These ten-fold and five-fold decreases in reporting limits would be similarly reflected in decreases in detection levels. The high rates of exclusions significantly bias the distribution of translator results for these data sets.</p> <p><b>[See comment letter for tables]</b></p> <p>The early and recent data sets were also tested for differences. The recent data period had significantly lower mean translator values (<math>p &lt; 0.05</math>) for wet and dry events for lead and zinc, and for wet events for copper. These differences are also reflected in the 90<sup>th</sup> percentile values used as final translators. The differences in translator data are illustrated with box plots for all three metals (<b>Figure 1</b>).</p> <p><b>[See comment letter for figure]</b></p> <p>The recent data set is representative of current conditions and is clearly of more reliable quality for calculating translators than the early data. Based on the findings above, it is requested that only the recent data set be used when calculating wet and dry weather translators for copper, lead, and zinc and that the dry-weather and wet-weather numeric targets be revised as follows:</p> <p><b>[See comment letter for tables]</b></p> <p>Additionally, the CTR criteria of interest are established as dissolved metals criteria as the dissolved metal more closely approximates the bioavailable fraction of the metal in the water column than does the total recoverable metal. The number of exceedances observed when comparing</p>	

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		<p>dissolved metals data against the dissolved metals target is the criteria which best demonstrates whether or not the water body is truly impaired by each metal. However, it is understood that EPA's NPDES regulations require that limits for metals in permits be stated as total recoverable in most cases (see 40 CFR 122.45(c)) except when an effluent guideline specifies the limitation in another form of the metal, the approved analytical methods measure only dissolved metal, or the permit writer expresses a metal's limit in another form (e.g., dissolved, specific valence, or total) when required to carry out provisions of the CWA. As such, the BC Metals TMDL uses translators to convert the dissolved metals target to a total metals target.</p> <p><b>Table 6</b> and <b>Table 7</b> present a comparison of the available data to TMDL targets using the proposed TMDL translators and the translators presented in <b>Table 5</b>, respectively. As shown in <b>Table 6</b> and <b>Table 7</b>, the number of exceedances observed when comparing dissolved data against a dissolved target is generally significantly lower than the number of exceedances observed when comparing total metals data against a total target. Furthermore, there are significantly more exceedances when using the proposed translator (<b>Table 6</b>), as compared to a translator based on the more recent data set (<b>Table 7</b>). Thus, the choice of data in selecting site-specific translators is important. As such, if the translators presented in <b>Table 4</b> and <b>Table 5</b> are not included in the TMDL, it is requested that language be added to the Implementation section and Implementation Schedule (Table 7-12.2) allowing compliance with the interim and final milestones to be demonstrated by meeting the dissolved CTR criteria instream. This step will ensure that if the Permittees' actions result in attainment of the CTR criteria (which is a dissolved criteria) they will not be out of compliance</p>	

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3.11	City of Los Angeles	<p>Apparent error in calculation of wet-weather storm water WLA</p>	<p>because of the translator. [See comment letter for tables] The Wet-Weather Storm Water WLA for Copper appears to have been incorrectly calculated. As such, the following change is requested: [See comment letter for tables]</p>
3.12	City of Los Angeles	<p>Use of 90<sup>th</sup> percentile conversion factor for the translation of dry-weather targets is an inappropriate MOS</p>	<p>The 2005 SIP dictates how a translator is derived for a location based on the set of ratios calculated:  “The translator shall be derived using the median of data for translation of chronic criteria and the 90<sup>th</sup> percentile of observed data for translation of acute criteria.”  The SIP states that the conversion factor shall be derived using the median of data for translation of the chronic criteria, which in this case are used to establish dry-weather numeric targets. Furthermore, the basis for the SIP translator approach is the USEPA’s 1996 Metals Translator Guidance, which allows States to adopt alternative percentiles to address a margin of safety (MOS). In the case of California, the choice regarding the MOS is addressed by the decision in the SIP to use the median for chronic criteria. As a result, use of 90<sup>th</sup> percentile conversion factor for the translation of dry-weather targets is an inappropriate MOS, and the median should be used and considered to incorporate an appropriate MOS.</p>
3.13	City of Los Angeles	<p>Additional compliance language should be included for consistency</p>	<p>See response to comment 3.1.</p>
			<p>See response to comment 3.4 and 3.5.</p>

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		<p>compliance with the interim and final milestones by meeting the dissolved CTR criteria instream be included. As such, the following revisions are requested:</p> <p>Each municipality and permittee will be required to meet the storm water waste load allocation. MS4 dischargers can demonstrate compliance with the interim and final milestones via one of the following:</p> <ol style="list-style-type: none"> <li>1. <u>Interim or final allocations are met consistent with the schedule in Table 7-12.2; or</u></li> <li>2. <u>There is no direct or indirect discharge from the Permittee's MS4; or</u></li> <li>3. <u>Dissolved or total CTR criteria are met instream; or</u></li> <li>4. <u>Flow-weighted concentration from MS4 discharges is less than or equal to CTR criteria, based on a weighted-average using flow rates from all measured outfalls discharging to a compliance point; or,</u></li> <li>5. <u>If permittees provide a quantitative demonstration as part of a watershed management program plan that control measures and BMPs will achieve milestones consistent with the schedule in Table 7-12.2, then compliance may be demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval.</u></li> </ol>	
3.14	City of Los Angeles	<p>BMP based compliance should apply to dry and wet weather conditions</p>	<p>See response to comment 3.5.</p>

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3.15	City of Los Angeles	<p>% reduction should relate to “baseline” conditions rather than “current” conditions</p>	<p>that are expected to result in attainment of the WQBELs should not be found in violation as they adaptively manage their programs consistent with an approved process. Additionally, it appears the incorrect table is referenced in the text. As such, the following changes are requested:</p> <p>If permittees provide a quantitative demonstration as part of a watershed management program plan that control measures and BMPs will achieve <del>wet-weather</del> WLAs consistent with the schedule in Table 7-142.2, then compliance with <del>wet-weather</del> WQBELs may be demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval.</p> <p>The Bureau appreciates the inclusion of an approach that allows for compliance with interim allocations to be based on load reduction in addition to the percent area approach. The addition of this approach is important as the purpose of the TMDL is to reduce the loading of metals, and BMPs are selected and located within the watershed based on their efficiency and effectiveness at reducing pollutant loadings. However, it is requested that the term “current loading” be replaced with “baseline loading”. This would help to avoid confusion on the intent of the load reduction approach. The goal is to reduce loadings from the “baseline” that existed when the impairment was identified to meet the TMDL targets and attain the beneficial uses. As such, the following revisions are requested:</p> <p>The implementation schedule for the MS4 and Caltrans permittees consists of a phased approach, with compliance to be achieved in prescribed percentages of the watershed or as a reduction from the <del>current</del> baseline loading, with total compliance to be achieved by <del>January 11, 2021</del> as outlined in Table 7-12.2. <u>The baseline loading is defined as the</u></p>

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3.16	City of Los Angeles	<p>% reduction should relate to “baseline” conditions rather than “current” conditions</p>	<p>loading that existed when the impairment was identified.</p> <p>Similar to comment #10, the Bureau appreciates the inclusion of an approach that allows for compliance with interim allocations to be based on load reduction in addition to the percent area approach. However, it is requested that the term “current loading” be replaced with “baseline loading” as follows:</p> <p>The MS4 and Caltrans storm water NPDES permittees are required to submit for approval of the Executive Officer a coordinated monitoring plan that will demonstrate the effectiveness of the phased implementation schedule for this TMDL, which requires attainment of the applicable waste load allocations in prescribed percentages of the watershed over a 15-year period or as a reduction from <del>current</del> <u>baseline</u> load.</p>
3.17	City of Los Angeles	<p>Language referencing additional TMDL reconsiderations should be included</p>	<p>Special studies that may serve to refine the estimate of loading capacity, waste load and/or load allocation, and other studies that may serve to optimize implementation efforts may still be conducted. As such, the following revisions are requested:</p> <p>In place of striking out the following sentence in its entirety:</p> <p><del>The Regional Board will re-consider the TMDL by January 11, 2011 in light of the findings of these studies;</del></p> <p>modify the sentence as follows:</p> <p>The Regional Board will re-consider the TMDL by <u>January 11, 2011 in light of the findings of these studies; five years after the effective date of this</u></p>



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3.18	City of Los Angeles	<p>Include reference to Coordinated Integrated Monitoring Program</p>	<p>The BPA has been modified to address this comment and provide additional clarification.</p>
3.19	City of Los Angeles	<p>Additional compliance language should be included for consistency</p>	<p>See response to comments 3.3 and 3.4.</p>
		<p>amendment in light of the findings of these or other relevant studies.</p> <p>As the MS4 Permittees have joined together to develop a Coordinated Integrated Monitoring Program, please add the following language to the requirement to update the coordinated monitoring plan (CMP) by June 11, 2015 to allow for monitoring updates to be incorporated directly into the CIMP rather than a separate CMP.</p> <p>Submit a revised coordinated monitoring plan or the MS4 Permit required Integrated Monitoring Program or Coordinated Integrated Monitoring Program.</p>	
		<p>The following comments relate to the compliance language for the interim dates of January 11, 2012, 2014, and 2016. Compliance with the milestones should provide additional mechanisms for compliance consistent with the language on page 12 of the BPA. As such, the following revisions to the compliance demonstration approaches are requested for the January 11, 2012, 2014, and 2016 interim compliance milestones:</p> <p>Compliance with the metals TMDL may be demonstrated in either one of two the following ways:</p> <ol style="list-style-type: none"> <li>1. <u>There is no direct or indirect discharge from the Permittee's MS4; or</u></li> <li>2. <u>Dissolved or total CTR criteria are met in-stream; or</u></li> <li>3. <u>Flow-weighted concentration from MS4 discharges is less than or equal to CTR criteria, based on a weighted-average using flow rates from all measured outfalls discharging to a compliance point; or,</u></li> </ol>	

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		<p>4. <u>If permittees provide a quantitative demonstration as part of a watershed management program plan that control measures and BMPs will achieve the interim milestones consistent with the schedule, then compliance may be demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval; or</u>  <u>Interim allocations are met as described below:</u></p> <p><b>The following changes are only for the 2012 Interim Milestone</b></p> <p>✚ The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 50% of the total drainage area served by the MS4 is effectively meeting the dry-weather waste load allocations and 25% of the total drainage area served by the MS4 is effectively meeting the wet-weather waste load allocations.</p> <p>✚ Alternatively, permittees shall attain a 50% reduction in dry-weather and 25% reduction in wet-weather in the difference between the <del>current</del> <u>baseline loadings</u> and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p> <p><b>The following changes are only for the 2014 Interim Milestone</b></p> <p>5. <u>Interim allocations are met as described below:</u></p> <p>✚ The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 75% of the total drainage area served by the MS4 is effectively meeting the dry-weather wasteload allocations.</p>	

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		<p><del>2</del> Alternatively, permittees shall attain a 75% reduction <del>in dry-weather</del> in the difference between the <del>current</del> baseline loadings and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p> <p><b>The following changes are only for the 2016 Interim Milestone</b></p> <p>5. <u>Interim allocations are met as described below:</u></p> <p><del>4</del> The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 100% of the total drainage area served by the MS4 is effectively meeting the dry-weather waste load allocations and 50% of the total drainage area served by the MS4 is effectively meeting the wet-weather waste load allocations.</p> <p><del>2</del> Alternatively, permittees shall attain a 100% reduction in dry-weather and 50% reduction in wet-weather in the difference between the <del>current</del> <u>baseline loadings</u> and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p>	
3.20	City of Los Angeles	<p>Additional compliance language should be included for consistency</p> <p>Compliance with the metals TMDL may be demonstrated in either one of two the following ways:</p> <p>1. <u>There is no direct or indirect discharge from the Permittee's MS4; or</u></p>	<p>See response to comments 3.3 and 3.4.</p>

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		<p>2. <u>Dissolved or total CTR criteria are met in stream; or</u></p> <p>3. <u>Flow-weighted concentration from MS4 discharges is less than or equal to CTR criteria, based on a weighted-average using flow rates from all measured outfalls discharging to a compliance point; or,</u></p> <p>4. <u>If permittees provide a quantitative demonstration as part of a watershed management program plan that control measures and BMPs will achieve the final milestones consistent with the schedule, then compliance may be demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval; or</u></p> <p>5. <u>Final allocations are met as described below:</u></p> <p><del>1.</del> The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 100% of the total drainage area served by the MS4 is effectively meeting both the dry-weather and wet-weather waste load allocations.</p> <p><del>2.</del> Alternatively, permittees shall attain a 100% reduction of both dry and wet-weather in the difference between the <del>current</del> <u>baseline</u> loadings and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p>	
3.21	City of Los Angeles	<p>Revise compliance schedule to be consistent with other adopted metals TMDLs in the region</p>	<p>The Regional Board has determined that the June 30, 2021 deadline for MS4 and Caltrans storm water permittees to meet final WLAs is realistic. SB 346 prohibits the sale of vehicle brake pads containing more than 5% copper by weight by 2021 (and more than 0.5% copper by weight by 2025). Although MS4 and Caltrans storm water permittees must meet the WLAs one year after SB 346 prohibits the sale of vehicle brake pads containing more than 5%</p>

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		<p>available. An analysis of the current annual load of copper that can be attributed to brake pad wear indicates that brake pads are a significantly larger source of copper in the Ballona Creek watershed than was assumed at the time when the IPs were developed. Over 32% of the total current copper loading to the watershed may be attributable to wear from brake pads. This value is conservative because calculations assumed a dry weather equilibrium of brake pad copper on street surfaces after 20 days, and did not account for washdowns of copper from street surfaces during storm events in the wet season.</p> <p>Recent results of Metals TMDL monitoring in Ballona Creek confirm that copper is the most challenging pollutant for meeting the WLAs of the Metals TMDL, followed by zinc, whereas lead rarely exceeds the WLAs, respectively. Wet weather WLAs are consistently exceeded for total recoverable copper, whereas dissolved copper exceeds the wet weather WLAs much less frequently, and the dry weather copper WLAs are rarely exceeded. These findings confirm that particulate copper (i.e., copper from brake pads), is a major source of the total copper loading to Ballona Creek, particularly during storm events when particulate copper is mobilized from street surfaces. Lastly, exceedances of the total recoverable copper WLAs occurring at all monitoring stations, at least occasionally, during wet weather also speaks to brake pads being a major source as the Ballona Creek watershed is highly urbanized with a high vehicle density that is uniformly distributed over the watershed. The ubiquitous nature of copper (and other metals) throughout the watershed imposes challenges to implementation and compliance schedules.</p>	<p>copper, it is possible that brake companies will go directly to low copper (i.e., 0.5% copper by weight) or copper-free brakes immediately, or achieve the 5% copper by weight requirement before 2021.</p> <p>According to the Brake Pad Partnership, although quantitative information about brake pad copper reductions is not yet available, strong industry attention to low-copper and copper-free brake pads and promotion of these pads by companies already offering them (such as Honeywell, FDP Brake, Williams, Fastmagna.com, Bendix, Phoenix, ALCO, Wilson, Crowe, Aftermarket News, Murphy) provides evidence that implementation is underway and is proceeding in accordance with the process and time frames anticipated by the Brake Pad Partnership.</p> <p>Furthermore, although brake pads may be a contributor of copper in the Ballona Creek Watershed, other sources of metals causing impairment of the watershed include vehicle wear, building materials, pesticides, erosion of paint, and deposition of air emissions from fuel combustion and industrial facilities. Thus, responsible parties may not be able to solely rely on the phase-out of copper in brake pads to attain their copper allocations. In addition, the TMDL addresses other metals, and to base the implementation schedule solely on the schedule in SB 346 would ignore the implementation efforts that will need to occur to attain allocations for other metals.</p> <p>If responsible parties choose to conduct a special study in the Ballona Creek Watershed to determine the proportion of copper coming from</p>

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4.1	City of Los Angeles	<p>Identical challenges to the implementation and compliance schedules for the Los Cerritos Channel Metals TMDL (Los Cerritos Channel Metals TMDL) and the San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (SGR Metals TMDL) existed, and the Regional Board has set precedent regarding how to address these challenges. Identical to the Metals TMDL, the Los Cerritos Channel Metals TMDL and the SGR Metals TMDL address multiple metals in a highly urbanized watershed, and were adopted in the years just prior to the time when SB 346 was signed into law. Also, similar to what is estimated for the Ballona Creek watershed, the staff report written for the Los Cerritos Channel Metals TMDL and SGR Metals TMDL Implementation Plans states that “a range of urban runoff reduction estimates from 17% to 29% by 2020 and 55 to 61% by 2032 as a result of the anticipated phase out of copper in brake pads due to SB 346.” In the Los Cerritos Channel Metals TMDL and the SGR Metals TMDL, the challenges were addressed by including the implementation period presented in <b>Table 9</b> that considers the effects of SB 346. As such, to also consider the effects of SB 346 in the BC Metals TMDL, it is requested that the Implementation Schedule be modified to include the interim and final compliance dates and milestones that were included for the Los Cerritos Channel Metals TMDL and the San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (<b>Table 9</b>).</p> <p>[See comment letter for tables]</p>	<p>brake pads and/or the contributions of the reduction in copper in brake pads to the reduction of copper in stormwater, the Regional Board can evaluate the impact of SB 346 on TMDL implementation and adjust the schedule if appropriate and necessary.</p> <p>The a study of the proportion of copper coming from brake pads and/or the contributions of the reduction in copper in brake pads to the reduction of copper in stormwater has been added to the list of potential special studies in the Basin Plan Amendment.</p>
		<p><b>1. Revisions to the Toxics TMDL Based on the findings of the Toxicity Identification Evaluation of Sediment (Sediment TIE) in Ballona Creek Estuary Final Report are greatly appreciated</b></p> <p>The Bureau greatly appreciates the revisions to the Toxics TMDL based on</p>	<p>The staff report has been revised to address this comment.</p>

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4.2	City of Los Angeles	<p>the findings of the <i>Toxicity Identification Evaluation of Sediment (Sediment TIE) in Ballona Creek Estuary Final Report</i>. The Bureau's Watershed Protection Division (WPD) and Environmental Monitoring Division (EMD), in conjunction with the Southern California Coastal Water Research Project (SCCWRP), conducted a three year study (Toxicity Identification Evaluation (TIE)) funded by the Responsible Parties to determine the current extent of chemical contamination within the Ballona Creek Estuary and to determine likely causes of toxicity. The TIE Study was conducted consistent with the State's Sediment Quality Objectives (SQOs) for toxic pollutants (Phase I SQOs) Stressor Identification Process. The TIE Study found that historical organic pollutants (total DDT, total PCBs, chlordanes, and total PAHs) were not causing toxicity in the Ballona Creek Estuary.</p> <p><b>Requested Actions:</b> <i>In the Problem Statement, note that the TIE Study found that historical organic pollutants (total DDT, total PCBs, chlordanes, and total PAHs) were not causing toxicity in the Ballona Creek Estuary.</i></p> <p><b>2. The Loading Capacity and WLAs should also be expressed in terms of discharged loads, not solely settleable loads, to support BMP selection and evaluation of attainment.</b></p> <p>As discussed in the 2005 BC Toxics TMDL Staff Report, the mass-based allocations are based on the sediments <i>deposited in the estuary</i> rather than what is <i>discharged from the watershed</i>. However, MS4 Permittees must address what they discharge from the watershed and cannot affect other sources of pollutants that may be deposited in the estuary. Including discharge based WLAs, instead of or in addition to deposition based WLAs, would be extremely helpful for the purposes of implementation planning, evaluating individual jurisdiction's contributions to loading, and ultimately determining compliance using data collected from MS4 discharges. MS4s will be monitoring at the outfalls to determine how much of these pollutants are discharged. If the mass <b>discharged</b> from MS4s was compared to the current WLAs based on what <b>settles</b>, Permittees could be out of compliance with the water quality based effluent limits (WQBELs) in the MS4 permit while still meeting the assumptions of the WLAs and goals of the TMDL. For implementation planning, modeling tools are heavily relied upon, were used for the development of the forthcoming Enhanced Watershed Management and will be used for the forthcoming Enhanced Watershed Management Program. These tools help select BMPs by estimating the reduction in the</p>	<p>The Los Angeles County MS4 permit specifies that the allocations for Ballona Creek Estuary are for sediment-bound pollutant loads deposited in the estuary. In addition, the Basin Plan Amendment for the Ballona Creek Estuary Toxics TMDL has been modified for clarity.</p> <p>The Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters TMDL also allocated based on what is deposited in the harbor waters but made the simplifying assumption that <i>all</i> of what is discharged from the watershed is deposited.</p> <p>While the 44,615 and 5,004 m<sup>3</sup> per year figures were based on a 10 year record (1991 – 2001) assembled by the Army Corps of Engineers, and are a reasonable approximation of discharge to settleable proportion, there are other technical methods of calculating the proportion of settleable fines from the total discharged, including development of appropriate</p>

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		<p>load of pollutants in the MS discharge rather than what is settled based on various combinations of BMPs.</p> <p>The 2005 BC Toxics TMDL Staff Report estimated the average annual total sediment discharged as 44,615 m<sup>3</sup>/year and the average annual fine sediment deposited as 5,004 m<sup>3</sup>/year. Given this information, the percentage of the total discharged sediment that is ultimately deposited as fine sediment is 11.2%. As previously stated, including discharge based WLAs, instead of, or in addition to, deposition based WLAs, would be extremely helpful and appropriate. Discharge based WLAs may be calculated by dividing the currently used loading capacity and WLAs, which are based on the fine sediment that settles, by the percentage of the total discharged sediment that is ultimately deposited as fine sediment, 11.2%.</p> <p>If the discharge based WLAs are not included in the TMDL, language should be included in the BPA and Staff Report clearly indicating that the WLAs apply to what settles on the bed sediment and does not directly correspond to an allowable effluent loading.</p> <p><i>Requested Actions: Incorporate strikeout-underline language and tables found in comment#5 of Attachment 1 into the Loading Capacity, Load Allocations, and Waste Load Allocations sections of the BPA. Additionally, if the discharge based WLAs are not included in the TMDL, incorporate strikeout-underline language found in comment #5 of Attachment 1 into the Implementation section of the BPA and the BPA Implementation Schedule (Table 7-14.2) clearly indicating that the WLAs apply to what settles on the bed sediment and does not directly correspond to an allowable effluent loading for consistency with the MS4 Permit.</i></p>	<p>proportions from actual discharge data and modeling methods. The Regional Board currently has contracted with University of California Irvine for the development of a modeling method that could be used by MS4 dischargers. These methods (or other appropriate methods based on special studies in the Ballona Creek Watershed) may be used to refine allocations during the scheduled reconsideration (see comment no. 4.6).</p>
4.3	City of Los Angeles	<p><b>3. THE PERCENT REDUCTION INTERIM COMPLIANCE MILESTONES SHOULD RELATE TO "BASELINE" CONDITIONS RATHER THAN "CURRENT" CONDITIONS.</b></p> <p>The Bureau appreciates the inclusion of an approach that allows for compliance with interim allocations to be based on load reduction in addition to the percent area approach. The addition of this approach is important as the purpose of the TMDL is to reduce the loading of toxics to the Estuary, and BMPs are selected and located within the watershed based on their efficiency and effectiveness at reducing pollutant loadings. However, it is requested that the term "current loading" be replaced with "baseline loading".</p>	<p>Staff agrees. The BPA has been revised to address this comment.</p>



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4.4	City of Los Angeles	<p>This would help to avoid confusion on the intent of the revision. The goal is to reduce loadings from the "baseline" that existed when the impairment was identified to meet the TMDL targets and attain the beneficial uses. The requested change would need to be made throughout the BPA and Staff Report.</p> <p><b>Requested Action: Replace the term "current loading" with "baseline loading" throughout the TMDL BPA and Staff Report and include the calculated "baseline loadings" presented in comment #7 of Attachment 1.</b></p> <p><b>4. Additional compliance language should be included for consistency and to provide a mechanism allowing the results of a TIE analysis or Stressor ID Study to demonstrate compliance for an individual constituent.</b></p> <p><u>Results of TIE Analysis or Stressor ID Study Compliance Language for Metals</u></p> <p>Addition of the multiple methods for demonstrating compliance is appreciated. Additionally a mechanism allowing the results of a TIE analysis or Stressor ID Study to demonstrate compliance for an individual constituent should be included. The 2008 TIE Study found that the historical organics were not contributing to toxicity and related targets for direct effects have been removed. The TIE Study also indicated that trace metals were most likely not causing sediment toxicity; however, several tests were inconclusive. Additional research is necessary and these direct effects targets and associated allocations are retained. If in the future it is determined that an individual constituent is not causing or contributing to toxicity at levels above the TMDL target, this additional compliance method provides the only mechanism to demonstrate, compliance. The concern is that an individual pollutant could be found to not be causing toxicity, but toxicity is occurring due to a different constituent with a separately enforceable permit limit. Without this mechanism, the Permittees would be subject to enforcement for exceedances of multiple constituents when one is not causing toxicity.</p> <p><u>Consistency of BPA Implementation Schedule with Implementation Section of the BPA</u></p> <p>The compliance demonstration methods for the direct effects and indirect effects interim dates of January 11, 2013, 2016, and 2017 and final WLAs</p>	<p>Staff acknowledges the challenges with addressing impairments to sediment from different constituents. As such, added flexibility was included in the TMDL in the form of multiple compliance options. Future special studies, including Stressor Identification studies that serve to inform responsible agencies and the Regional Board regarding sources of toxicity will be considered as they are developed.</p> <p>If, in the future, a stressor identification study shows that an individual constituent is not causing or contributing to toxicity at levels above the TMDL target, and the stressor identification study has been adequately designed and implemented, the TMDL can be revised to consider the results of the study. While stressor identification studies are described in the State Water Quality Control Plan for Enclosed Bays and Estuaries (EB&amp;E Plan Part 1), minimum requirements or expectations for stressor identification studies are not developed, therefore it would be premature to assume that any future stressor identification study would be sufficient to demonstrate compliance with the TMDL.</p>

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4.5	City of Los Angeles	<p>should include all of the compliance related language on page 9 of the BPA for consistency.</p> <p><b>Requested Action: Incorporate strikeout underline language found in comments #6, #13, #14, and #15 of Attachment 1 into the Implementation section of the BPA and the BPA Implementation Schedule (Table 7-14.2).</b></p> <p><b>5. Indirect effects targets, loading capacities, and WLAs should not be included for constituents without an identifiable impairment.</b></p> <p>During the development of the 2005 Toxics TMDL, an impairment for bioaccumulatives in fish tissue was not found and, as a result, fish tissue targets and allocations were not included. Subsequent to TMDL adoption, Regional Board staff recommended removing the DDT, chlordane, and PCBs listings for fish tissue. The fish and mussel tissue data that have been collected in the Ballona Creek Estuary since TMDL adoption are shown in Table 1 and Table 2. As indicated in Table 1, available fish tissue data that have been collected since the adoption of the 2005 Toxics TMDL do not demonstrate an impairment when compared to the Fish Contaminant Goals (FCGs) (used as proposed targets in the TMDL) and Advisory Tissue Levels (ATLs) listed in Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene. It should be noted that page 23 of the Draft Staff Report is incorrect in stating that "only three fish have been collected (in 2012)." There were composite samples for each of the three different fish species. The speckled sanddab composite consisted of tissue from nine individuals, the spotted turbot composite consisted of tissue from three individuals, and the staghorn sculpin composite consisted of fish tissue from ten individuals. In addition, as shown in Table 2, available mussel tissue data collected since the adoption of the 2005 Toxics TMDL also do not demonstrate an impairment when compared to the FCGs and ATLs.</p> <p><b>[See comment letter for tables]</b></p> <p>Additionally, although the TMDL Reconsideration Staff Report references an OEHHA advisory, the OEHHA Fish Consumption Guidelines Report<sup>1</sup> clearly states, "Concentrations of chlordane and dieldrin were below levels of concern (see Klasing and Brodberg, 2008) and will not be addressed in this</p>	<p>The commenter's statement that, "an impairment was not found during the development of the 2005 Toxics TMDL" is incorrect. The 2005 TMDL Staff Report states "This TMDL will address impairments of beneficial uses due to concentrations of chlordane, DDT, PCBs, PAHs, cadmium, copper, lead, silver and zinc in Ballona Creek Estuary sediments." (page 4 Ballona Creek Estuary Toxics TMDL Staff Report).</p> <p>The 2005 Toxics TMDL addressed impairments of sediment and tissue by developing TMDLs and allocations for sediments.</p> <p>DDT, PCBs and chlordane remain in the 303(d) list for Ballona Creek Estuary and the Lines of Evidence supporting the listings include both sediment and tissue data.</p> <p>The 2005 Toxics TMDL did not address human health impacts associated with the beneficial uses, specifically. The tentative Basin Plan Amendment proposes the addition of TMDL targets and allocations for sediments to address human health (beneficial use of REC-1 or COMM) specifically. Those targets and allocations are based on Fish Contaminant Goals (developed by OEHHA in 2008) and the State Water Resources Control Board Sediment Quality Objectives for indirect effects (developed in 2008) contained in the Enclosed</p>

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		<p>report."<sup>2</sup> As such, fish consumption guidelines have not been instituted for southern California waters including Ballona Creek Estuary for chlordane.</p> <p>These conclusions are consistent with the TMDL Reconsideration Staff Report, which does not indicate that fish tissue data demonstrate an impairment. Rather, the reasoning for inclusion of fish tissue and associated sediment targets is based on interpretation of a narrative objective as follows:</p> <p>"The State's Water Quality Control Plan for Enclosed Bays and Estuaries- Part 1 Sediment Quality (EB&amp;E Plan Part 1), which was adopted in 2009 after the original establishment of the toxics TMDL, includes (1) a narrative objective to protect benthic communities along with an evaluation approach based on integrating multiple lines of evidence (the - "triad" approach) to determine whether this objective is achieved, and (2) a narrative objective to protect the human health beneficial use. Therefore, it is necessary to include fish tissue targets and associated sediment targets for the bioaccumulatives to protect the human health beneficial use and ensure that the narrative objective for indirect effects contained in the State's EB&amp;E Plan is achieved."</p> <p>The draft Amendments to the EB&amp;E Plan Part 1 (Section IV.B) referenced in the TMDL Reconsideration Staff Report presents the following narrative objective for indirect effects to protect human health:</p> <p>"Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health in bays and estuaries of California. <b>This narrative objective shall be implemented as described in Section VI.A of Part 1.</b>"</p> <p>The draft Amendments to the EB&amp;E Plan Part 1 (Section VI.A) provides the following guidance on implementing the narrative objective:</p> <p>"The narrative human health objective in Section IV. B. of this Part 1 <b>shall be implemented on a case-by-case basis, based upon a human health risk assessment.</b>"</p>	<p>Bays and Estuaries Plan – Part 1 Sediment Quality, both of which have been developed since adoption of the original TMDL.</p> <p>TMDLs are required to protect all beneficial uses affected. See <i>Anacostia Riverkeepers, Inc. v. Jackson</i>, 798 F.Sup.2d 210, 224.</p> <p>The development of OEHHA's Fish Consumption Advisories for Southern California included a total of 1,373 fish comprising 22 species or species groups, which were analyzed for one or more contaminants. Fish were collected in pre-determined target lengths to align with expected normal angler catch. OEHHA then made fish consumption guidelines for 19 different species of fish including five species, which have advisories of "Do not eat" (for women 18-45 and children – for adult men and older women, three species are identified with the "Do not eat" advisory).</p> <p>We note that the three species caught in 2012 were not any of the species for which specific consumption advisories were made by OEHHA in 2008.</p> <p>The Ballona Creek Estuary is on the 303(d) list for chlordane and monitoring shows occasional chlordane exceedances in sediment. Thus a TMDL is developed for chlordane to include protection of all the beneficial uses.</p> <p>The commenter discusses the impairments as if there may be separate listings, or findings of impairment, for separate environmental media, that is, as if there could be a listing for DDT <i>in tissue</i> in the Ballona Creek Estuary and a listing for DDT <i>in sediment</i> in Ballona Creek Estuary -</p>

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		<p>As a result, if the results of a human health risk assessment show that the narrative objectives for indirect effects are not being achieved, it may be necessary to include fish tissue targets and associated sediment targets for the bioaccumulatives to protect human health and ensure that the narrative objective for indirect effects contained in the State's EB&amp;E Plan is achieved. On the other hand, if the results of a human health risk assessment show that the narrative objectives for indirect effects are being achieved or if a human health risk assessment is not performed, it is not necessary to include fish tissue targets and associated sediment targets for the bioaccumulatives. Given that the results of a human health risk assessment were not presented in the TMDL Reconsideration Staff Report, it does not appear that a health risk assessment has been conducted.</p> <p>To evaluate the potential human health risk associated with sediments in the Estuary, a tool currently being considered by State Water Board staff as part of the Draft EB&amp;E Plan Part 2 implementation process was utilized to consider site-specific conditions which were not considered in the sediment targets proposed in the BPA (the proposed targets were developed for other waterbodies based on the site-specific conditions of those waterbodies, not Ballona Creek Estuary). The tool currently being considered by State Water Board staff to be included as part of the Draft EB&amp;E Plan Part 2 implementation process is the Human Health SQO Decision Support Tool (DST). The DST is an Excel workbook that performs the Tier II SQO site assessment referenced in the Staff CEQA Scoping Informational Document: <i>Phase II Sediment Quality Objectives for Enclosed Bays and Estuaries of California</i>. The purpose of the Tier II SQO site assessment is to determine if site sediments meet the sediment quality objective described in Section IV.B that protects human consumers of resident seafood from bioaccumulative contaminants in sediment. The Tier II SQO site assessment consists of an evaluation of both tissue data and sediment data to determine the potential hazard to human health, using available site-specific information. Consumption risk is evaluated for both cancer and non-cancer effects. Evaluation of sediment linkage utilizes a mechanistic food web model to estimate tissue concentrations derived from measured sediment concentrations. Although the DST has not yet been approved, it provides an initial evaluation of the risk and provides an overview of the general thought process that demonstrates the path that State Water Board staff are considering.</p>	<p>two separate DDT listings in one waterbody. In fact, there is one listing for DDT in Ballona Creek Estuary. It happens that the data supporting that listing included sediment and tissue data (but not water data). Regardless of the environmental media from which the impairment was assessed, when the Regional Board develops a TMDL all the beneficial uses must be protected. Thus, fish tissue targets for the bioaccumulative compounds, DDT, PCBs and chlordanes, are included in this TMDL revision.</p> <p>The conclusions presented in comment #2 [comment 3.31 in this Response to Comments] are incorrect and not consistent with the TMDL Staff Reports. The TMDL reconsideration Staff Report presents the technical analyses in support of recommended changes to the TMDL. As the Staff Report states: <i>“The regulatory background, beneficial uses to be protected, geographical extent and complete TMDL elements along with supporting analysis are described in the respective staff reports and amendments to the Los Angeles Region Water Quality Control Plan (Basin Plan) (LARWQCB, 2005a and LARWQCB, 2005b) at (<a href="http://www.waterboards.ca.gov/losangeles/wal_er_issues/programs/tmdl/tmdl_list.shtml">http://www.waterboards.ca.gov/losangeles/wal_er_issues/programs/tmdl/tmdl_list.shtml</a>) and are not repeated, herein.”</i> DDT, chlordanes and PCBs impair the beneficial uses in the Ballona Creek Estuary. Fish tissue targets and associated sediment targets are included for those bioaccumulative compounds to protect all the beneficial uses including human health associated uses (REC-I and COMM).</p> <p>A human health risk assessment was very</p>

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		<p>The results obtained when using the DST with data collected from the Ballona Creek Estuary indicate the absence of an impairment for chlordane, total DDT, and total PCBs. The overall site assessment category is determined using the decision matrix presented in <b>Table 3</b>. Site sediments categorized as unimpacted or likely unimpacted meet the sediment quality objective protecting human consumers for the specific contaminant evaluated. Site sediments categorized as possibly impacted, likely impacted, or clearly impacted do not meet the sediment quality objective. As required, this evaluation has been performed separately for chlordane, total DDT, and total PCBs. In each case, the result for the consumption risk is categorized as <b>very low</b>. Thus, as indicated by the decision matrix in <b>Table 3</b>, the overall site assessment category is <b>unimpacted</b> for each constituent. This suggests that, based on site-specific data, sediment concentrations do not appear to be posing a risk to human health. This is contrary to the determination made in the TMDL amendment, which uses targets that were developed for other waterbodies rather than Ballona Creek site-specific data.</p> <p><b>[See comment letter for table]</b></p> <p>Adoption of the currently proposed targets <b>will result in MS4 allocations that will be incorporated as effluent limits even though there is no identified impairment in fish tissue, and site-specific analysis does not suggest sediment are causing an impairment</b>. Removal of the currently proposed sediment targets for indirect effects is appropriate. Monitoring requirements currently stipulated in the Draft Revised TMDL can be maintained so that data will still be collected to ensure that the narrative objective for indirect effects contained in the State's EB&amp;E Plan continues to be achieved. If the sediment targets for indirect effects and fish tissue are not removed, resources will be focused on the implementation of BMPs aimed at addressing constituents which do not appear to be causing or contributing to an impairment and, as a possible worst case scenario, the responsible parties may be forced to dredge the Estuary.</p> <p>The following provides a summary of the key points presented in the previous discussion:</p> <ol style="list-style-type: none"> <li>1. Available fish tissue and mussel data do not demonstrate an impairment;</li> <li>2. Sediment targets for indirect effects and fish tissue were included</li> </ol>	<p>capably done by OEHHA: “<i>Health Advisory and Safe Eating Guidelines for Fish from Coastal Areas of Southern California: Ventura Harbor to San Mateo Point</i>, June 2009.”</p> <p>Some version of the ‘Human Health SQO Decision Support Tool,’ may become part of revisions to the State’s SQOs for indirect effects. The ‘Human Health SQO Decision Support Tool,’ may be a useful exercise once fully vetted and incorporated into the State’s SQOs and appropriate data is used.</p> <p>The fish species used by the commenter in the “Decision Support Tool” were speckled sanddab, spotted turbot, and staghorn sculpin, which are not included in the 19 species that OEHHA identified as a risk for consumption in the Los Angeles Region. Therefore, a conclusion that the consumption risk is “very low” is deficient or premature, at best.</p>

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		<p>to protect the human health beneficial use and ensure that the narrative objective for indirect effects contained in the State's EB&amp;E Plan is achieved;</p> <ol style="list-style-type: none"> <li>3. The narrative objective contained in the State's EB&amp;E Plan clearly states that it should be implemented on a case-by-case basis, based upon a human health risk assessment;</li> <li>4. A human health risk assessment was not provided in the TMDL Reconsideration Staff Report to demonstrate the need for sediment targets for indirect effects and fish tissue;</li> <li>5. A human health risk assessment tool currently being considered by State Water Board staff indicates that the sediment quality objective protecting human consumers is met for chlordane, total DDTs, and total PCBs;</li> <li>6. Chlordane, total DDTs, and total PCBs will continue to be monitored to ensure that the narrative objective for indirect effects contained in the State's EB&amp;E Plan continues to be achieved; and</li> <li>7. Resources could be inappropriately diverted to BMPs and possibly dredging the Estuary even though site-specific data does not suggest an impairment.</li> </ol> <p><b><i>Requested Action: Remove the sediment targets, loading capacities, and WLAs for indirect effects and fish tissue. Maintain monitoring and reconsider the TMDL after the adoption of new State policies utilizing site-specific data. At a minimum, if sediment targets for indirect effects and fish tissue are still included despite the absence of an identifiable impairment, it seems appropriate to note that an impairment in fish tissue has not been identified in the Problem Statement.</i></b></p>	
4.6	City of Los Angeles	<ol style="list-style-type: none"> <li>6. TMDL Reopener should be added prior to the final compliance date to reconsider the TMDL based on the finding of relevant State policies and scientific studies.</li> </ol> <p>As recognized in the 2005 Toxics TMDL and the BPA for the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxics Pollutants TMDLs (Harbor Toxics TMDLs), it may be necessary to make adjustments to the TMDL to be responsive to new State policies including, but not limited to, SQO Part II and the toxicity policy. Additionally, BC stakeholders may conduct additional special studies, such as further investigation of the role of metals in toxicity in bed sediment, and the</p>	<p>Regional Board acknowledges the ongoing efforts within the state and the region which may serve to inform greater understanding and guide implementation efforts as well as the synergy with the Harbors TMDL. Because these efforts are underway at this time with a regularly-meeting workgroup which includes staff from the City of Los Angeles, a specific date for reconsideration has been added to the Toxics TMDL. Because the Ballona Creek Estuary Toxics TMDL may benefit from these studies</p>

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4.7	City of Los Angeles	<p>Responsible Parties to the Harbor Toxics TMDLs are currently conducting studies which may provide findings applicable to the BC Toxics TMDL. A number of these efforts are expected to be completed within the next few years and this TMDL would benefit from the guidance that these studies and State policies will provide.</p> <p><b>Requested Action: Incorporate strikeout-underline language found in comment #11 of Attachment 1 into the Monitoring section of the BPA and the BPA Implementation Schedule (Table 7-14.2).</b></p>	<p>that have already begun to support potential revisions of the Harbors Toxics TMDL including studies to develop reliable methods to determine total versus settleable loads for MS4 allocations, resident fish studies, bioaccumulation modeling, etc., staff proposes a date of March 2018, which is the target date for the Harbors Toxics TMDL reconsideration.</p> <p>The BPA and staff report have been revised to address this comment.</p>
4.8	City of Los Angeles	<p><b>7. The compliance schedule for PCBs should be revised based upon the significant reduction in the total PCBs WLA.</b></p> <p>Notwithstanding the previous comment that indirect effects targets for total PCBs should be removed, the following comment relates to the compliance language for the indirect effects interim dates of January 11, 2013, 2016, and 2017 and the final date of January 11, 2021. Given that the total PCBs WLA for MS4 Permittees went from 152 g/yr to 21.40 g/yr, which is an 86% reduction in the WLA, additional BMPs will need to be implemented that had not been accounted for during the development of the original TMDL and the Toxics TMDL Implementation Plans developed by the Cities and County. While the Cities and County have improved discharge quality and a reduction in total PCBs in Estuary sediments have been observed, additional time is needed to meet the new and significantly lower WLA. As a result, the implementation period to comply with the interim and final milestones for total PCBs should be extended.</p> <p><b>Requested Action: Modify the BC Toxics TMDL Implementation Schedule to include the interim and final compliance dates as shown in Table 4.</b></p> <p>[See comment letter for table]</p>	<p>Regional Board agrees and has modified the Basin Plan Amendment for the Ballona Creek Estuary Toxics TMDL for PCBs as recommended.</p>
4.8	City of Los Angeles	<p><b>8. The inclusion of sediment targets and allocations based on fish tissue end points fundamentally changes the TMDL from an direct effects TMDL to an indirect effects TMDL, without an appropriate opportunity to complete appropriate scientific studies and</b></p>	<p>Staff has a different recollection of the development of the revised TMDL in terms of the incorporation of the indirect effects SQOs to the Toxics TMDL. At every public meeting and</p>

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		<p><b>stakeholder processes.</b></p> <p>Notwithstanding the previous comments discussed in detail previously and those included in Attachment 1, the Bureau would like to comment on the process that was used during the reconsideration of the Toxics TMDL. The incorporation of indirect effects targets, loading capacities, and WLAs into the Toxics TMDL has created an entirely new TMDL because, not only were the values of the numeric targets, loading capacities, and WLAs changed (which is typical for TMDL reconsiderations), but the key matrix being protected was changed from sediment to fish tissue (which is not typical for TMDL reconsiderations). During the development of the new indirect effects TMDL, the Bureau was not given the opportunity to provide input on any aspect of the new indirect effects TMDL. As a result, the Bureau was not given sufficient time to research and propose alternatives which may benefit all stakeholders for many aspects of the new TMDL.</p> <p>The Bureau submitted a Ballona Creek Estuary Toxics Total Maximum Daily Load Reopener Support Report to Regional Board staff in October 2012. Within the 2012 report, the Bureau provided input regarding the aspects of the 2005 Toxics TMDL which were expected to be reconsidered. The Bureau's staff met with Regional Board staff twice (in 2012 and early 2013), but did not receive any feedback on the input that the Bureau provided despite several attempts to seek Regional Board staff feedback. On the contrary, the Bureau was told by Regional Board staff that the Toxics TMDL would not be reconsidered in 2013. It was not until one week prior to the release of the draft revisions to the TMDL that the Bureau was informed that the Toxics TMDL would be reconsidered in 2013, and not until the draft Tentative BPA was released that the Bureau found out that the Toxics TMDL would address indirect effects.</p> <p><b>Requested Actions: Remove all aspects of the Toxics TMDL related to indirect effects, and if necessary, create a separate indirect effects TMDL developed in cooperation with all interested stakeholders.</b></p>	<p>individual meeting with the City of Los Angeles, staff stressed that the model for the TMDL reconsideration was the Harbors Toxics TMDL and stressed that the revised TMDL would include indirect effect SQOs as required by the State's EB&amp;E Plan, Part 1 – Sediment Quality.</p> <p>During the meetings between the City of Los Angeles staff and Regional Board staff (in 2012, early 2013 and more recently), the Reopener Support Report, the data included, the methods utilized to analyze the data, and the conclusions and recommendations of the Reopener Support Report were discussed extensively. In addition, multiple emails and phone calls between Board staff, City of Los Angeles staff and City of Los Angeles consultants discussed the Reopener Support Report - and discussed the indirect effects SQOs. The City of Los Angeles received extensive feedback on the input they provided.</p> <p>The TMDLs were first scheduled for reconsideration in FY 2012-2013. This was later revised to FY 2013-2014.</p> <p>The Regional Board is required by State Water Board regulations to provide 45 days for public comment and the comment period met that requirement. The comment period was legally sufficient and was in keeping with the other TMDL projects adopted by this Board since 2000.</p> <p>In addition to the 45 days opportunity for public comment on reconsideration of the TMDLs, the Regional Board engaged in public outreach that provided the public with many opportunities to participate in the development of the TMDL.</p>



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4.9	City of Los Angeles	Additional information regarding the results of the TIE Study should be included	Also see response to comment 3.26.
		<p>The City of Los Angeles Bureau of Sanitation (Bureau) greatly appreciates the revisions to the Toxics TMDL based on the findings of the <i>Toxicity Identification Evaluation of Sediment (Sediment TIE) in Ballona Creek Estuary Final Report</i>. The Bureau Watershed Protection Division (WPD) and Environmental Monitoring Division (EMD), in conjunction with the Southern California Coastal Water Research Project (SCCWRP), conducted a three year study (Toxicity Identification Evaluation (TIE)) funded by the Responsible Parties to determine the current extent of chemical contamination within the Ballona Creek Estuary and to determine likely causes of toxicity. The TIE Study was conducted consistent with the State’s Sediment Quality Objectives (SQOs) for toxic pollutants (Phase I SQOs) Stressor Identification Process. The TIE Study found that historical organic pollutants (total DDT, total PCBs, chlordane, and total PAHs) were not causing toxicity in the Ballona Creek Estuary. The main conclusions from the Sediment TIE Study related to historical organic pollutants included:</p> <ul style="list-style-type: none"> <li>• The Effects Range Low (ERL) sediment quality guideline values used as target concentrations for the chemicals listed in the Toxics TMDL were found to be inaccurate and highly conservative.</li> <li>• Concentrations of TMDL-listed compounds often exceeded numeric targets (ERLs), but there was a poor correlation between ERL concentrations and observed sample toxicity.</li> <li>• For the organic compounds, ERLs were several orders of magnitude below toxicity thresholds for benthic organisms.</li> <li>• Concentrations of chlordane, DDT, and DDE</li> </ul>	See response to comment 4.1.

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4.10	City of Los Angeles	Information regarding the lack of an identifiable fish tissue impairment should	<p>were 10 to 10,000 times below toxicity thresholds either developed in this study or reported in other studies.</p> <ul style="list-style-type: none"> <li>• Spiked sediment tests were conducted to estimate the toxicity thresholds of several trace organics listed in the TMDL: chlordane, DDT, and DDE. Comparison of Ballona Creek Estuary sediment chemical concentrations to the toxicity thresholds indicated that these chemicals were not present at concentrations high enough to cause toxicity.</li> <li>• Sediment concentrations of PAHs and PCBs were also below levels likely to cause direct sediment toxicity. Given these findings form the basis for removing the direct effects targets and allocations from the TMDL, it seems appropriate to note this in the Problem Statement and Staff Report.</li> </ul> <p>During the development of the 2005 Toxics TMDL, an impairment for bioaccumulatives in fish tissue was not found and, as a result, fish tissue targets and allocations were not included. Subsequent to TMDL adoption, Regional Board staff recommended removing the DDT, chlordane, and PCBs listings for fish tissue. The fish and mussel tissue data that have been collected in the Ballona Creek Estuary since TMDL adoption are shown in <b>Table 1</b> and <b>Table 2</b>. As indicated in <b>Table 1</b>, available fish tissue data that have been collected since the adoption of the 2005 Toxics TMDL do not demonstrate an impairment when compared to the Fish Contaminant Goals (FCGs) (used as proposed targets in the TMDL) and Advisory Tissue Levels (ATLs) listed in <i>Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene</i>. It should be noted that page 23 of the Draft Staff Report is incorrect in stating that “only</p>
			See response to comment 4.5.

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		<p>three fish have been collected (in 2012).” There were composite samples for each of the three different fish species. The speckled sanddab composite consisted of tissue from nine individuals, the spotted turbot composite consisted of tissue from three individuals, and the staghorn sculpin composite consisted of fish tissue from ten individuals. In addition, as shown in <b>Table 2</b>, available mussel tissue data collected since the adoption of the 2005 Toxics TMDL also do not demonstrate an impairment when compared to the FCGs and ATLs.</p> <p><b>[See comment letter for tables]</b></p> <p>Additionally, although the TMDL Reconsideration Staff Report references an OEHHA advisory, the OEHHA Fish Consumption Guidelines Report clearly states, “Concentrations of chlordane and dieldrin were below levels of concern (see Klasing and Brodberg, 2008) and will not be addressed in this report.”<sup>2</sup> As such, fish consumption guidelines have <b>not</b> been instituted for southern California waters, including Ballona Creek Estuary, for chlordane. Given that an impairment was not found during the development of the 2005 Toxics TMDL and that the data that has been collected since the adoption of the 2005 Toxics TMDL also shows the absence of an identifiable impairment, numeric targets, loading capacities, and WLAs for chlordane, total DDT, and total PCBs should be removed. At a minimum, if sediment targets for indirect effects and fish tissue are still included despite this information, it seems appropriate to note this in the Problem Statement.</p>	
4.11	City of Los Angeles	Indirect effects targets should not be included for	See response to comment 4.6.

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	constituents without an identifiable impairment	<p>demonstrate an impairment. Rather, the reasoning for inclusion of fish tissue and associated sediment targets is based on interpretation of a narrative objective as follows:</p> <p>“The State’s Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (EB&amp;E Plan Part 1), which was adopted in 2009 after the original establishment of the toxics TMDL, includes (1) a narrative objective to protect benthic communities along with an evaluation approach based on integrating multiple lines of evidence (the — “triad” approach) to determine whether this objective is achieved, and (2) a narrative objective to protect the human health beneficial use. Therefore, it is necessary to include fish tissue targets and associated sediment targets for the bioaccumulatives <b>to protect the human health beneficial use and ensure that the narrative objective for indirect effects contained in the State’s EB&amp;E Plan is achieved.</b>”</p> <p>The draft Amendments to the EB&amp;E Plan Part 1 (Section IV.B), referenced in the TMDL Reconsideration Staff Report presents the following narrative objective for indirect effects to protect human health:</p> <p>“Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health in bays and estuaries of California. <b>This narrative objective shall be implemented as described in Section VI.A of Part 1.</b>”</p>	

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		<p>The draft Amendments to the EB&amp;E Plan Part 1 (Section VI.A) provides the following guidance on implementing the narrative objective:</p> <p>“The narrative human health objective in Section IV. B. of this Part 1 <b>shall be implemented on a case-by-case basis, based upon a human health risk assessment.</b>”</p> <p>As a result, if the results of a human health risk assessment show that the narrative objectives for indirect effects are not being achieved, it may be necessary to include fish tissue targets and associated sediment targets for the bioaccumulatives to protect human health and ensure that the narrative objective for indirect effects contained in the State’s EB&amp;E Plan is achieved. On the other hand, if the results of a human health risk assessment show that the narrative objectives for indirect effects are being achieved or if a human health risk assessment is not performed, it is not necessary to include fish tissue targets and associated sediment targets for the health risk assessment were not presented in the TMDL Reconsideration Staff Report, it does not appear as if a human health risk assessment has been conducted.</p> <p>To evaluate the potential human health risk associated with sediments in the Estuary, a tool currently being considered by State Water Board staff as part of the Draft EB&amp;E Plan Part 2 implementation process was utilized to consider site-specific conditions which were not considered in the sediment targets proposed in the BPA (the proposed targets were developed for other waterbodies based on the site-specific conditions of those waterbodies, not Ballona Creek Estuary). The</p>	

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		<p>tool currently being considered by State Water Board staff to be included as part of the Draft EB&amp;E Plan Part 2 implementation process is the Human Health SQO Decision Support Tool (DST). The DST is an Excel workbook that performs the Tier II SQO site assessment referenced in the <i>Staff CEQA Scoping Informational Document: Phase II Sediment Quality Objectives for Enclosed Bays and Estuaries of California</i>. The purpose of the Tier II SQO site assessment is to determine if site sediments meet the sediment quality objective described in Section IV.B that protects human consumers of resident seafood from bioaccumulative contaminants in sediment. The Tier II SQO site assessment consists of an evaluation of both tissue data and sediment data to determine the potential hazard to human health, using available site-specific information. Consumption risk is evaluated for both cancer and non-cancer effects. Evaluation of sediment linkage utilizes a mechanistic food web model to estimate tissue concentrations derived from measured sediment concentrations. Although the DST has not yet been approved, it provides an initial evaluation of the risk and provides an overview of the general thought process that demonstrates the path that State Water Board staff are considering.</p> <p>The results obtained when using the DST with data collected from the Ballona Creek Estuary indicate the absence of an impairment for chlordane, total DDT, and total PCBs. The overall site assessment category is determined using the decision matrix presented in Table 3. Site sediments categorized as unimpacted or likely unimpacted meet the sediment quality objective protecting human consumers for the specific contaminant evaluated. Site sediments categorized as possibly impacted, likely impacted, or clearly impacted do not meet the sediment quality objective. As required, this evaluation has been</p>	

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		<p>performed separately for chlordane, total DDT, and total PCBs. In each case, the result for the consumption risk is categorized as <b>very low</b>. Thus, as indicated by the decision matrix in Table 3, the overall site assessment category is <b>unimpacted</b> for each constituent. This suggests that, based on site-specific data, sediment concentrations do not appear to be posing a risk to human health. This is contrary to the determination made in the TMDL amendment, which uses targets that were developed for other waterbodies, rather than Ballona Creek site specific data.</p> <p><b>[See comment letter for table]</b></p> <p>Adoption of the currently proposed targets <b>will result in MS4 allocations that will be incorporated as effluent limits even though there is no identified impairment in fish tissue, and site-specific analysis does not suggest sediment are causing an impairment</b>. Removal of the currently proposed sediment targets for indirect effects is appropriate. Monitoring requirements currently stipulated in the Draft Revised TMDL can be maintained so that data will still be collected to ensure that the narrative objective for indirect effects contained in the State's EB&amp;E Plan continues to be achieved. If the sediment targets for indirect effects and fish tissue are not removed, resources will be focused on the implementation of BMPs aimed at addressing constituents which do not appear to be causing or contributing to an impairment and, as a possible worst case scenario, the responsible parties may be forced to dredge the Estuary.</p> <p>The following provides a summary of the key points presented in the previous discussion:</p>	
		<ol style="list-style-type: none"> <li>1. Available fish tissue and mussel data do not</li> </ol>	

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4.12	City of Los Angeles	Loading capacities and WLAs should not be included for constituents without an identifiable	<p>demonstrate an impairment;</p> <p>2. Sediment targets for indirect effects and fish tissue were included to protect the human health beneficial use and ensure that the narrative objective for indirect effects contained in the State's EB&amp;E Plan is achieved;</p> <p>3. The narrative objective contained in the State's EB&amp;E Plan clearly states that it should be implemented on a case-by-case basis, based upon a human health risk assessment;</p> <p>4. A human health risk assessment was not provided in the TMDL Reconsideration Staff Report to demonstrate the need for sediment targets for indirect effects and fish tissue;</p> <p>5. A human health risk assessment tool currently being considered by State Water Board staff indicates that the sediment quality objective protecting human consumers is met for chlordane, total DDT, and total PCBs;</p> <p>6. Chlordane, total DDTs, and total PCBs will continue to be monitored to ensure that the narrative objective for indirect effects contained in the State's EB&amp;E Plan continues to be achieved; and</p> <p>7. Resources could be inappropriately diverted to BMPs and possibly dredging the Estuary, even though site-specific data does not suggest an impairment.</p> <p>As such, it is requested that the sediment targets for indirect effects and fish tissue be removed, monitoring be maintained, and, if appropriate, the TMDL be reconsidered after the adoption of new State policies utilizing site-specific data.</p>
		Loading capacities and WLAs should not be included for constituents without an identifiable	See response to comments 4.6.



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No.	Author	impairment	Comment	Response
4.13	City of Los Angeles	Loading capacity and WLAs should also be based on allowable discharge not solely settleable capacity	DDT, and total PCBs should also be removed. As discussed in the 2005 BC Toxics TMDL Staff Report, the mass-based allocations are based on the sediments <i>deposited in the estuary</i> rather than what is <i>discharged from the watershed</i> . However, MS4 Permittees must address what they discharge from the watershed and cannot affect other sources of pollutants that may be deposited in the estuary. Including discharge based WLAs, instead of or in addition to deposition based WLAs, would be extremely helpful for the purposes of implementation planning, evaluating individual jurisdiction's contributions to loading, and ultimately determining compliance using data collected from MS4 discharges. MS4s will be monitoring at the outfalls to determine how much of these pollutants are discharged. If the mass <b>discharged</b> from MS4s measured at the outfalls is compared to the current WLAs based on what <b>settles</b> , Permittees could be out of compliance with the water quality based effluent limits (WQBELs) in the MS4 permit while still meeting the assumptions of the WLAs and goals of the TMDL. For implementation planning, modeling tools are heavily relied upon, were used for the development of the implementation plans for the Toxics TMDL, and will be used for the forthcoming Enhanced Watershed Management Program. These tools help select BMPs by estimating the reduction in the load of pollutants in the MS4 discharges rather than what is settled based on various combinations of BMPs. For these reasons, discharge based WLAs should be included in the TMDL consistent with the assumptions of the WLAs. The following discussion outlines how discharged based WLAs can be developed utilizing the information in the TMDL.  The 2005 BC Toxics TMDL Staff Report estimated the average annual total sediment discharged as	See response to comment 4.2.

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		<p>44,615 m<sup>3</sup>/year and the average annual fine sediment deposited as 5,004 m<sup>3</sup>/year. Given this information, the percentage of the total discharged sediment that is ultimately deposited as fine sediment is 11.2%. As previously stated, including discharge based WLAs, instead of, or in addition to, deposition based WLAs, would be extremely helpful and appropriate. Discharge based WLAs may be calculated by dividing the currently used loading capacity and WLAs, which are based on the fine sediment that settles, by the percentage of the total discharged sediment that is ultimately deposited as fine sediment, 11.2%. As such, it is requested that the following additional information be included in the Loading Capacity section for clarification purposes:</p> <p>The loading capacity for Ballona Creek Estuary is calculated by multiplying the numeric targets by the average annual deposition of fine sediment, defined as silts (grain size 0.0625 millimeters) and smaller, within the Estuary and the average annual discharge of total sediment by the bulk density of the sediment. The average annual fine sediment deposited is 5,004 cubic meters per year (m<sup>3</sup>/yr), the average annual total sediment discharge is 44,615 m<sup>3</sup>/yr, and the bulk density is 1.42 metric tons per cubic meter (mt/m<sup>3</sup>). The TMDL is set equal to the discharged loading capacity.</p> <p><b>[See comment letter for tables]</b></p> <p>It is also requested that the LAs are referred to as “Settled Load Allocations” and that the following additional information be included in the WLAs section for clarification purposes:</p> <p><b>[See comment letter for tables]</b></p>	

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No.	Author	Comment	Response
		<p>The storm water waste load allocations are apportioned between the MS4 permittees, Caltrans, the general construction and the general industrial storm water permits based on an arealaerial weighting approach.</p> <p><b>[See comment letter for tables]</b></p> <p>If the discharge based WLAs are not included in the TMDL, language should be included in the BPA and Staff Report clearly indicating that the WLAs apply to what settles on the bed sediment and does not directly correspond to an allowable effluent loading as follows:</p> <p>Compliance with sediment WLAs for copper, lead, and zinc, may be demonstrated via any one of three different means:</p> <ol style="list-style-type: none"> <li>a. Sediment numeric targets are met in bed sediments.</li> <li>b. The qualitative sediment condition of <b>Unimpacted or Likely Unimpacted</b> via the interpretation and integration of multiple lines of evidence as defined in the SQOs, is met.</li> <li>c. Final sediment allocations, as presented above, are met. If data characterizing the load in discharged sediment are obtained, the discharged sediment load shall be multiplied by 0.112 (the ratio of sediment that settles to sediment that is discharged) to assess attainment of the final sediment allocations.</li> </ol> <p>Compliance with sediment WLAs for Chloroacene, total DDT, and total PCBs may be demonstrated via any one of four different means:</p> <ol style="list-style-type: none"> <li>1. Sediment numeric targets are met in bed sediments.</li> </ol>	

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No.	Author	Comment	Response
4.15	City of Los Angeles	<p>Additional compliance language should be included to provide a mechanism allowing the results of a TIE analysis or Stressor ID Study to demonstrate compliance for an individual constituent</p>	<p>2. Fish tissue targets are met in species resident to Ballona Creek Estuary.</p> <p>3. Final sediment allocations, as presented above, are met. <u>If data characterizing the load in discharged sediment are obtained, the discharged sediment load shall be multiplied by 0.112 (the ratio of sediment that settles to sediment that is discharged) to assess attainment of the final sediment allocations.</u></p> <p>4. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.</p> <p>Addition of the multiple methods for demonstrating compliance is appreciated. One additional mechanism for determining compliance should be considered. The TIE Study found that the historical organics were not contributing to toxicity and related targets for direct effects have been removed. The TIE Study also indicated that trace metals were most likely not causing sediment toxicity; however, several tests were inconclusive. Additional research is necessary and these direct effects targets and associated allocations are retained. However, if in the future it is determined that these metals are not causing or contributing to toxicity, an additional compliance mechanism should be included so that Permittees do not face non-compliance prior to the Regional Board reopening the TMDL. As such, the following revisions to the compliance demonstration approaches are requested:</p> <p>Compliance with sediment WLAs for copper, lead, and zinc, may be demonstrated via any one of <del>three</del> <u>four</u> different means:</p> <p>a. Sediment numeric targets are met in bed</p>

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No.	Author	Comment	Response
4.16	City of Los Angeles	<p>% reduction should relate to “baseline” conditions rather than “current” conditions</p>	<p>See response to comment 4.3.</p> <p>The City’s estimate of baseline appears valid; if the City intends to demonstrate compliance through the percent reduction of baseline loadings, the City should submit the calculations as a modification to the Ballona Creek Estuary Toxics TMDL Implementation Plan for Executive Officer approval.</p>
		<p>sediments.</p> <p>b. The qualitative sediment condition of <b>Unimpacted or Likely Unimpacted</b> via the interpretation and integration of multiple lines of evidence as defined in the SQOs, is met.</p> <p>c. Final sediment allocations, as presented above, are met.</p> <p>d. <u>Results of a Toxicity Identification Evaluation or Phase I Stressor ID study determine that copper, lead, and/or zinc are not causing toxicity.</u></p> <p>The Bureau appreciates the inclusion of an approach that allows for compliance with interim allocations to be based on load reduction in addition to the percent area approach. The addition of this approach is important as the purpose of the TMDL is to reduce the loading of toxics to the Estuary and BMPs are selected and located within the watershed based on their efficiency and effectiveness at reducing pollutant loadings. However, it is requested that the term “current loading” be replaced with “baseline loading”. This would help to avoid confusion on the intent of the revision. The goal is to reduce loadings from the “baseline” that existed when the impairment was identified to meet the TMDL targets and attain the beneficial uses. The requested change would need to be made throughout the BPA and Staff Report.</p> <p>To demonstrate a percent load reduction, it is necessary to first estimate a “baseline” loading upon which the reduction would be based. Though a baseline estimate of loading was not computed as part of the Toxics TMDL, a conservative estimate of loading at the time of TMDL development can be calculated using data presented in the 2005 Toxics TMDL Staff Report. As this data was used to determine the impairment of the Estuary, it seems</p>	

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		<p>appropriate to establish the baseline estimate of loading on the same data collected in the Estuary. The sediment data from the Estuary were collected at Station 440240 by the State’s Bay Protection and Toxic Cleanup Program (BPTCP). These data were collected in the portion of the Estuary where samples are currently collected to evaluate whether the TMDL targets are being met.</p> <p>The range of concentrations from the BPTCP study is presented in Table 2-5 of the 2005 Toxics TMDL Staff Report. The maximum concentration for each constituent in Table 2-5 was utilized as a conservative estimate of baseline sediment concentrations in the Ballona Creek Estuary. <b>Table 4</b> presents a comparison between the measured concentrations and the TMDL targets. As expected, all baseline constituent concentrations are greater than the TMDL target.</p> <p><b>[See comment letter for table]</b></p> <p>To estimate the baseline loadings to the Estuary the annual total sediment load discharged from Ballona Creek (Column 1 of <b>Table 5</b>) was multiplied by baseline sediment concentrations for each constituent (Column 2 of <b>Table 5</b>) to obtain baseline loading estimates (Column 3 of <b>Table 5</b>). Baseline MS4 loading (Column 5 of <b>Table 5</b>) is calculated by multiplying the total load (Column 3 of <b>Table 5</b>). ) by the percent MS4 area in the watershed (Column 4 of <b>Table 5</b>).</p> <p><b>[See comment letter for table]</b></p> <p>With the baseline loadings calculated in Column 5 of <b>Table 5</b>, interim milestones in terms of percent reductions of the load to the Estuary can be calculated. The baseline estimated load and</p>	

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		<p>corresponding percent reduction interim milestones are presented in <b>Table 6</b>. As an example, the loads corresponding to the 25% interim milestone were calculated by first computing 25% of the difference between the Baseline MS4 Loading (Column 1 of <b>Table 6</b>) and the Allowable MS4 Loading (Column 2 of <b>Table 6</b>) to obtain the required 25% load reduction and then subtracting the 25% load reduction from the Baseline MS4 Loading (Column 1 of <b>Table 6</b>) to obtain the total allowable load with a 25% load reduction (Column 3 of <b>Table 6</b>). The allowable loads with 50% load reductions (Column 4 of <b>Table 6</b>) and 75% load reductions (Column 5 of <b>Table 6</b>) were calculated similarly. In summary, the addition of the option to demonstrate attainment of interim milestones based on loading reductions based on “baseline” conditions is consistent with the goals of the TMDL, the approach used to select and site BMPs, and recently adopted TMDLs.</p> <p><b>[See comment letter for table]</b></p>	
4.17	City of Los Angeles	<p>Include reference to SQOs document to avoid unnecessarily reconsidering TMDL</p>	<p>2008 was specified so that the Ballona Creek Estuary triad monitoring could be coordinated with the every-five-years <i>Bight</i> sampling efforts, which would provide cost savings to the City. As the City already participates in <i>Bight</i>, it is not necessary to have an approved revised monitoring plan to proceed with the triad monitoring.</p>

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No.	Author	Comment	Response
4.18	City of Los Angeles	<p>Include language clarifying when additional stressor identifications shall be conducted</p>	<p>The BPA and staff report have been revised to address this comment.</p>
		<p><del>chemical suite, two toxicity tests and four benthic indices</del> as specified in the SQOs Part 1 shall be conducted and evaluated. Locations for sediment triad assessment and the methodology for combining results from sampling locations to determine sediment conditions shall be specified in the <u>Coordinated Monitoring Plan or the MS4 Permit required Integrated Monitoring Program or Coordinated Integrated Monitoring Program</u> to be approved by the Executive Officer.</p> <p>A stressor identification, as required by the EB&amp;E Plan Part 1 (Section VII.F) has already been conducted and the stressors have been identified. To be consistent with Table 7-14.2 which provides a schedule for revising the coordinated monitoring plan (or Coordinated Integrated Monitoring Program as discussed in comment #12) to be in compliance with the revised TMDL, and regardless of whether sediments fail to meet the protective conditions of <b>Unimpacted</b> or <b>Likely Unimpacted</b>, additional stressor identifications should not be required unless evidence suggests that the results of the most recent stressor identification may not be representative of current conditions. As such, the following revisions are requested:</p> <p>A stressor identification, as required by the EB&amp;E Plan Part 1 (Section VII.F), shall be conducted if sediments fail to meet the protective condition of <b>Unimpacted</b> or <b>Likely Unimpacted</b> after <del>2013</del>the revised coordinated monitoring plan or the MS4 Permit required <u>Integrated Monitoring Program</u> is approved per Table 7-14.2 and evidence suggests that the results of the most recent stressor identification may not be representative of current conditions.</p>	



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No.	Author	Comment	Response
4.19	City of Los Angeles	Non-triad sediment monitoring requirements should be omitted	Regional Board disagrees. Full triad monitoring is required only once every five years, therefore, annual chemistry and toxicity monitoring is necessary to track trends in sediment quality.  Removing the chemistry and toxicity only (non-triad) monitoring would also be inconsistent with the Harbors TMDLs.
4.20	City of Los Angeles	Language referencing additional TMDL reconsiderations should be included	See response to comment 4.6.

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No.	Author	Comment	Response
4.21	City of Los Angeles	<p>section are requested to incorporate a TMDL reopener prior to the final compliance date to reconsider the TMDL based on the findings of relevant State policies and scientific studies:</p> <p>In place of striking out the following sentence in its entirety:</p> <p><del>The Regional Board will re-consider the TMDL in the sixth year after the effective date in light of the findings of these studies;</del></p> <p>modify the sentence as follows:</p> <p>The Regional Board will re-consider the TMDL after the adoption of the Phase II SQOs <del>and in the sixth year after the effective date in light of the findings of these studies</del> <u>five years after the effective date of this amendment in light of the findings of these or other relevant studies and additional newly adopted State policies.</u></p> <p>In addition, the following revisions to the Implementation Schedule (Table 7-14.2) are requested to incorporate a TMDL reopener prior to the final compliance date to reconsider the TMDL based on the findings of relevant State policies and scientific studies:</p> <p><b>[See comment letter for suggest revisions]</b></p>	<p>The BPA has been modified to address this comment and provide additional clarification.</p>
	Include reference to Coordinated Integrated Monitoring Program	As the MS4 Permittees have joined together to develop a Coordinated Integrated Monitoring Program, please add the following language to the plan (CMP) by June 11, 2015 to allow for monitoring updates to be incorporated directly into the CIMP rather than a separate CMP.	

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No.	Author	Comment	Response
4.22	City of Los Angeles	Additional compliance language should be included for consistency	For use of Stressor identification studies to demonstrate compliance, see response to comment 4.4.  For “current” versus “baseline” terminology, see comment 4.16.  The clarification from “Final “ to “Interim” has been made in the Basin Plan Amendment, as shown.
		<p>Revise the coordinated monitoring plan or the <u>MS4 Permit required Integrated Monitoring Program or Coordinated Integrated Monitoring Program</u> in compliance with the revised TMDL.</p> <p>The following comments relate to the compliance language for the direct effects interim dates of January 11, 2013, 2016, and 2017. The compliance demonstration methods should include all of the compliance related language on page 9 for consistency. Additionally a mechanism allowing the results of a TIE analysis or Stressor ID Study to demonstrate compliance for an individual constituent should be included. The 2008 TIE Study found that the historical organics were not contributing to toxicity and related targets for direct effects have been removed. If in the future it is determined that an individual constituent is not causing or contributing to toxicity at levels above the TMDL target, this additional compliance method provides the only mechanism to demonstrate compliance. The concern is that an individual pollutant could be found to not be causing toxicity, but toxicity is occurring due to a different constituent with a separately enforceable permit limit. Without this mechanism, the Permittees would be subject to enforcement for exceedances of multiple constituents when one is not causing toxicity. As such, the following revisions to the compliance demonstration approaches are requested for the January 11, 2013, 2016, and 2017 interim compliance milestones:</p> <p>Compliance with the metals WLA TMDLs may be demonstrated via any one of <del>three different</del> <u>the following</u> means:</p> <ol style="list-style-type: none"> <li>1. Demonstrate that the sediment quality condition of Unimpacted or Likely Unimpacted via the interpretation and integration of multiple lines</li> </ol>	

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No.	Author	Comment	Response
		<p>of evidence as defined in the SQOs, is met; or</p> <p>2. Sediment numeric targets are met in bed sediments; or</p> <p>3. <u>Results of a Toxicity Identification Evaluation or Phase I Stressor ID study determine that copper, lead, cadmium, silver and/or zinc are not causing toxicity; or</u></p> <p>4. <u>If permittees provide a quantitative demonstration as part of a watershed management program plan that control measures and BMPs will achieve the interim milestones consistent with the schedule, then compliance may be demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval; or</u></p> <p><b>The following changes are only for the 2013 Interim Milestone</b></p> <p>5. <del>Final</del> <u>Interim</u> allocations in the discharge are met, as described below: The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 25% of the total drainage area served by the MS4 is effectively meeting the waste load allocations for sediment.</p> <p>Alternatively, permittees shall attain a 25% reduction in the difference between the <del>current</del> <u>baseline</u> loadings and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p> <p><b>The following changes are only for the 2016 Interim Milestone</b></p> <p>5. <del>Final</del> <u>Interim</u> allocations in the discharge are</p>	

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No.	Author	Comment	Response
		<p>met, as described below: The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 50% of the total drainage area served by the MS4 is effectively meeting the waste load allocations for sediment.</p> <p>Alternatively, permittees shall attain a 50% reduction in the difference between the <del>current</del> <u>baseline</u> loadings and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p> <p><b>The following changes are only for the 2017 Interim Milestone</b></p> <p>5. <del>Final</del> <del>Interim</del> allocations in the discharge are met, as described below: The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 75% of the total drainage area served by the MS4 is effectively meeting the waste load allocations for sediment.</p> <p>Alternatively, permittees shall attain a 75% reduction in the difference between the <del>current</del> <u>baseline</u> loadings and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p>	
4.23	City of Los Angeles	Additional compliance language should be included for consistency	See response to comment 4.4, 4.6, 4.16, and 4.22,

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No.	Author	Comment	Response
		<p>demonstrate compliance for an individual constituent should be included. The 2008 TIE Study found that the historical organics were not contributing to toxicity and related targets for direct effects have been removed. If in the future it is determined that an individual constituent is not causing or contributing to toxicity at levels above the TMDL target, this additional compliance method provides the only mechanism to demonstrate compliance. The concern is that an individual pollutant could be found to not be causing toxicity, but toxicity is occurring due to a different constituent with a separately enforceable permit limit. Without this mechanism the Permittees would be subject to enforcement for exceedances of multiple constituents when one is not causing toxicity. As such, the following revisions to the compliance demonstration approaches are requested for the January 11, 2021 final compliance milestones:</p> <p>Compliance with the metals WLA <del>TMDLs</del> may be demonstrated via any one of <del>three different</del> the following means:</p> <ol style="list-style-type: none"> <li>1. Demonstrate that the sediment quality condition of Unimpacted or Likely Unimpacted via the interpretation and integration of multiple lines of evidence as defined in the SQOs, is met; or</li> <li>2. Sediment numeric targets are met in bed sediments; or</li> <li>3. <u>Results of a Toxicity Identification Evaluation or Phase I Stressor ID study determine that copper, lead, cadmium, silver and/or zinc are not causing toxicity; or</u></li> <li>4. <u>If permittees provide a quantitative demonstration as part of a watershed management program plan that control measures and BMPs will achieve the interim</u></li> </ol>	

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No.	Author	Comment	Response
		<p><u>milestones consistent with the schedule, then compliance may be demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval; or</u></p> <p>5. Final allocations in the discharge are met, as described below: The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 100% of the total drainage area served by the MS4 is effectively meeting the waste load allocations for sediment.</p> <p>Alternatively, permittees shall attain a 100% reduction in the difference between the <del>current</del> baseline loadings and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p> <p>Compliance with sediment WLAs for Chlordane, total DDT, and total PCBs may be demonstrated via any one of <del>three different</del> <u>the following</u> means:</p> <ol style="list-style-type: none"> <li>1. Sediment numeric targets are met in bed sediments; <del>or</del></li> <li>2. Fish tissue targets are met in species resident to Ballona Creek Estuary; <del>or</del></li> <li>3. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife; <del>or</del></li> <li>4. <u>If permittees provide a quantitative demonstration as part of a watershed management program plan that control measures and BMPs will achieve the final milestones consistent with the schedule, then compliance may be demonstrated by</u></li> </ol>	

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No.	Author	Comment	Response
4.24	City of Los Angeles	<p>Revise compliance schedule based upon drastically reduced total PCBs WLA</p>	<p>implementation of those control measures and BMPs, subject to Executive Officer approval; or</p> <p>5. Final allocations in the discharge are met, as described below:</p> <p>The MS4 and Caltrans storm water NPDES permittees shall demonstrate that 100% of the total drainage area served by the MS4 is effectively meeting the waste load allocations for sediment.</p> <p>Alternatively, permittees shall attain a 100% reduction in the difference between the <del>current</del> <u>baseline</u> loadings and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.</p>
		<p>Notwithstanding that the indirect effects targets for total PCBs should be removed, the following comments relate to the compliance language for the indirect effects interim dates of January 11, 2013, 2016, and 2017 and the final date of January 11, 2021. Given that the total PCBs WLA for MS4 Permittees went from 152 g/yr to 21.40 g/yr, which is an 86% reduction in the WLA, additional BMPs will need to be implemented that had not been accounted for during the development of the Toxics TMDL Implementation Plan developed by the Cities of Los Angeles, Beverly Hills, Culver City, Inglewood, Santa Monica, West Hollywood, and Caltrans. As a result, the implementation period to comply with the interim and final milestones for total PCBs should be extended. As such, it is requested that the BC Toxics TMDL Implementation Schedule be modified to include the interim and final compliance dates as shown in <b>Table 7</b>.</p>	<p>See response to comment 4.7.</p>



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No.	Author	Comment [See comment letter for table]	Response
5.1	County of Los Angeles	<p>The County of Los Angeles and Los Angeles County Flood Control District appreciate the opportunity to comment on the proposed changes as part of the reconsideration of the Ballona Creek Metals and Ballona Creek Estuary Toxic Pollutants Total Maximum Daily Loads (TMDLs). In January 2013, the County of Los Angeles, along with the City of Los Angeles and other responsible agencies, submitted “white papers” recommending a number of changes to these two TMDLs based on new information and data collected since the promulgation of the TMDLs. We appreciate Regional Board staff’s consideration of the white papers in revising the TMDLs. Below are our additional comments in response to the proposed changes.</p> <p><b>COMMENTS SPECIFIC TO THE BALLONA CREEK METALS TMDL</b></p> <p><b>1. Final compliance date should align with implementation timeline for Senate Bill 346</b></p> <p>As indicated in Appendix D of the draft Staff Report, water quality monitoring data shows that, in the Ballona Creek watershed, copper is the only metal that exceeds during dry weather and has the most number of exceedances during wet weather.</p> <p>Since the adoption of the original TMDL in 2007, Senate Bill 346 (SB 346) was signed into law in 2010, which requires a reduction in copper content in brake pads to five percent (by weight) by 2021 and to 0.5 percent by 2025. This law is expected to significantly reduce copper loading over time in California’s urbanized watersheds, including the Ballona Creek watershed; it represents the most cost-effective way to achieve the TMDL’s copper limits. Other TMDLs developed by Regional Board staff have recognized the role of SB 346 in copper reduction, specifically the Los Cerritos Channel and San Gabriel River Metals TMDLs adopted by the Regional Board in June 2013. The Staff Report for those TMDLs states:</p> <p><i>“Stakeholders have proposed an implementation schedule generally consistent with the implementation of SB 346 ... Thus, based on ... the potential phase out of copper ... in the watershed due to pollution prevention, the 13-year</i></p>	See response to comment 3.21.

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No.	Author	Comment	Response
5.2	County of Los Angeles	<p><i>implementation schedule is reasonable and as short as practicable”</i></p> <p>The resulting TMDL implementation schedule for the Los Cerritos Channel and San Gabriel River Metals TMDLs is shown below:</p> <p><b>[See comment letter for tables]</b></p> <p>However, the final compliance dates for dry weather and wet weather in the tentative Basin Plan Amendment (BPA) for the Ballona Creek Metals TMDL currently do not reflect the implementation timeline of SB 346, but instead remain unchanged at January 11, 2016, and January 11, 2021, respectively. The final compliance dates for the Ballona Creek Metals TMDL should be modified to align with the implementation timeline for SB 346, specifically 2023 for dry weather and 2026 for wet weather.</p> <p><b>2. Dissolved targets are miscalculated and should be corrected</b></p> <p>Metal targets and hardness exhibit a direct relationship, that is, metal targets increase when hardness increases. The revised dissolved targets indicated in the tentative BPA do not reflect this principle. For example, the revised wet-weather dissolved criteria for copper and lead are lower than the original criteria in spite of the increase in hardness value from 77 mg/L to 82 mg/L. Our calculations indicate that the dissolved dry- and wet-weather targets presented in the tentative BPA need correction as shown below.</p> <p><b>[See comment letter for tables]</b></p>	See response to comment 3.2.
5.3	County of Los Angeles	<p><b>3. Dry-weather total recoverable targets should be calculated using the 50th percentile conversion factor consistent with the State Implementation Policy</b></p> <p>The proposed dry-weather total recoverable metal concentration targets were calculated using the 90th percentile ratio of the dissolved metals value to total recoverable metals value (conversion factor). According to the Water Board’s State Implementation Policy (SIP), chronic (or dry weather) criteria should be calculated using the 50th percentile (i.e., median) conversion factor. The 90th percentile is to be used only for acute (or wet weather) criteria. Page 14 of the SIP states:</p>	See response to comment 3.1.

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5.4	County of Los Angeles	<p><i>“The translator shall be derived using the median of data for translation of chronic criteria and the 90th percentile of observed data for translation of acute criteria.”</i></p> <p>Therefore, we request that the dry-weather metals targets be re-calculated using the 50th percentile conversion factor, consistent with the SIP. The table below provides the dry-weather total recoverable metal concentration targets we calculated for dry weather based on the 50th percentile conversion factors shown in Table 3-6 of the draft Staff Report and the dissolved targets we calculated and presented in Item 2 above.</p> <p><b>[See comment letter for tables]</b></p> <p><b>4. The TMDL should only list the beneficial uses applicable to Ballona Creek</b></p> <p>It is our understanding that the Metals TMDL only applies to the freshwater portion of Ballona Creek. However, the Problem Statement section of the TMDL lists beneficial uses that are not applicable to Ballona Creek. According to the Basin Plan, Ballona Creek is designated for the following beneficial uses: WARM, WILD, LREC-1, and REC-2. The TMDL should be revised to reflect these beneficial uses only. Specifically, the following beneficial uses should be deleted: EST, MAR, RARE, MIGR, SPWN, COMM, and SHELL.</p>	<p>The BPA has been revised to address this comment.</p>
5.5	County of Los Angeles	<p><b>5. The targets for lead should be revised based on the Lead Recalculation Report recently completed by stakeholders in the Los Angeles River watershed</b></p> <p>Earlier this year, stakeholders in the Los Angeles River watershed completed and shared with the Regional Board the Lead Recalculation Report to Support Implementation of the Los Angeles River and Tributaries Metals TMDL. The report incorporated comments from an independent scientific Technical Advisory Committee and Regional Board staff. The report indicates that since “the entire approved USEPA dataset was utilized [in the Lead Recalculation], the recalculation of the lead criteria results in a de facto recalculation of the national criteria.” Therefore, the findings presented in the Lead Recalculation Report are applicable to all water-bodies in southern California, including Ballona Creek. Accordingly, we request that the lead</p>	<p>At this time, it is premature to implement recommendations of the Lead Recalculation Report.</p> <p>The Lead Recalculation Report is still in draft form and still being considered by staff. In addition, the findings of the report and resulting action will also need to be considered by the State Water Board and USEPA.</p> <p>Depending on how the results and recommendations of the Lead Recalculation Report are evaluated, the scope of the consequences of implementing aspects of the</p>

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5.6	County of Los Angeles	<p>targets in Ballona Creek be revised based on the equations proposed in the Lead Recalculation Report, which are shown below.</p> <p>Proposed Chronic Dissolved Target  <math>= (1.46203 - \ln(\text{hardness}) * 0.145712) * e^{1.466 * \ln(\text{hardness})} - 3.649</math></p> <p>Proposed Acute Dissolved Target  <math>= (1.46203 - \ln(\text{hardness}) * 0.145712) * e^{1.466 * \ln(\text{hardness})} - 1.882</math></p> <p>Based on the proposed equations above and the hardness values and conversion factors presented in the tentative BPA, the recalculated dissolved and total recoverable targets would be as shown below:</p> <p><b>[See comment letter for tables]</b></p>	<p>Report may extend beyond the Ballona Creek Watershed.</p>
	County of Los Angeles	<p><b>COMMENTS SPECIFIC TO THE BALLONA CREEK ESTUARY TOXICS TMDL</b></p> <p><b>1. The loading capacities and waste load allocations should be calculated using the total sediment discharge to the Ballona Creek estuary</b></p> <p>Ballona Creek estuary's loading capacities were calculated using the average annual sediment deposition rate of fine sediment particles in the estuary, with the assumption that only fine-grained particles carry the pollutants (2005 Ballona Creek Toxics TMDL Staff Report, page 32). This assumption is not supported by current science. A study<sup>1</sup> conducted by Southern California Coastal Water Research Project concluded that although most stormwater metals are associated with particles less than 6 µm, the association shifts to larger particles with larger storms, indicating that pollutants are associated with all sediment particles.</p> <p>Moreover, the calculation of TMDL allocations based on a sediment deposition rate in the estuary, rather than on what is being discharged from the watershed, creates implementation and compliance challenges for MS4 agencies. The determination of jurisdictional contributions and the design of associated implementation actions and compliance evaluation would depend on total sediment discharged, not just fine or deposited sediment. Dischargers rely heavily on modeling tools for implementation planning; typically, these</p>	<p>See response to comment 4.2.</p>

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5.7	County of Los Angeles	<p>tools help select Best Management Practices by estimating the load reduction based on total discharges rather than what settles.</p> <p>For the reasons stated above, the TMDL loading capacities and wasteload allocations should be set based on the total sediment discharged from the watershed. This way the TMDL would be consistent with other Toxics TMDLs in the region, including Colorado Lagoon Toxics TMDL, Machado Lake Toxics TMDL, Marina del Rey Toxics TMDL, and Santa Monica Bay Toxics TMDL.</p> <p>Based on information presented in the 2005 Final Staff Report, the total sediment discharge into the estuary from Ballona Creek is about 44,615 cubic meters per year. With the bulk sediment density of 1.42 metric tons per cubic meter, the total mass of sediment discharge would be 63,350 metric tons per year. Given that, the allowable allocations for each pollutant would then be as presented in the table below.</p> <p><b>[See comment letter for tables]</b></p> <p><b>2. Imposing fish tissue-based targets is not justified</b></p> <p>The tentative BPA incorporates fish tissue targets despite a lack of evidence that fish tissue is impaired. As noted in Appendix D of the draft Staff Report, existing data do not show fish tissue impairment in the Ballona Creek estuary. In the absence of fish impairment, it is not appropriate to incorporate fish tissue-based targets in the TMDL. Additionally, the fish tissue-based sediment targets included in the tentative BPA were adopted from site-specific studies conducted in San Francisco Bay, which is not reflective of the conditions in the Ballona Creek estuary. Finally, the State is working on Phase II of the Sediment Quality Objectives, which will establish appropriate sediment targets associated with fish tissue. Therefore, the TMDL should not include fish tissue-based sediment targets until after Phase II (indirect effects criteria) is adopted by the State. Further, any fish tissue monitoring should be conducted every two years instead of annually, consistent with the Los Angeles and Long Beach Harbors Toxics TMDL.</p>	See response to comment 4.5.
5.8	County of Los Angeles	<p><b>1. Monitoring requirements for selenium and PAHs should be COMMENTS APPLICABLE TO BOTH METALS AND TOXICS TMDLs</b></p>	<p>Regional Board disagrees; monitoring for both these constituents should continue.</p> <p>However, the Basin Plan Amendment for</p>

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5.9	County of Los Angeles	<p><b>removed or reduced</b></p> <p>The tentative BPAs for the Metals and Toxics TMDLs remove selenium and PAHs due to the findings of non-impairment. However, the TMDLs still require responsible agencies to continue to monitor these pollutants at the same frequency as the other pollutants listed in the TMDLs. In light of the findings of non-impairment, dischargers should not be required to continue to monitor for selenium and PAHs as part of the TMDLs. Instead, an assessment of selenium and PAHs levels can be addressed through monitoring being conducted at the mass emission station as part of the MS4 Permit. If monitoring for these two pollutants must remain as part of the TMDLs, the frequency of monitoring should be reduced to allow resources to be directed to higher priority areas.</p> <p><b>2. Future TMDL re-opener dates should be added</b></p> <p>With the continuous evolution of the science behind stormwater management and new data collected through the TMDL monitoring programs, it is important to evaluate the TMDLs periodically. We request that a future TMDL re-opener date for 2019 be included in the implementation schedule of both TMDLs.</p>	<p>Ballona Creek metals has been modified to specify that water quality monitoring, including water column toxicity, copper, lead, zinc and selenium, shall be in accordance with an approved monitoring plan. Responsible parties can revise the current monitoring plan to provide appropriate monitoring frequencies or include in the Integrated Monitoring Program or Coordinated Integrated Monitoring Program, required by the Los Angeles County MS4 permit, appropriate monitoring frequencies.</p> <p>If PAHs continue to meet standards and are not implicated in updated sediment toxicity identification evaluations, the requirement for continued PAH monitoring may be re-evaluated during the scheduled reconsideration of the Ballona Creek Estuary Toxics TMDL.</p> <p>See response to comment 4.6.</p>
5.10	County of Los Angeles	<p><b>3. Reference to “jointly responsible” should be deleted as it is inconsistent with the Clean Water Act</b></p> <p>Both the tentative BPAs for the Ballona Creek Metals TMDL and the Ballona Creek Estuary Toxics TMDL provide that the MS4 permittees are “jointly responsible” for meeting the mass-based waste load allocations assigned to the MS4 permittees (tentative BPA for the Ballona Creek Metals TMDL, page 11; tentative BPA for the Ballona Creek Estuary Toxics TMDL, page 8). There is no basis under the Clean Water Act for making MS4 permittees “jointly responsible” and this reference should be deleted.</p> <p>A TMDL is a requirement imposed by the federal Clean Water Act and therefore it is limited to what is authorized by the Clean Water Act. The</p>	<p>See response to comment 1.2.</p>

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		<p>Clean Water Act limits a waste load allocation to one point source, not a combination of point sources. 40 C.F.R. § 130.2(h) defines “waste load allocation (WLA)” to mean “The portion of a receiving water’s loading capacity that is allocated to <b>one</b> of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.” This regulation does not define waste load allocations in terms of a set of point sources or “joint” discharges. Instead, under this definition, each point source has its own separate waste load allocation; that point source is responsible only for its own allocation.</p> <p>The fact that each point source is responsible only for its own allocation, and not the allocation given to others, derives from the provisions of the Clean Water Act itself. There is no provision for imposing joint responsibility under the Clean Water Act. Under the Act, a party is responsible only for its own discharges or those over which it has control. <i>Jones v. E.R. Snell Contractor, Inc.</i>, 333 F.Supp.2d 1344, 1348 (N.D. Ga. 2004); <i>United States v. Sargent County Water Dist.</i>, 876 F.Supp. 1081, 1088 (D.N.D. 1992). See also <i>United States v. Michigan</i>, 781 F. Supp. 1230, 1234 (E.D. Mich. 1991) (“There is nothing in federal law that requires the Counties to accept responsibility for discharges that ... are appropriately within the province, jurisdiction and responsibility of local municipalities.”).</p> <p>The Clean Water Act regulations applicable to MS4 permits specifically provide that co-permittees under an MS4 permit are only required to “comply with permit conditions relating to discharges from the municipal separate storm sewers <i>for which they are operators</i>.” 40 C.F.R. § 122.26(a)(3)(vi) (emphasis supplied).</p> <p>Similarly, under the Porter-Cologne Act, Water Code § 13000 et seq., waste discharge requirements (“WDR”) are issued to the person or entity that is “discharging.” Water Code § 13260(a)(1) provides that “any person discharging waste, or proposing to discharge waste” shall file a report of waste discharge. After hearing, the Regional Board issues waste discharge requirements to “the <b>person</b> making or proposing the discharge.” Water Code § 13263(f) (emphasis supplied). Enforcement is directed towards “any person who violates any cease and desist order, cleanup and abatement order ... or ... waste discharge requirement.” Water Code § 13350(a). See also Water Code § 13300 (the regional board may require the <b>discharger</b> to submit for approval a detailed time schedule of specific actions)(emphasis</p>	

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6.1	Heal the Bay and Los Angeles Waterkeeper	<p>supplied); Water Code § 13301 (cease and desist order directed at “those persons not complying with the requirements or discharge prohibitions”). Under the Porter-Cologne Act, a discharger is not responsible for discharges of pollutants over which it has no authority or control.</p> <p>Should the Regional Board decline to delete the reference to “jointly responsible,” then the Regional Board should clarify that no one permittee is individually required to ensure that co-mingled stormwater meets the applicable WLAs. This can be accomplished by adding in the MS4 and Caltrans section on page 11 of the tentative BPA for the Ballona Creek Metals TMDL the following sentence at the end of the first paragraph:</p> <p>No permittee shall be individually required to ensure that co-mingled stormwater meets the applicable MS4 WLAs unless such permittee is shown to be solely responsible for the exceedances.</p> <p>A similar sentence should be added in the MS4 and Caltrans section on page 8 of the tentative BPA for the Ballona Creek Estuary Toxics TMDL.</p> <p><b>Proposed Alternative Compliance Mechanism</b></p> <p>Our biggest concern with the Draft Metals TMDL and Draft Toxics TMDL is the new alternative compliance mechanism proposed by Regional Board staff. Both Draft TMDLs allow dischargers to demonstrate compliance by providing “quantitative demonstrations that control measures and best management practices will achieve” WLAs and WQBELs consistent with implementation schedules for the TMDLs and subject to Executive Office approval. Draft Metals TMDL at p. 10, 11, 12; Draft Toxicity TMDL at p. 8, 9. This proposed alternative compliance is improper and unjustified and must be removed.</p> <p>As stated on numerous occasions, both Heal the Bay and Waterkeeper are supportive of BMPs and storm water and non-storm water control measures as an important method for ensuring dischargers comply with WLAs, effluent limits and water quality standards. BMPs and other measures, however, cannot be used as a measure for compliance with water quality standards, effluent limits and TMDLs. Providing quantitative demonstrations of BMP effectiveness and/or installation of Regional Board approved BMPs do not ensure that TMDL wasteload allocations and WQBELs are actually</p>	<p>The provisions providing compliance demonstration through “<i>quantitative demonstrations that control measures and best management practices will achieve WLAs and WQBELs consistent with implementation schedules for the TMDLs and subject to Executive Office approval</i>” allow for appropriate permitting flexibility and are consistent with the Regional Board’s undertakings in many TMDLs and permits.</p> <p>Required monitoring will demonstrate if the WLA and targets are actually met and if they are not met according to the TMDL schedule, the TMDL or the applicable permits may be revised.</p> <p>Provisions to deal with the failure to meet targets or allocations may also be written into the applicable permits.</p>



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		<p>met to achieve compliance with water quality standards in the impaired waterbodies. Moreover, the Regional Board fails to provide any evidence to support its decision to allow the alternative compliance demonstration with Metals and Toxicity TMDLs, let alone explain how any of the quantitative demonstrations for BMPs or measures to be implemented in the future will be sufficient to achieve WLAs or WQBELs. The alternative compliance demonstration mechanism provided in the Draft TMDLs is therefore not supported by the findings and the evidence and violate state law. <i>See Topanga Ass'n for a Scenic Cmty</i>, (1974) 11 Cal.3d 506, 515 (the administrative agency's analysis must "bridge the analytic gap between the raw evidence and [the] ultimate decision or order"); see also <i>Zumiga v. Los Angeles County Civil Serv. Comm'n</i> (2006) 137 Cal.App.4th 1255, 1258 (abuse of discretion is established when the administrative order or decision is not supported by the findings or the findings are not supported by the evidence).</p> <p>For these reasons, the alternative compliance demonstrations must be deleted from the Draft TMDLs or, at a minimum, revised to require BMP monitoring to verify compliance with WLAs and WQBELs.</p>	<p>The evidence to support its decision to allow the alternative compliance demonstration must be provided by the discharger or responsible party prior to Executive Officer approval or no such approval will be made.</p> <p>The TMDL establishes the WLAs that the permittees must achieve. The WLAs are supported by findings and evidence in the record of the TMDL and the proposed amendment. The proposed amendment provides alternatives to the method for demonstrating compliance with the WLAs, consistent with the Los Angeles County MS4 permit. The commenter appears to be suggesting that the Board may not provide alternative compliance methods without a demonstration that the alternative methods, in this case, control measures and BMPs, will in fact work to achieve the WLAs. Such a demonstration is not necessary at this stage. The permittees must demonstrate, if they propose to use such a compliance demonstration approach, that the control measures and BMPs have a reasonable assurance of achieving the WLAs. The permittees are subject to the Los Angeles County MS4 permit which provides for various methods to demonstrate compliance with water quality standards, including use of control measures and BMPs that are supported by an initial "Reasonable Assurance Analysis". The TMDLs are implemented, in part, through the Los Angeles County MS4 permit. The proposed amendments to the TMDLs clarify that the permittees may demonstrate compliance with the WLAs in a manner consistent with the Los Angeles County MS4 permit.</p>
6.2	Heal the Bay and Los Angeles	<p><b>Proposed Amendments to Ballona Creek Metals TMDL</b></p> <p>Toxicity Inclusion in TMDL Ballona Creek is included on the Clean Water</p>	<p>When the Ballona Creek Metals TMDL was originally developed, staff concluded that "the water column toxicity will be addressed by the</p>

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	Waterkeeper	<p>Act Section 303(d) list of impaired waterbodies for dissolved copper, dissolved lead, total selenium, dissolved zinc, and toxicity. Appropriately, the toxicity impairment was added to the Draft Metals TMDL (although it is unclear why this was not in the original TMDL). However, while other toxicity TMDLs in the Region, such as the Calleguas Creek Watershed Toxicity TMDL, include toxicity numeric targets, the Draft Metals TMDL does not provide a numeric target or wasteload allocation for toxicity. The Regional Board provides no justification for this decision. A toxicity numeric limit and WLA should be included in the Draft Metals TMDL. In addition, the Regional Board should require toxicity monitoring in the water column in order to track toxicity over time.</p>	<p><i>WLAs for the listed metals</i>” (Staff Report, 2008 TMDL), which is still the Board’s conclusion. California’s Clean Water Act Section 303(d) list of impaired waters was updated in 2010 to move the toxicity listing for Ballona Creek to the “being addressed by a TMDL” section of the list.</p> <p>Toxicity was added to the Basin Plan Amendment problem statement for clarity.</p> <p>In addition, water column toxicity has been added to the required monitoring for this TMDL.</p>
6.3	Heal the Bay and Los Angeles Waterkeeper	<p><b>Compliance with Past Implementation Schedule Dates</b></p> <p>We have concerns regarding the change in compliance actions required by the already-passed compliance date, January 11, 2012, for MS4 and Caltrans Storm Water Permits in the Draft Metals TMDL. On page 17 of Attachment A, the compliance actions for the January 11, 2012 implementation date have been changed to include the following: “Alternatively, permittees shall attain a 50% reduction in dry-weather and 25% reduction in wet-weather in the difference between the current loadings and WLAs, as measured at the relevant existing MS4 permit monitoring location and/or at relevant MS4 monitoring stations identified in an approved coordinated monitoring plan.” This type of revision in compliance actions is neither envisioned by the Ballona Metals TMDL1 nor is it supported by the staff report. More importantly, it is completely improper for Permittees’ compliance options to be changed once implementation schedule dates have passed. For this reason, any revisions to the required compliance actions should be removed.</p>	<p>Staff agrees that an evaluation of whether a permittee has met an interim compliance point should be measured <i>at that time</i> in respect to the provisions in place at that time. However, at the time that interim compliance point deadline occurred, the MS4 allocations were not yet included in any permit.</p> <p>This does not mean that the means of determining compliance cannot ever change. This change is appropriate because the final water quality result is the same and the change provides appropriate flexibility to the responsible parties.</p> <p>This is consistent with the TMDL as developed in 2005, since the TMDL allowed “<i>waste load allocations to each jurisdiction within a subwatershed based on drainage area</i>” and found that “<i>Therefore, the focus should be on developed areas where the contribution of metals is highest and areas where activities occur that contribute significant loading of metals (e.g., high-density residential, industrial areas and highways). Flexibility will be allowed</i></p>

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6.4	Heal the Bay and Los Angeles Waterkeeper	<p><b>Ballona Creek Estuary Toxic Pollutants TMDL Margin of Safety is Not Sufficient</b></p> <p>The Draft Toxics TMDL states that "the addition of numeric targets for indirect effects and multiple compliance options listed in the implementation section for sediments serve as an implicit margin of safety". Pursuant to Section 303(d) of the Clean Water Act, TMDLs must include a margin of safety to reflect uncertainties regarding discharges, water quality, and capturing critical conditions. The inclusion of less stringent numeric targets, compared to the current TMDL, and multiple compliance options for sediment, including demonstrating compliance through quantitative demonstration that BMPs and control measure will achieve WLAs and WQBELs, does not serve as an implicit margin of safety. In fact, these will likely result in greater impairment of the waterway. Thus, the Draft Toxics TMDL should include an explicit margin of safety.</p>	<p><i>in determining how to reduce metals as long as the wasteload allocations are achieved."</i></p> <p>The selection of targets for sediment to support fish tissue <i>in addition</i> to fish tissue targets represents additional protection. The TMDL requires monitoring, and implementation to achieve targets, in both environmental media.</p> <p>Actions taken by responsible parties to meet a contaminant's target in one environmental media, may help lower the contaminant in another environmental media.</p> <p>Further, under the State's EB&amp;E Plan Part 1 – Sediment Quality, protected sediments are defined by the categories of "unimpacted" and "likely unimpacted." All other categories are considered as not representing the protective condition. This provides for a margin of safety as the next category "possibly impacted" may include sites that are actually unimpacted.</p> <p>The targets for fish tissue are based on the fish contaminant goals set by OEHHA which represent a 10<sup>-6</sup> cancer risk and do not include a balancing of the increased risk with the benefits of fish consumption. They are therefore conservative.</p>
6.5	Heal the Bay and Los Angeles Waterkeeper	<p><b>Compliance with Sediment Waste Load Allocations</b></p> <p>The Draft Toxics TMDL states MS4 and Caltrans Storm Water Permitees can demonstrate compliance with TMDL sediment waste load allocations for Chlordane, total DDT, and total PCBs via one of four different ways:</p> <ol style="list-style-type: none"> <li>a. Sediment numeric targets are met in bed sediments.</li> <li>b. Fish tissue targets are met in species resident to Ballona Creek Estuary.</li> <li>c. Final sediment allocations, as presented above, are met.</li> </ol>	<p>It is not uncertain that the beneficial use (in this case, human health) will be met because all the compliance endpoints support the beneficial use.</p> <p>Should additional monitoring or special studies show that the sediment or fish tissue targets do not support the human health beneficial use, the TMDL may be revised.</p>

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6.6	Heal the Bay and Los Angeles Waterkeeper	<p>d. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.</p> <p>We believe that TMDL language should be modified to require that “a” and “b” and “c” must be met in order to be deemed in compliance. The goal of the TMDL is for all beneficial uses to be protected, not just one. If you only have one compliance endpoint, it is uncertain if all beneficial uses will be met. In addition, fish tissue concentration for Chlordane, total DDT, and total PCBs can vary depending on size and age of fish as well as season. Furthermore, fish migration in the estuary can influence constituent concentrations. Because of fish tissue concentration variability, we ask that the Draft Toxics TMDL specify as to how fish tissue sampling should be conducted.</p> <p><b>TMDL Effectiveness Monitoring Schedule</b></p> <p>The Draft Toxic TMDL specifies that sediment quality effectiveness monitoring for direct effects (sediment triad sampling) be performed once every five years beginning in 2008. This frequency is not often enough to monitor sediment quality, and instead, we suggest monitoring be conducted twice every five years. Of note, the draft Coordinated Compliance, Monitoring, and Reporting Plan for Greater Los Angeles and Long Beach Harbor Waters requires sediment triad sampling be conducted twice every five (5) years. We ask the Regional Board to change the Draft Toxics TMDL sediment quality evaluation to twice every five years in order to best represent sediment conditions impacting water quality. Sediment chemistry and toxicity samples are required to be collected annually to evaluate trends in general sediment quality constituents and listed TMDL constituents. We suggest sediment chemistry and toxicity effectiveness monitoring be done semi-annually to be consistent with other TMDL Toxics effectiveness monitoring programs (i.e. Marina Del Rey) in the region.</p>	<p>While fish tissue contaminant concentrations do vary considerably, and the three fish species collected under the current monitoring plan do not include any of the 19 species for which OEHHA has developed fish consumption advisories, it has been difficult for the responsible parties to collect fish in Ballona Creek Estuary in the past so the Regional Board does not want to restrict sampling methods or fish species at this time.</p>
<p>While the Greater Los Angeles and Long Beach Harbor Waters Coordinated Compliance, Monitoring, and Reporting Plan (in review at the Regional Board at this time) has proposed a full triad assessment twice in five years, the TMDL, itself, (effective March 2012) for the Greater Los Angeles and Long Beach Harbor Waters requires that sediment triad sampling is conducted <i>once</i> every five (5) years and chemistry alone sampling once in between the triad years.</p> <p>While the Marina del Rey Coordinated Monitoring Plan currently includes semi-annual sediment monitoring, the Marina del Rey toxics TMDL revisions (now out for public comment) include the requirement that sediment chemistry and toxicity samples be collected annually, not semi-annually.</p> <p>The requirement for more frequent sediment chemistry monitoring in the Ballona Creek Estuary TMDL in comparison to the Harbors Toxics TMDL, reflects the potentially more changeable nature of the sediments in an</p>			<p>While the Greater Los Angeles and Long Beach Harbor Waters Coordinated Compliance, Monitoring, and Reporting Plan (in review at the Regional Board at this time) has proposed a full triad assessment twice in five years, the TMDL, itself, (effective March 2012) for the Greater Los Angeles and Long Beach Harbor Waters requires that sediment triad sampling is conducted <i>once</i> every five (5) years and chemistry alone sampling once in between the triad years.</p> <p>While the Marina del Rey Coordinated Monitoring Plan currently includes semi-annual sediment monitoring, the Marina del Rey toxics TMDL revisions (now out for public comment) include the requirement that sediment chemistry and toxicity samples be collected annually, not semi-annually.</p> <p>The requirement for more frequent sediment chemistry monitoring in the Ballona Creek Estuary TMDL in comparison to the Harbors Toxics TMDL, reflects the potentially more changeable nature of the sediments in an</p>

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6.7	Heal the Bay and Los Angeles Waterkeeper	<p><b>Miscellaneous</b></p> <p>The Draft Metals TMDL and Draft Toxics TMDL allow permit writers to translate concentration based waste load allocations for minor and general non-storm water NPDES permits into effluent limits by applying procedures outlined in Section 1.4 of the State Water Resources Control Board’s Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2005) or <b>applying other appropriate methodologies authorized under federal regulation</b>. The language, “applying other appropriate methodologies authorized under federal regulation” is ambiguous and we ask the Regional Board to specify other appropriate methodologies. We suggest these methodologies be specified in a footnote.</p>	<p>estuary.</p> <p>Additional methods for development of effluent limits may be found in US EPA’s Technical Support Document for Water Quality-based Toxics Control (1991). In addition, if the State Board revises or replaces the Policy for Implementation of Toxics Standards for Inland Surface Waters or issues additional guidance for permit writers, any new methods included could be applied.</p> <p>The phrase “<i>applying other appropriate methodologies authorized under federal regulation</i>” is not ambiguous in the sense of being vague or unclear, but appropriately general.</p>