Comment Summary and Responses
Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters

Comments Received	
1. – 13. Comment Letters from: 1. City of Artesia 2. City of Bellflower, 3. City of Cerritos, 4. City of Commerce, 5. City of Downey 6. City of Irwindale,	7. City of Lakewood 8. City of Lynwood, 9. City of San Gabriel, 10. City of Signal Hill, 11. City of South Gate, 12. City of Vernon 13. City of Whittier
2. Additional Comments City of Bellflower	
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14-16 Comment Letters from: 14 City of Inglewood 15. City of Irwindale and Cities situated in the Los Angeles and San Gabriel River Watershed 16. City of Lomita	
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23. City of Los Angeles/Department of Water and Power	
24. City of Manhattan Beach	
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26. City of Palos Verdes Estates	
27. City of Rancho Palos Verdes	
28. City of Rolling Hills	
29. City of Rolling Hills Estates	
30. County of Los Angeles	
31. Los Angeles County Flood Control District	
32. County Sanitation District of Los Angeles County	
33. Dominguez Channel Watershed Management Committee	
34. Exxon Mobil Refining & Supply	
35. Heal the Bay	

36. Latham & Watkins for 10 organizations
37. State of California Department of Transportation (Caltrans)
38. Western States Petroleum Association
39. Rutan and Tucker on Behalf of the City of Signal Hill
40. Flow Science on Behalf of the City of Signal Hill

Comments Received after February 22, 2011
City of Covina
City of South El Monte

Comment Summary and Responses
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1 - 13	Cities of Artesia, Bellflower, Cerritos, Commerce, Downey, Irwindale, Lakewood, Lynwood, San Gabriel, Signal Hill, South Gate, Vernon, Whittier		
1.1		The primary purpose of the TMDLs appears to be to implement a cleanup of the contaminated sediment located in the Los Angeles and Long Beach Harbors. However, the City along with numerous other cities in Los Angeles County, has entered into a federal Consent Decree with the United States and the State of California (including the Regional Board), which federal Consent Decree was first approved by the U.S. District Court in 1993, and was thereafter amended in 1999. This Consent Decree required the payment of $45.7 million in funds and in kind services from the settling local governmental agencies, which consideration was to be used, in part, to address the contaminated sediment within the Long Beach and Los Angeles Harbor areas. The TMDLs thus appear to be an improper attempt to further require the cities yet again pay to address these contaminated sediments. The TMDLs are inappropriate for this reason, and are inappropriate because TMDLs cannot lawfully be used as a. mechanism to require the removal of contaminated sediment caused by prior releases of hazardous substances.	There is no conflict between the Cities' Consent Decree (CD) and the proposed TMDL. The CD and the TMDL do address partially overlapping areas of contaminated sediments, but they rely on different authorities, address different concerns, and are not mutually exclusive. The proposed TMDL is necessary as part of a comprehensive approach to improve water quality in the Dominguez Channel and the Ports of Los Angeles and Long Beach, and nothing in the CD supersedes the Regional Water Quality Control Board's authority to adopt and implement TMDLs pursuant to Clean Water Act section 303(d), or to revise and enforce the Basin Plan. Compliance with TMDLs and related implementation plans does not constitute response action – either removal or remedial – and does not involve "Response Costs," as those terms are used in the CD. (See, e.g., *City of Arcadia v. State Water Resources Control Bd*. (2006) 135 Cal.App.4th 1392, 1414-15 ("A TMDL does not, by itself, prohibit any conduct or require any actions. Instead, each TMDL represents a goal that may be implemented by adjusting pollutant discharge requirements in individual NPDES permits or establishing nonpoint source controls. A TMDL forms the basis for further administrative actions that may require or prohibit conduct with respect to particularized pollutant discharges and water[]bodies.") (internal citations omitted)). In addition, of the commenters in letters 1-13, the Cities of Commerce, Downey, Irwindale, Lynwood, San Gabriel, Signal Hill, and Vernon are listed as permittees (along with other cities as well as the County of LA and the Los Angeles County Flood Control District) in the Los Angeles County MS4 permit, which is one of the regulatory mechanisms identified in the TMDL to implement wasteload allocations.

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			Furthermore, the permittees are responsible for ensuring that water discharged from its facilities does not cause or contribute to exceedances of water quality standards. Unless dischargers can demonstrate that their discharges did not contribute to the exceedances coming from the outfall, MS4 dischargers are jointly and severally liable for discharges from the common storm drain system. The inter-connected nature of the storm drain system makes it difficult to determine exactly where pollutants originate within the MS4. In such an integrated system, one or more permittees may have caused or contributed to violations. Thus, permittees are jointly and severally liable either because a permittee is one of several sources that discharge pollutants or a permittee conveys and ultimately discharges pollutants that may have originated further up the MS4. Moreover, the fact that sediment is contaminated from prior releases of hazardous substances does not make this TMDL unlawful. In fact, bioaccumulation of pollutants in aquatic life tissue as well as sediment toxicity are two major factors used in placing water segments on the 303(d) list. (See State Water Board *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List*, Resolution No. 2004-0063.) For example, this Regional Board has adopted TMDLs for Calleguas Creek including PCBs (effective March 2006) and a Ballona Creek Estuary which included PCBs (effective January 2006). Even though PCBs were banned in the late 1970s, they are known to persist in the environment. Likewise, this TMDL addresses PCBs and other toxic pollutants that persist in the environment from past discharges. TMDLs serve as a backstop provision of the Clean Water Act designed to implement water quality standards when other provisions have failed to achieve water quality standards.

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1.2		The City is also very concerned with the significant number of ambiguities in the TMDLs, including what water bodies are to be dredged, and by who, and what requirements are being imposed on the Los Angeles and San Gabriel River cities. For example, the City is unclear as to what its obligations are or even why it has been included within these TMDLs. This is of particular concern to the City given the fact that there is already an existing metals TMDL for the Los Angeles and San Gabriel Rivers, and given that the non-metal pollutants that are referenced in the proposed TMDLs, according to the technical documents prepared on behalf of US EPA, are not believed to be migrating from the Los Angeles and San Gabriel Rivers in any quantities of concern. Accordingly, until this and the many other ambiguities (as identified in the technical and legal comments submitted on behalf of the City of Signal Hill) are addressed, the proposed TMDLs should not be adopted.	As identified in Section 2, Environmental Setting of the Staff Report, the Los Angeles River Watershed and San Gabriel River Watershed are not focus of these TMDLs. Specific WLAs and LAs are not assigned to Los Angeles River and San Gabriel River in the proposed tentative BPA. However, discussion of the Los Angeles River above the estuary and the San Gabriel River and estuary as a source to the Harbors on the whole, is included. Responsible parties in Los Angeles River and San Gabriel River watersheds are currently implementing other TMDLs including the Los Angeles River Metals TMDL and San Gabriel Metals TMDL, which will directly or indirectly support the goals of this TMDL. The result of this TMDL monitoring program will be used to evaluate whether or not the loading from Los Angeles River and San Gabriel River have the potential to re-contaminate the Harbors and determine if additional reductions in loadings from sources from Los Angeles River and San Gabriel River will be required and addressed through revision of the TMDL.
1.3		In addition, the tentative Basin Plan Amendment for these TMDLs lists the Los Angeles River and San Gabriel River metals TMDL Cities as being the third category of responsible parties for achieving compliance with the .proposed TMDLs. This category of responsible parties should be deleted, however, for the reasons set forth above, namely that there is no indication that these alleged responsible parties are contributing any significant pollutant loadings to the non-metal impairments, and given that metal TMDLs are already in place for both the Los Angeles and the San Gabriel Rivers.	Los Angeles River Watershed and San Gabriel River Watershed responsible agencies identified in the metals TMDLs that are currently in effect for Los Angeles River and San Gabriel River are responsible for conducting water and sediment monitoring above the Los Angeles River Estuary and at the mouth of the San Gabriel River, respectively, to determine the Rivers' contributions to the impairments in the Greater Harbor waters (Tentative BPA, Monitoring Plan Section, page 24-25). WLAs and LAs are not assigned to Los Angeles River and San Gabriel River in the proposed tentative BPA. Therefore, Los Angeles River Watershed and San Gabriel River Watershed responsible agencies are not identified as responsible parties for achieving compliance

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			with the proposed TMDLs at this point. (See revised Staff Report and tentative BPA for clarification)
1.4	Comment 1.4 made by Cities of Artesia, Bellflower, Downey, Irwindale, Lakewood, Signal Hill, only		
1.4		Furthermore, the Cities of Bellflower, Lakewood, Paramount and Signal Hill all appear to have been included under the secondary category of responsible parties for the "Greater Los Angeles and Harbors" specifically because they were presumed to discharge into saline receiving waters. The TMDLs are unclear in this regard, however, and should not be adopted until there is some basis set forth in the TMDLs that explains the reasoning behind including said Cities as Category 2 responsible parties in the TMDLs. It is our presumption that these Category 2 cities were included as responsible parties based a misperception. Because these Cities do not discharge directly into saline receiving waters, none of these Cities should be included.	These cities are part of the Los Cerritos Channel watershed. The Los Cerritos Channel Watershed and other watersheds draining to Alamitos Bay are appropriately included as part of the nearshore watersheds because they drain to Alamitos Bay, which is ultimately a source to San Pedro Bay (as noted in the comment, plumes from Alamitos Bay do pass through to San Pedro Bay during large events). The nearshore areas represent the additional subwatersheds draining to the Harbors system that are not part of the Los Angeles River, San Gabriel River, or Dominguez Channel watersheds. Only areas contributing directly to the saline TMDL receiving waters receive mass-based wasteload and load allocations; therefore, the LCC and other watersheds draining to Alamitos Bay (not a TMDL receiving water) receive concentration-based allocations.
1.5		The City also believes that these TMDLs are being adopted without the Regional Board having given any consideration to the various factors set forth under sections 13000 and 13241 of the California Porter-Cologne Act, and specifically without there being any consideration to whether the TMDLs are "reasonably" and "economically" achievable, particularly in light of the "environmental characteristics" of the waters in issue. For example, understanding that the environmental characteristics of the Los Angeles and Long Beach Harbors contain pollutants within sediments that must first be remediated before the waters can be considered in compliance with water quality standards, compliance with the Porter-Cologne Act requirements would very likely result in an entirely different set of TMDLs for these waters.	Staff disagrees. Water Code section 13241 only requires consideration of the listed factors when the Board establishes "water quality objectives," which are "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." (Wat. Code § 13050, subd. (h).) This TMDL does not establish any new water quality objectives, and nothing in the Water Code requires the Board to consider the section 13241 factors, including costs, in establishing TMDLs or wasteload allocations. (See draft Staff Report, Section 7.8.) TMDLs and wasteload allocations are a means of implementing or achieving water quality objectives that have *previously* been established. (See *City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal.App.4th 156, 175-79.)

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			In addition, the Board's adoption of the TMDL is compelled by federal law – Clean Water Act section 303(d). As the Court of Appeal in *City of Arcadia* explained, a 13241 analysis is only required when water quality objectives are more stringent than what federal law requires. (*City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal.App.4th 156, 178-79.) The TMDL does not set forth any requirements that exceed federal law, because the TMDL merely sets forth water quality goals that will be implemented in, *inter alia*, NPDES permits. Likewise, Water Code section 13000 does not require the Board to consider costs in establishing the TMDL and wasteload allocations. Section 13000 is merely a statement of legislative policy, and does not impose any specific duty on the Board. California law is clear that a statement of legislative intent cannot give rise to a mandatory duty. (See *City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal.App.4th 156, 175-76 (trial court erred in declaring defendants had a duty to consider statements of legislative intent found in section 13000 in adopting the MS4 permit and incorporating the TMDL requirements into it).) In any event, the Board did consider the costs associated with this TMDL. The Staff Report includes a cost analysis entitled "Cost Consideration," which provides an overview of the costs associated with the typical toxic pollutant cleanup and toxic pollutant reduction implementation methods. The Staff Report estimates that the total cost of dredging is $679.8 million dollars, or $59,277,589 per year over the 20-year implementation schedule at an annual interest rate of 6%; the estimated total cost of a sand/organic filter system would be $225 million or $20.65 million annually, and the estimated total cost for vegetative swales is $54.1 million, or $4.95

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			million annually. This discussion of costs is more than adequate. (See *City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1417 (stating that an estimation of costs of compliance is adequate, and that section 13241 neither defines "economic considerations" nor requires an analysis of every conceivable method or combinations thereof or the fiscal impacts on permittees).)
1.6		The City is also very concerned about the scant evaluation of the various environmental impacts that will likely result from dredging of the Los Angeles and Long Beach Harbors, along with the lack of consideration given to any feasible alternatives to this project, as required by the California Environment Quality Act. The economic impacts of this project from the dredging portion alone of the TMDL are estimated at $680 million. This cost is, in and of itself, significant and there does not appear to have been any real evaluation of the potentially significant environmental impacts caused by such a dredging operation, or nor of the likely benefits expected from conducting the dredging.	The CEQA analysis is discussed in detail in responses to **Comments 20.8 – 20.15.** In addition, concerning cost, see response to **Comment 23.9.**
2.	Additional comments City of Bellflower		
2.1		The City notes that in 2005 Bellflower was incorrectly included in the draft Los Angeles River Metals TMDL (LAR Metals TMDL) as a responsible party in Jurisdiction Group 2 of that TMDL. Regional Board staff realized the error and removed Bellflower from the LAR Metals TMDL because the City does not discharge into the Los Angeles River Watershed. If modeling data from the LAR Metals TMDL was used for the proposed TMDLs, the City wants to ensure that Bellflower was not incorrectly included as a party to the LAR Metals TMDL.	Comment noted.
9.	Additional Comments City of San Gabriel		
9.2		The MS4 permit limits responsibility to controlling	Staff agrees that MS4 permittees are only responsible for

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		stormwater within a jurisdiction, specifically at the end of pipe. It does not require eliminating a pollution source located downstream of it; nor does it require eliminating a source of stormwater pollution or the pollutant itself. Per WQA Section 402(p)(3)(B)(iii): "...[MS4 permits] shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." In view of this, dredging is not an action that can be imposed on municipal permittees through the permit	their own discharges to and from the MS4. In order to reduce or eliminate the impact of MS4 discharges on receiving waters and to ensure that MS4 discharges do not cause or contribute to violations of water quality standards, MS4 permits require control of sources of pollutants to the MS4 (e.g., IC/IDE requirements, commercial/industrial inspections, public agency activities, public information and outreach) as well as control of the pollutants themselves (e.g. capture of water quality design storm, receiving water limitations, effluent limitations, implementation of BMPs with known performance). The commenter is not assigned a load allocation for dredging of existing bed sediments; this tentative BPA does not impose any dredging action on this commenter. While MS4 permittees are only responsible for their own discharges, the MS4 permit may require a demonstration of compliance with discharge requirements in a variety of ways, which may include at the MS4 outfall, in the receiving water, and at downstream jurisdictional boundaries.

14-16 City of Inglewood (Identical set of comments with 15. Irwindale and Cities Situated in the Los Angeles and San Gabriel River Watershed, 16. City of Lomita, and City of South El Monte)

14.1		**Dredging** The DC/LAH-TTDML discusses dredging to remediate contaminated soil in the harbors. It is not clear, however, if municipal NPDES permittees are responsible for paying for this activity. Erring on the worst-case, the City cannot dismiss the possibility that it could be included as a cost sharing participant. The City must point out that the MS4 limits responsibility to controlling stormwater within a jurisdiction, specifically at the end of pipe. It does not require eliminating	See response to **Comment 9.2**

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		a pollution source located downstream of it; nor does it require eliminating a source of stormwater pollution or the pollutant itself. As it relates to stormwater, MS4 permits, per WQA section 402(p)(3)(B)(iii): *shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.* In view of this, it should be clear that dredging is not an action that can be imposed on municipal permittees through the municipal NPDES permit. Controls must be implemented intra-jurisdictionally. Recommendation/Action Required Make it clear: (1) that none of the municipal NPDES permittees is responsible for contributing to dredging or any other clean-up activity mentioned in the TMDL; which municipal permittees would be responsible for funding dredging; and that requiring a municipal permittee to participate in dredging exceeds federal stormwater regulations and, therefore, should be required through a waste discharge order pursuant to Porter-Cologne.	
14.2		**Scope of TMDL Applicability** The inclusion of municipal permittees as responsible agencies that must comply with the DC/LAH-TTDML requirements appears arbitrary and capricious. There is no explanation as to why Regional Board staff elected to include the municipal permittees, both specifically identified as responsible agencies and those that may be subject by merely being situated in the Los Angeles and San Gabriel River	Specific WLAs and LAs are not assigned to MS4 Permittees that are exclusively within the Los Angeles River Watershed and San Gabriel River Watershed in the proposed tentative BPA. However, the Los Angeles River and San Gabriel River are major sources of freshwater loading to the Greater Harbor waters. Discussion of the Los Angeles River and San Gabriel River above the estuary as sources to the Harbors on the whole, is included in the Staff Report.

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		Watersheds. The City and others are concerned that the Regional Board is likely to require an implementation plan imposed on permittees who have no idea as to why they are being included. As is with other TMDLs the Regional Board has adopted, determining inclusion as based on exceedances detected at a mass emissions station and from samples taken from other points within receiving waters. However, it is our understanding that federal regulations require outfall monitoring or, if not possible, from a manhole within a jurisdiction. Basing TMDL "collective" inclusion on downstream sampling results is neither fair nor useful in determining whether a permittee is causing or contributing to water quality standard excursion. Recommendation/Action Required First, provide an credible explanation as to why permittees situated in the entire Los Angeles River and San Gabriel Rivers, including those are located over 40 miles away from the harbors, and in the case of those that are situated above spreading grounds, may subject to the requirements of this TMDL. Second, build into the TMDL outfall/manhole monitoring, together with a reasonable potential analysis (RPA) to determine to what extent, if any, a permittee is causing or contributing to an exceedance. Once this information is made available the Regional Board could then identify who the responsible jurisdictions really are.	Responsible parties that are exclusively within the Los Angeles River and San Gabriel River watersheds, are currently implementing other TMDLs including the Los Angeles River Metals TMDL and San Gabriel Metals TMDL, which will directly or indirectly support the goals of this TMDL. This TMDL includes additional monitoring for those parties. The result of this TMDL monitoring program will be used to evaluate whether or not the loading from Los Angeles River and San Gabriel have the potential to re-contaminate the Harbors and determine if reductions in loadings from controllable sources from Los Angeles River and San Gabriel River will be required and addressed through revision of the TMDL. A reasonable potential analysis (RPA) is not applicable to the completion and approval of a TMDL. A RPA is prepared to support the issuance of an NPDES permit. When issuing an NPDES permit, if the permitting authority (such as the Board) determines there is a reasonable potential for a discharge to cause or contribute to an exceedance of a water quality standard, the Board must perform an RPA to establish a water quality-based effluent limit (WQBEL) in the permit. (40 C.F.R. § 122.44(d)(1)(i).) Where a TMDL has been adopted and approved, the NPDES permit must establish appropriate WQBELs based on the WLAs established in the TMDL. Consistent with the provisions of 40 C.F.R. § 122.44(d)(1) and 130.2(h), it is permissible for the permitting authority to either apply the WLA directly as a WQBEL in the permit or to conduct additional analysis, if necessary, to translate the WLA into a WQBEL. The TMDL analysis addresses each of the elements

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			required for an RPA, and therefore the Board may rely on the TMDL's wasteload allocation in setting a WQBEL without a separate RPA. Therefore, it would be permissible for the Board to incorporate the WLA directly into the permit as a WQBEL without further analysis, but the TMDL itself is not required to incorporate an RPA. It is also important to note that federal regulations provide that "WLAs constitute a type of WQBEL." (40 C.F.R. § 130.2(h).)
14.3		**Meeting TMDL WLAs** The City is concerned with the compliance approach the DC/LAH-TTDML proposes. It in effect determines compliance by meeting WLAs, as the following excerpt indicates: *MS4 permittees, Caltrans, and other NPDES dischargers will be required to meet the WLAs at the designated compliance locations as defined in the TMDL monitoring plan. To achieve the necessary reductions to meet the allowable waste load allocations, permittees could balance short-term capital investments directed to addressing this and other TMDLs in the Dominguez Channel watershed and greater Los Angeles and Long Beach Harbor waters with long-term planning activities for stormwater management in the region as a whole. It should be emphasized that the potential implementation.* Once again, as a municipal NPDES permittee, the City cannot be compelled to comply with the WLA as strict numeric limit. Instead, compliance is determined through a water quality based effluent limitation (WQBEL) a device specified under federal stormwater regulations device that in effect translates WLAs, which apply to the receiving water, into BMPs, quantifiable BMPs, or surrogate parameters (viz., a numeric WQBEL). These translated WQBELs can be	Staff disagrees with the commenter's inference that WQBEL's may only be expressed as "BMPs, quantifiable BMPs, or surrogate parameters." The U.S. EPA issued guidance on the implementation of TMDLs in MS4 permits that addresses the commenter's concerns. U.S. EPA has recognized "that where the NPDES authority determines that MS4 discharges and/or small construction stormwater discharges have the reasonable potential to cause or contribute to water quality standards excursions, permits for MS4s and/or small construction stormwater discharges should contain numeric effluent limitations where feasible to do so." While this guidance provides that, if supported by the record, permit requirements may be expressed as BMPs or other narrative requirements sufficient to achieve the WLA(s), nothing limits the Board's discretion to include numeric water quality based effluent limitations (WQBELs). In addition, staff disagrees with the commenter's suggestion that it cannot be compelled to comply with the WLA as a strict numeric limitation. If the WLA is translated into the NPDES permit directly as a numeric WQBEL, nothing limits the Board's authority to require compliance with this limitation. It is also important to remember that the WLAs in the TMDL are not actual, operative effluent limitations, and that the actual effluent limitations in the NPDES permit may differ, as long as they are consistent with the assumptions and

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		evaluated through end-of-pipe and in stream monitoring. However, it must be made clear that compliance is determined by the implementation of the translated WQBELs and not by meeting the WLA at the outfall or receiving water by any means necessary -- as stated in this and other Regional Board TMDLs. Recommendation/Action Required Delete from the TMDL any mention that when incorporated into the municipal NPDES permit, compliance with the TMDL and its WLA must be accomplished by any means and that, instead, compliance shall be determined by appropriately translated WQBELs.	requirements of the WLAs. The method of incorporation will be determined when NPDES permits are revised to reflect an adopted TMDL. Finally, federal regulations do not suggest that the iterative/adaptive process is an inherent component of BMP-based permit requirements. TMDLs are the backstop for the Clean Water Act in cases where effluent limitations or BMPs have been inadequate to achieve water quality standards. Indefinitely continuing such an iterative/adaptive approach without greater specificity in terms of implementation schedules and numeric limitations is not in the best interest of water quality.
14.4		**No WQBEL or RPA** We note that Regional Board TMDL staff did not conduct a reasonable potential analysis (RPA) and not did it develop a water quality based effluent limit (WQBEL), which is a by-product of the RPA analysis. This is inconsistent with the USEPA's NPDES Permit Writers' Manual and USEPA's 2010 revised memorandum on establishing TMDLs. The former document makes it clear that: *EPA regulations at § 122.44(d)(1)(i) state, "Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any [s]tate water quality standard, including [s]tate narrative criteria for water quality." [emphasis added] Because of that regulation, EPA and many authorized NPDES states refer to the process that a permit writer uses to determine whether a WQBEL is required in an NPDES permit as a reasonable potential analysis.*	Comments noted. See also responses to **Comments 14.2 and 14.3**.

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		TMDL staff indicated during a meeting on February 7, 2011, that an RPA was not conducted, which also explains why a WQBEL was not established for this TMDL as well. USEPA's 2010 memo makes it very clear that a WQBEL must be established by the NPDES authority when it determines that MS4 discharges have the reasonable potential to cause or contribute to a water quality excursion and recommends that, where feasible, the NPDES permitting authority exercise its discretion to include numeric effluent limitations as necessary to meet water quality standards. It should be noted that USEPA Washington D.C. NPDES permit and TMDL development staff agreed that a numeric a numeric WQBEL and a TMDL WLA allocation are not to be considered one of the same. In fact, this issue has been raised by several local congressional representatives who have asked USEPA headquarters to provide a written "clarification" response. We are confident that USEPA will make it clear that a WQBEL is an effluent limitation that is required to address a WLA through BMPs, performance BMPs, or surrogate parameters such as flow or impervious cover (known as a numeric WQBEL). When placed in an MS4 permit a WQBEL does not require strict compliance with the receiving water WLA. This is because MS4 permits limit responsibility at the end-of-pipe - not the receiving water. The WQBEL actually bridges the gap between the endof-pipe and the receiving water. This is why the City does not believe that the TMDL can impose dredging or any other extra-jurisdictional control on a permittee. However, we are concerned that this could be achieved if the Regional Board places strict compliance with the WLA into the MS4 permit. Such an action would immediately open municipal permittees to third party	

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		litigation - something that has already been attempted by NRDC vis-a-vis the County of Los Angeles Flood Control District. However, if the Regional Board is intent on demanding strict compliance with the WLA, by any means necessary, for this or any other TMDL, it will have to rely on Porter-Cologne to compel compliance with it. Recommendation/Action Required It is understood that the Regional Board is operating under a compressed timeline to adopt this and other TMDLs by the consent decree deadline. Therefore, the City recommends that the Regional Board defer adoption of this and other TMDLs to USEPA. USEPA would be able to better perform the RPA and discuss with affected permittees what WQBEL variant should be included into the next MS4 permit. The City expects WQBELs to be effectuated through the MS4 permit's stormwater quality management program plan (e.g., low impact development through the development planning program, enhanced street sweeping through the public agency programs, etc.). By deferring to USEPA, the Regional Board can assure compliance with the consent decree deadline date while avoiding administrative and legal challenge from affected permittees. It should be noted that if the permittees challenge the TMDL and delay its adoption, USEPA would have to adopt it anyway, as it had for the trash TMDL and as it has for the San Gabriel River metals TMDL.	
14.5		**Responsible Parties/Agencies Terminology** The TMDL references responsible parties and agencies, but the distinction between them is not clear.	"Responsible parties" should be used consistently in the TMDL. Draft Staff Report and tentative BPA are revised accordingly

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		Recommendation/Action Required Provide an explanation of what the difference is between the two terms. If there is no difference, explain that the two are used interchangeably or delete one of them.	
14.6		**Responsible Parties/Agencies Responsibilities** The TMDL sets an interim waste load allocation for toxicity (< 2 TUc) that must be met by the effective date of the TMDL by all responsible parties. It is not clear to the City why this allocation must be set. The TMDL admits that this target should be easy to meet based on Los Angeles County monitoring data, which begs the question as to why it is necessary. Further, what if the WLA is not met? Would the Regional Board issue a notice of violation based on a receiving water exceedance? The City is concerned that this could open affected MS4 permittees to third party litigation. Recommendation/Action Required If the Regional Board is requiring compliance with the WLA for toxicity then it must rely on Porter-Cologne and, as a consequence comply with the "balancing of factors" requirement under §13241.	The established interim limits are intended to prevent any degradation in water quality from the in current condition. When the TMDL is adopted and approved by the Regional Board, OAL, State Board, EPA, and becomes effective, the interim limits will be incorporated into the appropriate permits and become enforceable. The Staff Report and BPA have been revised to clarify that the interim toxicity WLA shall be implemented as a trigger requiring additional evaluation (e.g., Toxicity Identification Evaluations). With respect to §13241, see response to **Comment 1.5.**
14.7		**Implementation Plan** As with other TMDLs adopted by the Regional Board, this TMDL requires the submittal of an implementation plan per §13242, in this case two years after its effective date. The purpose of the plan is to show how the TMDL WLAs are to be met. It is recognized that Porter-Cologne requires an implementation plan (IP) for TMDLs. However the version presented in this and other TMDLs adopted by the Regional Board are inconsonant with Porter-Cologne and federal storm water regulations. First, the IP requires only approval by the	Regional Board adopted TMDLs include a program of implementation consistent with Cal. Water Code section 13242. TMDLs are adopted by the Board as amendments to the Region's Basin Plan pursuant to Cal. Water Code sections 13240 and 13242. The implementation components of the TMDL, including possible means of compliance with WLAs and LAs, a schedule, and monitoring and surveillance, are adopted by the Regional Board at the same time and using the same administrative procedures as the technical components of the TMDL.

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		Regional Board's Executive Director. And since the IP involves best management practices (BMPs) or other actions to meet a WLA, federal stormwater regulations require a reasonable potential analysis and the development of a WQBEL. Porter-Cologne requires not only a TMDL but any component thereof to be adopted by the Regional Board's governing body. This is because they are basin plan amendments. For example, the Santa Ana Regional Board's governing body adopted Bacterial Indicator Source Evaluation Plans and Water Quality Monitoring Plans after the Middle Santa Ana River Bacterial TMDL three years it was adopted. Because the IP and the MRP require an expenditure of public funds to comply with the TMDL, a public hearing is necessary to, among other things, address §13241, which requires a balancing of factors, including cost. By only requiring Executive Officer approval side-steps that process which the State legislature clearly intended to be followed. It should be noted that Resolution No. 98-08 was adopted by the Regional Board in April of 1998 to approve BMPs required to implement several MS4 SQMP elements including illicit connection and discharge detection and elimination, development planning, development construction, and industrial/commercial inspection programs. The same must be done for each of the TMDLs. IP should be discussed at the time of adopting the TMDL, since it is part of the basin plan amendment, but could be deferred after it is adopted. With respect to federal stormwater regulations, a reasonable potential analysis and a WQBEL should be discussed during the TMDL development process. Resulting from the discussion should be a determination of	The Regional Board is not permitted to prescribe the specific method(s) of compliance. Therefore, the requirement to submit implementation plans after the TMDL is in effect provide an opportunity for responsible parties to specify in detail their chosen implementation actions and milestones to achieve the WLAs per the TMDL implementation deadlines. This greater level of detail can then be considered by the Regional Board during permit development to determine the most appropriate permit requirements consistent with the assumptions and requirements of the TMDL's WLAs. A section 13241 analysis is not required for the adoption of the TMDL. See response to **Comment 1.5**. See also response to **Comment 14.2** and **14.3**.

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		appropriate BMPs (quantifiable and enforceable) or surrogate parameters needed to address the WLA. The Regional Board could also defer such discussion after the TMDL has been adopted. It is recommended, however, that the WQBEL expressed as BMPs or surrogate parameters should be incorporated into the MS4 within the framework of its stormwater quality management program (SQMP) and not be referenced as a separate attachment. For example, LID, as a BMP or as flow or impervious cover reduction surrogate parameter, should be implemented through the development planning/SUSMP program. The WQBEL is to be implemented over the 5 year term of the MS4 permit. The bottom line is that Regional Board cannot require implementing BMPs in the IP once the TMDL is placed into the next MS4 permit without performing the required analysis and discussion and obtaining Regional Board approval. Recommendation/Action Required A workshop is needed discuss the several issues raised in this letter, including how to meet the WQBEL requirement and the kinds of BMPs or surrogate parameters that can be applied to address the WLA. This is a very different compliance approach from the one specified in the toxics TMDL, which essentially requires strict compliance with WLAs through BMPs. It is understood that Regional Board TMDL staff is operating under a compressed time line. However, not addressing these valid issues could result in an administrative and legal challenge from permittees, which could cause an unacceptable delay and force USEPA to adopt the TMDL to avoid being in contempt of the consent decree deadline (as it had for the Los Angeles River trash TMDL and as it has for the San Gabriel River metals TMDL). Given that USEPA has greater expertise in translating WLAs	

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		into WQBELs Regional Board staff should give serious consideration to letting it adopt this TMDL.	
14.8		**Inclusion of Lomita** Why is Lomita included in this TMDL? It is already included in the Machado Lake Toxics TMDL. Recommendation/Action Required Please provide an explanation as to why Lomita is subject to this TMDL.	Lomita has been removed as a responsible party in BPA and Staff Report . Staff note that Lomita will be taking implementation Actions to comply with the Machado Lake TMDLs.
17.	City of Hidden Hills		
17.1		As a preliminary matter, the City of Hidden Hills (and many other municipal entities) have spent considerable time evaluating the Board's January 31, 2011 public notice of an intent to issue an `interim' MS4 permit for the entire Los Angeles Basin, along with incorporating the San Monica Bay Beaches Bacteria TMDL into that `interim' permit. This matter has taken considerable time and attention of the City and its legal and technical consultants. The Board staff, by introducing at the same time a complex Toxic TMDL and requesting a full review of that separate TMDL by no later than February 22, 2011 for a hearing on the same day as the Board will consider an entire MS4 permit (and incorporated bacteria TMDL)(April 7, 2011) imposes an intolerable burden on the City and its staff: Moreover, most of the TMDL appears to be primarily focused upon the harbor areas of Los Angeles and Long Beach. Thus, it is more than a little surprising to the City of Hidden Hills, which has very limited drainage into the upper portion of the Los Angeles River, to suddenly be confronted with the Toxic TMDL and asked to provide meaningful comments on such a TMDL.	Comment noted. The proposed TMDL is now scheduled for the May 5, 2011 Board hearing. The proposed TMDL is for toxic pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters TMDL. Los Angeles River is a major source of freshwater loading to the harbors, therefore, the loading from Los Angeles River must be addressed in this TMDL. However, because some of the same pollutants are being addressed in metals TMDLs for the Los Angeles River and San Gabriel River watersheds, specific WLAs and LAs are not assigned to discharges to the Los Angeles River and San

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			Gabriel River in the proposed tentative BPA. See response to **Comment 14.2**.
17.2		The proposed TMDL, as written, is extremely confusing, and yet it would seemingly apply to virtually every city within Los Angeles County, since most cities drain into either the Los Angeles or San Gabriel Rivers at some point. Yet, we are not aware of any formal public workshops that have been conducted on the purpose and scope of the TMDL, and our limited review of the TMDL documentation has raised a series of questions regarding its goals, as well as over the obligations to be imposed on the various municipalities as responsible parties under the TMDL. For this reason, we would ask that the TMDL not be adopted at this time until the affected local governmental agencies have been given sufficient opportunity to not only fully consider the TMDL and its impact, but also to be in a position to have further dialogue with the Regional Board over their necessity and scope.	See response to **Comment 1.42**. The proposed TMDL was noticed and posted for public review on December 17, 2010. A 45-day public review period was originally set to close on January 31, 2011. As requested by the stakeholders, the public review period was extended two weeks from January 31, 2011 to February 14, 2011. The Regional Board has received requests to further extend the public review period. During this comment period, the Regional Water Board and EPA have had meetings and phone conferences with stakeholders to clarify and discuss many technical matters and issues associated with the TMDL. Regional Board and EPA extended the public review period a second time to February 22, 2011. Regional Board staff finds that the public has had a reasonable opportunity to participate in the review of the proposed TMDL and the tentative BPA.
17.3		To the extent that the Board maintains the same hearing date (April 7, 2011) as the hearing on the LA Basin MS4 `interim' permit and the incorporation of the Santa Monica Bay Bacteria TMDL into that `interim permit', then the City adopts and incorporates by reference the technical comments of the Port of Long Beach. As pointed out in the comment letter filed by that Port, there are numerous technical difficulties with the proposed TMDL. As a legal matter, the Board should revise upward all of the numeric targets in the TMDL for those compounds that are described as currently having "targets that are lower than the readily available [laboratory] detection limits."(Attachment A	Comment noted. The hearing was postponed to May 5, 2011. Numeric targets must be selected based on the environmentally relevant levels that will be protective of beneficial uses of the waterbodies. Currently several of the constituents of concern have numeric targets that are lower

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		to draft Resolution, p. 21). Otherwise, a responsible party would have to file a report of non-compliance as part of the annual reports simply because the current laboratory measurement would always be above the numeric target. While it may be that laboratory detection limits will decline over time, there is absolutely no assurance that this declining level will match the deadlines for compliance by LA River parties currently set forth in Table 7-40.2, which requires submittal of annual monitoring reports within 15 months after monitoring commences. This would subject a municipality such as the-City to a lawsuit by a private party for such `non-compliance' under the Clean Water Act as soon as the TMDL became incorporated into the applicable permit.	than the readily available detection limits. For constituents with numeric targets that are lower than readily available detection limits, testing results that are below detection limits are considered in compliance. The tentative BPA also includes that as analytical methods and detection limits continue to improve (i.e., development of lower detection limits) and become more environmentally relevant, responsible parties shall incorporate new method detection limits in the MRP and QAPP.
17.4		Legally, the City also objects to the TMDL's concept of measuring compliance for a coordinated monitoring program. Hidden Hills is a small community which must, for fiscal reasons, take advantage of savings afforded by a coordination with other communities in the Los Angeles River. But, to impose liability (or measure 'non-compliance') upon Hidden Hills for a legacy pollutant such as DDT, dieldrin or chlordane which are 'ubiquitous in the environment' (Attachment A to Resolution at p. 5, "source analysis") that is measured downstream or downgradient from the City is entirely unfair and inconsistent with the Clean Water Act.	The City has the option to comply with the assigned allocation at the MS4 outfall(s) of the permittee's drainage area. Alternatively, if the City selects a coordinated compliance monitoring option, the compliance point for the stormwater WLA may be at MS4 outfalls to receiving waters or at a point in the receiving water, which suitably represents the combined discharge of cooperating parties. See also response to **Comment 9.2**.
18.	City of Hawthorne		
18.1		This is probably the most technically complex TMDL the Regional Board has issued to date and as such, flexibility needs to be built into the compliance tasks, deadlines and limits. Specifically, the interim compliance limits for the freshwater portion of the Dominguez Channel need to be	Interim WLAs are established to ensure that there is no water quality degradation or backsliding from current discharge quality (BPA, page 9) with or without treatment (the draft Staff Report and tentative BPA are revised to clarify accordingly). When the TMDL is adopted and approved by

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		adjusted to take into account the current conditions and sampling data outliers that will undoubtedly occur in future monitoring. It is recommended that the interim limits not be enforceable until the permittees have initiated and completed a special study, in consultation with Regional Board staff, to review the first several years of monitoring data (the time period is to be established in consultation with the Regional Board staff and other affected MS4 permittees).	the Regional Board, OAL, State Board, EPA, and becomes effective, the interim WLAs will be incorporated into the relevant permits and become enforceable. Interim WLAs for freshwater metals in Dominguez Channel are now recalculated based on all of the data collected from January 2006 to January 2010 including the two outliners and additional data collected in 2007. [See revised BPA and Staff Report]
18.2		Page 104 of the staff report includes the City of Hawthorne among the Responsible Parties for the Dominguez Channel, Torrance Lateral and Dominquez Channel Estuary. The Tentative Basin Plan Amendment only establishes WLAs for Hawthorne for the freshwater portion of the Dominguez Channel. Hawthorne requests the Regional Board acknowledge that only the Dominguez Channel Freshwater WLA's apply to Hawthorne	Comment noted. The tentative BPA is revised accordingly for clarification.
18.3		Page 27 of the Tentative Basin Plan Amendment calls for the MS4 permittees to develop a Sediment Management Plan to address contaminated sediment in the Dominguez Channel and Dominguez Channel Estuary. For other existing sediment beds covered by this TMDL, including the Los Angeles River estuary, the cities- and ports of Los Angeles and Long Beach and the State Lands Commission are explicitly listed as responsible agencies. However, for the Dominguez Channel and Estuary it appears that the MS4 dischargers would all be jointly responsible for this material. In addition, there is no sediment WLAs assigned to permittees discharging to the freshwater portion of the Dominguez Channel; therefore these cities should not be included in this requirement.	The tentative BPA will be revised to separate responsible parties for Dominguez Channel estuary from Dominguez Channel and Torrance Lateral.
18.4		A typographical error is noted for the interim goals for lead on page 10 which are set lower (35.8) than the final goals on page 11 (39.3) and this needs to be corrected.	Comment noted. The tentative BPA is revised accordingly.

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19.	City of Long Beach		
19.1		**Air deposition is not fully or appropriately addressed** The draft TMDL recognizes that the estimates of metals deposited on land are much higher than estimates of loadings to the river system. However, it is indicated that "loadings of metals associated with loadings." If this is accurate, one would expect concentrations and masses of these metals to be steadily increasing somewhere within the watershed. Years of monitoring suggests that this is not occurring. Given the apparent importance of airborne sources and the current inability of the listed permittees to control these sources, it is critical that the sources of airborne contaminants be identified and incorporated as permittees in the TMDL.	Regional Board staff agrees that air deposition is a significant source of contaminants to Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters. Air deposition has been addressed in this TMDL consistent with the approach used in previously adopted TMDLs. The loadings of metals associated with indirect air deposition are accounted for in the estimates of the loadings from the MS4, while the loadings from direct air deposition to the affected waterbodies are estimated and load allocations (LAs) are established for direct air deposition. Regional Board staff agrees that source control may be an effective and appropriate means of addressing the pollutant contributions from air deposition that are washed into the MS4s, and encourages municipalities to work with the air dischargers in their jurisdictions and corresponding regulatory agencies to address such discharges. Such efforts would not only facilitate compliance with this TMDL, but benefit all of the jurisdiction's residents by aiding in control and remediation of other metals and toxics water quality impairments (and even air quality impairments). To the extent the MS4 Permittees desire to proceed with source control as a means of addressing pollutant loading from indirect air deposition in this or other TMDLs, and believe the Regional Board can be of assistance in such multi-media coordination, the MS4 Permittees are encouraged to enlist the support of the Regional Board. See also response to **Comment 40.14**.
19.2		**It is inappropriate to apply chronic toxicity loads to stormwater** The staff report recognizes that loading capacities for metals	Toxicity is treated slightly differently than metals to recognize the differences in the measured responses of the different toxicity tests; that is, acute tests endpoint is lethality;

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		must be based upon acute criteria due to the limited duration of storm events. In the case of toxicity, the staff report suggests that both chronic and acute criteria apply regardless of season or flow conditions.	chronic tests endpoint is sub-lethal effects; e.g., reduced reproductive success, growth, etc. Given that short discharge conditions may also cause an adverse sub-lethal toxic effect, it is appropriate to apply chronic toxicity to adequately protect aquatic organisms during all seasons and flow conditions.
19.3		**Table 6-3, p. 84. The TMDL suggests that wet weather load reductions are a moving target** Although existing lead loads are less than 50% of the allowed load, the footnote indicates that a small percentage of the measured loads still exceed the limit and therefore a small percent reduction is required. This suggested that reducing copper loads by 73.2% and zinc loads by 77% would also still be deemed to be inadequate. Please clarify that the lead limitation is solely due to antidegradation requirements. As noted for lead in the subsequent paragraphs, it would also be helpful to reiterate that the targets are averages and thus will continue to have loads that are both higher and lower.	The inclusion of recently identified data for 2007, shows exceedances for all three metals (including lead); therefore, wet weather freshwater TMDLs are presented for copper, lead, and zinc. The percent reductions provided in Table 6-3 are presented to provide the reader with an estimate of the reductions required. While the average annual existing lead load is less than the average annual lead allowable load, exceedances of the allowable daily load are observed; therefore, a 3.1 percent reduction for lead is required. The Staff Report text and table footnotes have been updated to reflect these changes.
19.4		**The Alamitos Bay watershed is incorrectly grouped into the Nearshore subwatersheds** (See Figure III-2, Appendix III). The Draft TMDL states that "These Nearshore areas refer to freshwater inputs that discharge directly into the saline receiving waters without passing through the Channel or Rivers." The freshwater portion of the nearly 18,000 acre Los Cerritos Channel watershed (shown in the figure below) comprises a large portion of this watershed. The Bouton Creek watershed consisting of 2,260 acres is located adjacent to the Los Cerritos Channel watershed and discharges into the estuarine portion of the Los Cerritos Channel. Suspended sediments from stormwater water discharges into	The Los Cerritos Channel Watershed and other watersheds draining to Alamitos Bay are appropriately included as part of the nearshore watersheds because they drain to Alamitos Bay, which is ultimately a source to San Pedro Bay (as noted in the comment, plumes from Alamitos Bay do pass through to San Pedro Bay during large events). The nearshore areas represent the additional subwatersheds draining to the Harbors system that are not part of the Los Angeles River, San Gabriel River, or Dominguez Channel watersheds. Only areas contributing directly to the saline TMDL receiving waters receive mass-based wasteload and load allocations; therefore, the LCC and other watersheds draining to Alamitos Bay (not a TMDL receiving water) receive concentration-based allocations. Clarification on the nearshore areas has been added to Section

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		Alamitos Bay rarely pass entirely through the Bay and into San Pedro Bay. Stormwater plumes from these watersheds were monitored during a number of early season storm events that occurred from 2002 through 2006. The vertical and horizontal extents of the plumes were mapped with GPS-tracking and a series of water quality profiles. The plume was sampled at four different dilutions (based upon salinity) and sampled to measure dissolved and total metals concentration and toxicity. The plume was typically found to be contained within Alamitos Bay except during extremely large events. Even during large events, the plume becomes difficult to delineate in between the breakwater at the entrance to the Bay. Details of these plume studies are included in the City's Annual Stormwater Monitoring reports. The appropriate area of the City-of Long Beach to be included with the "Nearshore Group" would be the San Pedro Bay subwatershed that is identified on page 44 of Appendix II (Figure 23. Waterbodies and Bight 03 Stations Assigned to Model Subwatersheds). **Location of Los Cerritos Channel Watershed** ***(Freshwater)*** **(Figure 1 of Appendix A of the Los Cerritos Channel Freshwater Metals TMDL, March 2010)** [See City of Long Beach original letter for figure]	4.3.
19.5		**Contributions from the San Gabriel River and Nearshore Seal Beach appear to overestimate land-based contributions to San Pedro Bay** The draft TMDL did not appear to examine export of contaminants from the southeast edge of area. The dominant winds are out of the southwest and tend to drive currents in a southeasterly direction along the shoreline. Although tidal currents will temporarily cause water from the San Gabriel	The mass-based WLAs associated with the nearshore areas draining to San Pedro Bay do not include the subwatersheds draining to Alamitos Bay (as described in the response to **Comment 19.4** above, these areas received concentration-based allocations). Only the subwatersheds draining directly to SPB receive mass-based WLAs and are included in the estimates of percent contributing area. The watershed-based loadings were determined using the same approach as the rest

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		River to flow into San Pedro Bay, the long term transport is to the southwest out of San Pedro Bay. The two figures below show the modeled results of a unit release at the mouth of the Los Angeles River after 15 days of normal wind conditions but with different wave directions. In both cases, the "dye" release is directed predominantly to the southwest out of San Pedro Bay. Over the last 10 years, SCCWRP, NOAA, USGS and others (Aim et al. 2005; Nezlin and DiGiacomo, 2005; Nezlin et al. 2005, Nezlin et al. 2008; and Warrick et al. 2007) have used a variety of satellite imagery and ship-based sampling to examine stormwater plumes from Southern California rivers. With large storms, the initial offshore velocity of the stormwater plumes was approximately 50 cm/s. In the case of the San Gabriel River, this initial momentum would typically cause the plume to move out of the San Pedro Bay. The initial momentum often causes the river plumes to move up to 10 kilometers off the coast before being directed largely in an alongshore direction and dominated by local winds. Warrick et al. (2007) noted that wind conditions after a storm event typically cause the plumes to flow down-coast from their respective river mouths at rates of 20 to 40 km/day. *(From Moffatt & Nichol 2009 Long Beach Breakwater Presentation)* [See City of Long Beach original letter for complete comment]	of the Harbor system, where the difference between the baseline conditions and "no upland loading" model scenarios was used to identify the percent contribution from the nearshore watersheds. This information on the stormwater plume and flow from the San Gabriel River has become available after the data cut-off date and after the 'no further model revisions' date. Such information may be considered as part of future TMDL update or model update; i.e., in preparation for the TMDL reconsideration.
19.6		**Watershed load estimates for solids, metals, DDT, PCBs and chlordane** There is substantial uncertainty in the calibration and validation process which leads to a general lack of confidence in the model results. The calibration and validation of the LSPF model was based upon data from a single event	Model calibration and validation requires a balance and in the case of the nearshore watersheds, very limited data were available to achieve this balance. The Forest subwatershed was used as a calibration location as it consisted solely of the

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		monitored at three small watersheds and was based upon visual comparisons. The Maritime Museum subwatershed, one of the two sites used for model validation, had measured flow that was extremely inconsistent with the model but it was concluded that data was not sufficient to recalibrate and validate flow. Similarly modeled TSS concentrations for the Forest Subwatershed (the calibration site) and the Pier A Subwatershed were far higher than measured values yet the discrepancies were viewed to be "well within acceptable modeling ranges". It is clear that TSS modeled loads would be far higher than the measured loads but we could not find evidence that these values were checked. Although the staff report indicates that the information was provided by the Port, there was no reference to an actual report study could be critically reviewed by others. Information provided in the staff report is not sufficient to evaluate if the data should be considered suitable for this purpose. There is no information as to drainage characteristics, rainfall, methods for flow measurements, sampling procedures, analytical methods or QAQC. For DDT, PCBs and chlordane the model used sediment concentrations from Bight 03 monitoring sites. Data were aggregated based upon Nearshore Subwatersheds. The sediment concentrations calculated for these organic compounds were then used with the TSS loads estimated for each subwatersheds by use of the LSPC model to generate in-stream concentrations of these toxics. There are a number of problems with this approach. Maintenance and deepening dredging has taken place within the Port of Los Angeles (POLA) and as part of the Channel Deepening and POLA improvement projects. Total dredge volumes of approximately 81 million cubic yards were	Port Activities land use, which was the only land use requiring parameterization. These Port Activities parameter values were then incorporated with the regionally calibrated land use parameters during the validation simulations for the Pier A subwatershed (the Maritime Museum subwatershed did not have any Port Activities land use; therefore, it was fully parameterized using regionally calibrated values). Given that the Port Activities parameter values are the only ones that could be adjusted (since these storm data were too limited to justify re-calibration of the regionally calibrated parameters for the other land uses), during the validation process, it was determined that the calibrated Port Activities values achieved the best fit when balancing the results at both the calibration and validation subwatersheds. In addition, overall loads were also considered during the calibration and validation process, since these are ultimately the inputs to the receiving water model. The simulated metals loads were generally in the range of observed loads and the differences observed are consistent with other TMDLs in the region. If additional storm data (particularly multiple storms at a single location) become available, more substantial calibration and validation could be performed during a reconsideration of the TMDL in the future. The discrepancies between modeled and observed values for the individual storms are not unusual when evaluating individual pollutographs and hydrographs for TMDL studies, especially given the limited amount of observed data and the use of an hourly modeling frequency compared to sub-hourly observed data. TSS loads were not originally reported, but have been added to Appendix II, Section 3.2.2. In addition, further description on the evaluation of model fit has been added throughout Section 3.2. The data used for LSPC model calibration were provided by the Ports; however, they were part of a SCCWRP study and

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		removed by deepening down to virgin sediments removing extensive contamination from the majority of the Port. These virgin sediments would have non-detect levels of DDT. Although it is recognized that recontamination of the virgin material can occur through suspension during the dredging process and advection from the Dominguez Channel and Consolidated Slip, it is clear that conditions have radically changed (see attached Plates showing pre 1990 and post 2007 conditions). Another problem with this approach was the use of the Bight 03 data to represent sediment concentrations associated with subwatersheds draining to Consolidated Slip. The values used in Table 12 of Appendix II (page 46) were among the lowest of all three organic contaminants. In reality, they are known to be among the highest concentrations found in the region. The geometric mean of total DDT concentrations measured in 5 sediment samples from Consolidated Slip sediments in 2002 (Karen and Byron, 2003) was 475 µg/kg-dry. The LSPC model used a mean value of 1.3 µg/kg-dry. While this may be a relatively small subwatershed, it suggests that similar problems may exist elsewhere especially in areas subject to periodic intense flows that modify and transport bedded sediments.	are therefore publicly available. The data source has been clarified in Appendix II. The watershed pollutant loading estimates were based on the best available data. These values could be refined in the future if new data become available to better characterize watershed loadings. The representative value for a receiving water was based on an average of available Bight '03 data. The Bight '03 data were used as they were the most recent data collected throughout the Harbors system at the time the modeling was conducted (early 2006). While these average values may not be representative of all bed sediments, they are the best available representation of the overall conditions in the receiving water as a whole.
19.7		In addition to the comments above we wish to point out that the Draft TMDL indicates that "The sediment load allocations for the contaminated bed sediments are assigned to the Cities of Long Beach and Los Angeles and State Lands Commission, which have responsibility for cleanup of the contaminated sediments." However, the City along with numerous other cities in Los Angeles County, has entered into a federal Consent Decree with the United States and the State of California (including the Regional Board), which federal Consent Decree was first approved by the U.S. District Court in 1993, and was thereafter amended in 1999. This Consent Decree required the payment of $45.7 million	Concerning the Consent Decree payment, see response to **Comment 1.1**. In addition, as identified on the 303(d) list, Dominguez Estuary and Consolidated Slip are contaminated with many more pollutants than DDT. The State has given 'high priority rank' to Consolidated Slip as a "toxic hotspot", due to numerous pollutants at very high levels in sediments. This designation also applies to Dominguez Channel and LA Inner Harbor (SWRCB 1999) [SWRCB 1999, Consolidated Toxic Hot Spots Cleanup Plan, Volume II: Regional Cleanup Plans, June 1999]

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		in funds and in-kind services from the settling local governmental agencies, which consideration was to be used, in part, to address the contaminated sediment within the Long Beach and Los Angeles Harbor areas. **The City views this to be an improper attempt to further require the cities yet again pay to address these contaminated sediments.** The staff report points out that copper is the controlling factor in meeting sediment quality objectives in most parts of the Harbor but DDT and PCBs (addressed in the 1999 consent decree) were considered the primary issue in the Consolidated Slip area. The Montrose Chemical Company is known to be the primary source of DDT in this region. Sediments are highly contaminated with DDT along the entire stormwater pathway from the Montrose DDT contamination to Consolidated Slip and beyond. The stormwater pathway is still considered a part of the Montrose NPL superfund site and is designated as OU-2. As a superfund site, EPA should clearly state the responsibility for cleanup or remediation of these sediments lies with the responsible parties for the CERCLA site. Based upon sediment surveys conducted by Kinnetic Laboratories, Inc. and Fugro, Inc. (2007) for the Port of Los Angeles it is estimated that approximately 66 pounds of DDT has been deposited in the top 20 feet of Consolidated Slip and substantially more is expected in the upstream sediments within the Dominguez Channel. The DDT presently trapped in Consolidated Slip would be capable of contaminating sediments throughout the Port of Los Angeles/Long Beach complex to a depth of 5 centimeters at a concentration of roughly 18 µg/Kg- dry, about 60 times the estimated screening levels developed in Oregon (0.3 µg/kg) for marine sediments by use of bioaccumulative risk analyses methods (human fish consumption) and more than 10 times the ERL.	Staff notes the comment regarding DDT load contained within Consolidated Slip is intriguing yet it does not alter the TMDL for that waterbody or any other waterbody in the Greater Harbor area. A similar sediment characterization study of Dominguez Estuary will be fruitful for future consideration of implementation activities. In addition, staff wishes to clarify that copper appears to be the controlling pollutant for other heavy metals and for PAHs. DDT and PCBs are likely to be the controlling pollutant factors for other bioaccumulative pollutants. *From 1999 Toxic Hot Spot Plan….* *The RWQCBs have identified a number of actions to address the problems identified at each high priority known toxic hot spot. Depending on the source and areal extent of the known toxic hot spot, the actions to remediate the sites include:* • *Institutional controls/education* • *Better characterization of the sites and problem* • *Dredging* • *Capping* • *A combination of dredging and capping* • *Source control* • *Watershed management* • *Implementation of a no-action alternative* *NOTE: a DRAFT amended FED exists (2003)* *http://www.waterboards.ca.gov/publications_forms/publications/general/docs/draftfed_consol_cleanup_plan.pdf*

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19.8		Finally, it is not sufficiently clear from the TMDL documents, and from subsequent comments made by Regional Board staff (RWQCB meeting related to TMDL, held 2/7/2011), which entities will ultimately be responsible for the implementation of remediation activities to achieve compliance in the harbor sediments and East San Pedro Bay. The impairments are the result of historic inputs into the harbor sediments from activities in the harbor and from activities upstream, throughout the watershed that have resulted in contaminants being transported to the harbor and deposited in the sediments. Therefore, the ports and the City of Long Beach are not solely responsible for the impairments, and therefore should not be held solely responsible for remediating the sediments to address those impairments. The TMDL should clearly identify that all parties that have contributed to historical inputs into the watershed are responsible for their fair share of the compliance actions.	In the greater Los Angeles and Long Beach Harbor waters, a variety of activities over the past decades have contributed to sediment contamination. Load allocations are assigned to these existing bed sediments. The tentative BPA assigns these load allocations to the City of Los Angeles (including the Port of LA), the City of Long Beach (including the Port of Long Beach), and the State Lands Commission. These public agencies are responsible for remediation because they have legal control over sediment management, dredging, and depth that other cities do not have. The State of California granted the tidelands to the Cities of Los Angeles and Long Beach in trust for the people of the State. The tidelands trust restricts the use of the tidelands for purposes related to harbor commerce, navigation, marine recreation and fisheries. Protection of environmental resources is encompassed within public trust principles. As a practical matter, having these public agencies act as the responsible parties for the existing bed sediment remediation makes the most sense. See page 13 of the tentative BPA. In addition, the responsible parties section of the BPA has been revised for clarity.
20.	The Port of Long Beach		
20.1		**A. The TMDL Employs Measurements, Targets, And Methods That Are Overly Conservative, Not Achievable, And Potentially Harmful** The targets in the TMDL are inappropriate, ignore the assimilative capacity of the system, and are overly conservative. The targets are irrelevant to the area, ignoring site-specific conditions. The targets also assume overly simplistic and unrealistic relationships between all contaminants and all living organisms. In addition, the targets are overly conservative and significantly underestimate the current water and sediment quality	The sediment targets are the Effects Range Low, ERL, guidelines, which are the 10th percentile values indicative of the concentration below which adverse effects rarely occur. This is the appropriate threshold to use in TMDLs, which must be set at the level necessary to fully protect beneficial uses. The toxicity predictive ability of ERLs has been tested in the field and when several ERLs are exceeded, the predictive ability is greater. The targets do not estimate current conditions in the Harbors but represent the target chemical condition. Because this TMDL also allows compliance to be demonstrated using the

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		within the harbor. Through port and city programs, the water and sediment quality, including the health of the benthic community, has measurably improved in the last 10 years, as shown by the monitoring data. Further, the Port is greatly concerned that the TMDL provides targets, load allocations (LAs) and waste load allocations (WLAs) that, if enforced, could cause greater environmental harm than benefit. If the TMDL is enforced as is, the targets will require construction of massive, unwarranted stormwater treatment systems, and the removal of sediments from every inch of the sea floor which currently supports a thriving marine community. The Port contends that greater environmental damage will result from attempts to meet the numeric targets in the TMDL than any impacts from current conditions. **1. The Board Should Use SQOs And Not ERLs As The Target** The establishment of the appropriate target is, perhaps, the most critical element of a TMDL. The wrong selection method and target will dramatically alter the outcome of the TMDL. The TMDL's use of Estimate Range Lows (ERLs) as sediment targets results in an incorrect indicator of sediment health and grossly underestimates the actual sediment quality of the harbor. As stated by Long and Morgan (1990), "ERLs were not intended for use in regulatory decisions or any other similar applications." Instead, as specified by Long et al. (1995) and NOAA (2010), ERL and Effects Range Median (ERM) were designed to be informal, screening-level tools that could be used to evaluate areas that might need further investigation. (Comment Table 2, Items 25 and 26, and Attachment 3 for further discussion.) **Sediment Quality Objectives (SQOs) and not ERLs**	triad Sediment Quality Objectives, healthy sediments in the Harbors will be considered in compliance even if the ERL target is exceeded. In addition, under this TMDL, site-specific studies can be conducted to develop new, site-specific, targets that would take into account the temporally-varying nature of the complex mixture of pollutants in the sediments of the Dominguez Channel or Los Angeles River estuaries or in the sediments of the Greater Harbor Waters. TMDLs are based on monitoring results outlined in Table 2-8, which includes recent data from (not limited to): -Ports Biobaseline 2008 -Ports Sediment survey 2006 -SCCWRP flux study 2006 -Ports enhanced water quality data 2005, 06, 08 -Bight 2003 -LA RWQCB SWAMP 2003 -EPA Superfund 2002 Commenter provided DRAFT results from Bight 08, which includes sampling sites within Inner, Outer Harbor and San Pedro Bay. Staff notes only sediment toxicity Bight 08 results are final, while sediment chemistry and benthic community results are still draft. Staff has performed an assessment review using SQO Part 1 methodology to evaluate sediment quality conditions. Using station assessment results of Clearly Impacted, Likely Impacted and Possibly Impacted as not meeting the protective condition, there are sufficient exceedances within each waterbody to confirm impairment based on SQO Part 1. This SQO direct effects assessment information is compiled in Appendix III.

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		should be utilized in the final TMDL. The SQO standard is set forth in the *Water Quality Control Plan For Enclosed Bays and Estuaries - Part 1 Sediment Quality (SQO* Part 1) adopted by the State Water Resources Control Board (State Board) on August 25, 2009. *SQOs* are based on three lines of evidence, specifically: sediment chemistry, sediment toxicity, and benthic community condition. (TMDL at 45-6.) According to *SQO* Part 1, *SQO* consists of "scientifically-defensible sediment quality objectives for bays and estuaries, which can be **consistently applied statewide to assess sediment quality, regulate waste discharges that can impact sediment quality, and provide the basis for appropriate remediation activities."** (State Board Resolution No. 2008-0070 If 14.) *SQO* Part 1 has been adopted pursuant to Water Code section 13393, which requires the State Board to develop *SQOs* for toxic pollutants for enclosed bays and estuaries. This statutory requirement was upheld by the Superior Court of Sacramento County in August 2001, which led to the creation and adoption of *SQO* Part 1 by the State Board. (State Board Resolution No. 2008-0070 ¶ 4.) The State Board developed *SQOs* pursuant to Water Code sections 13240-13247 which require, among other factors: (1) consideration of past, present, and probable future beneficial uses of estuarine and bay waters that can be impacted by toxic pollutants in sediments; (2) environmental characteristics of waters; (3) water quality conditions that can reasonably be achieved through the control of all factors affecting sediment quality; and (4) economic considerations. As they are based on statutory requirements that have been upheld in court, application of *SQOs* in this TMDL is mandatory, and adoption of another method would be in conflict with this legal requirement. Beyond this, as the	We acknowledge the Harbor have shown water quality improvements over the years; however, they have not yet attained the applicable water quality objectives, nor achieved the desired condition to fully support all beneficial uses. Once Bight 08 sediment triad results are final, then those can be similarly evaluated and integrated with mentioned results above. The goal of the TMDL is to remove impairment and restore beneficial uses. Sediment targets are guided by the Basin Plan, the State Board Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (SQO Part 1) and the sediment quality guidelines of Long and MacDonald (Long et al., 1995; MacDonald et al., 2000) which are recommended by the State Listing Policy. The Sediment Quality Objectives (SQOs) established by the Enclosed Bays and Estuaries (EBE) Plan provide objectives based on multiple lines of evidence that can be applied to sediments but does not provide individual numeric targets for sediment chemistry. To develop a TMDL, it is necessary to translate the narrative objectives in the Basin Plan and the lines of evidences in the SQOs into numeric targets that represent attainment of applicable numeric and narrative sediment and water quality standards. The Effects Range Low (ERL) values represent the levels below which adverse biological effects are not expected to occur, and therefore are the appropriate threshold for ensuring that aquatic life beneficial uses are fully supported and that impairment is eliminated. The use of ERLs as the numeric targets is consistent with previously adopted TMDLs in the Los Angeles Region, including among others the Calleguas

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		aforementioned factors will indicate in comparison to ERLs, SQOs are the superior alternative in this case. SQOs were developed precisely because the legislature recognized the need to develop a better means of regulating sediment impairment in bays and estuaries. (Water Code § 13393.5.) ERLs are preliminary screening-level values that do not consider all of the confounding and contributing factors associated with understanding the conditions at a particular site. Therefore, ERLs are not adequate to be the basis for the protection of California's bays. The SQOs, on the other hand, take into account site-specific conditions and are designed to adequately consider all the factors pertinent to the protection of the bays and estuaries. ERLs do not provide a threshold for chemical concentrations in sediment above which the probability of impairment shows an abrupt increase. There is no basis for assuming that multiple concentrations above an ERL will increase the probability of toxicity or alterations to the benthic community. ERLs are merely the 10th percentile on an ordered list of concentrations in sediment found in scientific literature that co-occur with some biological effects. It is not a threshold below which sediment impairment is impossible and above which it is likely. Rather, ERLs are a concentration at the extreme low end of a continuum roughly relating bulk chemistry with toxicity. While correlations may be statistically significant between a chemical concentration above an ERL and a biological effect, these relationships are coincidental, not necessarily causal. Categorizing sediments on the basis of whether their chemical concentrations include one or more ERL exceedances leads to unfounded conclusions and misperceptions of the actual probability that sediments are	Creek OC pesticides, PCBs, and Siltation TMDL, the Marina del Rey Harbor Toxic Pollutants TMDL, and the Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDLs. The TMDL also provides a compliance option with the sediment TMDL based on achieving the loads and waste load allocations or, alternatively, demonstrating attainment of the SQO Part 1 through the triad/multiple lines of evidence approach. ERL, Effects Range Low, is the 10th percentile value indicative of the concentration below which adverse effects rarely occur. In the absence of full triad data which includes the assessment of toxicity and benthic communities, the ERLs are a protective predictor of toxic effects in sediment. The toxicity predictive ability of ERLs has been tested in the field and when several ERLs are exceeded, the predictive ability is greater. The ERLs provide a readily measurable numeric target that can be used to calculate the TMDL. While multiple lines of evidence will prove useful for assessing sediment, such an approach is not applicable to the calculation of TMDLs and allocations. The use of ERLs as the numeric targets is consistent with previously adopted TMDLs in the Los Angeles Region, including the Colorado Lagoon toxics TMDL, Calleguas Creek OC pesticides, PCBs, and Siltation TMDL and the

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		toxic. ERLs have insufficient predictive ability for setting remedial goals because of the significant frequency of false positives and false negatives (exceedances of the ERL with no biological effects, and concentrations below the ERL in the presence of effects, respectively). (Long et al., 1995; Long et al., 1998; NOAA, 2010; Field et al., 1997; O'Connor et al., 1998; Shine et al., 2003; and Vidal and Bay, 2005.) This is illustrated with data from the Los Angeles and Long Beach Harbor itself. Sediment chemistry data collected within the harbor indicate numerous ERM and ERL exceedances with little corresponding toxicity or benthic effects. (See comparison of ERL exceedance map and benthic health map in Attachment 1.) (Comment Table 2, Items 25 to 27, and Attachment 3 provide further discussion.) In the TMDL, the Board relies on the 303(d) listing policy, which states that the ERL value is an acceptable method of determining sediment impairment. However, the State Board has made it clear that this particular aspect of the 303(d) listing policy is all but eliminated in the wake of the development of SQOs. SQO Part 1 states that "the section 303(d) listing policy was adopted prior to the development of SQOs and without the benefit of the scientific evidence supporting their development. The State Water Board recognizes the need to ensure that the listing policy and this plan are consistent." (State Board Resolution No. 2008-0070 ¶ 10.) The State Board now uses the SQOs, which provide an integrated assessment of concentration of selected chemicals, measured toxicity, and alterations in benthic organism assemblages for the evaluation of sediments quality. Therefore, the Board should abandon ERLs in favor of SQOs in the final TMDL. An examination of the comparison between the estimated	Marina del Rey Harbor Toxic Pollutants TMDL. In fact, compliance with the TMDL can be demonstrated by achieving the ERLs in the sediment or by demonstrating the protective condition of “Unimpacted” or “Likely Unimpacted” using the full SQO triad. Certainly staff do anticipate that the responsible parties will comply by a cost-effective means which may mean demonstrating compliance by the SQO triad and, as the commenter suggests, “...dredging certain "hot spots" that will result in an improved marine habitat.” In addition, the Basin Plan Amendment and Staff Report have been clarified by an addition that states that the sediment targets are not necessarily ‘clean-up standards’ for dredging or capping activities. The BPA has been revised to include options to demonstrate compliance with the interim concentration-based sediment allocation through the SQO process. (See revised BPA, page 11). Interim sediment allocations are based on the 95th percentile of sediment data collected from 1998-2006. Data sources include BIGHT 03, BPTCP, LB NAVY, SCCWRP-B98, and WEMAP 99. BIGHT 08 sediment data, which were included in the Port’s Attachment 8, are not complete, therefore were not included in the calculation

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		volumes in cubic yards (cy) of dredged materials in TMDL Table 7-3 indicates the extreme difference between the amount of sediment that would have to be dredged in the harbor using the ERLs as thresholds and an SQO approach, respectively. (TMDL at 125.) Adoption of the sediment targets would, in fact, result in the dredging of an additional 25,000,000 cy of sediments that currently support healthy marine communities in the harbor, whereas SQO would require dredging certain "hot spots" that will result in an improved marine habitat. (See Attachment 9.) Furthermore, under Water Code section 13241(c), the Regional Board is required to consider the "[w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area." SQOs are a drastically superior way of meeting this statutory requirement. Given these facts, the use of ERLs rather than SQOs simply cannot be justified in this instance. (See Section D of this cover letter below for a discussion of the application of Water Code section 13241 to this TMDL.) *The TMDL should be revised to reflect SQO Phase 1 as the sediment target (inclusive of chemistry, benthic community effects, and toxicity) as is required by California law. If a numeric chemical number is needed to complete elements of the TMDL O. e., Load and Waste Load Allocations), time should be allowed in the implementation schedule to derive the values through the SQO Phase 1 approach, based upon an understanding of site-specific conditions, and not set at the ERL level.* Like the final targets, the interim sediment targets in the TMDL are based on chemistry alone. Because the interim sediment targets do not consider benthic health and sediment	The interim sediment targets are based on current sediment values. In addition the Basin Plan Amendment has been

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		toxicity, they prevent the ability to demonstrate attainment of water and sediment quality objectives through the SQO process. Furthermore, the interim sediment targets: (1) were not calculated correctly, (2) include mathematical errors, (3) do not reflect current conditions of the harbor sediments as intended, and (4) artificially split listed water bodies. Rather than ensuring no further degradation, the listed targets would result in exceedances of the TMDL on the day of adoption. If enforced, the interim targets could require dredging and result in the destruction of marine habitats that currently support healthy marine life. Therefore, the interim sediment targets should not be included in the TMDL. While the Port firmly believes that interim sediment targets should not be used, corrected interim numbers (using the methodology prescribed in the TMDL), are included in Attachment 8.	modified to include demonstration of compliance of the interim sediment allocations by SQOs. See response to **Comment 21.5.** Attachment 8 includes data from Bight 08 which are not yet final and are not included in the calculation of the interim sediment allocations.
20.2		2. **Methodologies Used To Create The TMDL Are**	

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		Flawed And Not Based On Accurate Or Current Data All TMDLs must be based on sound science and must be established in accordance with state and federal regulations, which provide for informed decision making and opportunities for meaningful public input. (40 C.F.R. 130.7(c).) Numeric water quality targets for a TMDL, if deemed necessary, must be identified and an adequate basis for those targets as an interpretation of water quality standards must be specifically documented in the submittal. (40 C.F.R. 130.7(c)(1).) Furthermore, the TMDL document must describe the relationship between numeric target(s) and identified pollutant sources, and estimate total assimilative capacity (loading capacity) of the water body for the pollutant of concern. (40 CFR 130.7(d) and 40 CFR 130.2 (i) and (f).) *The Port is concerned that the TMDL does not accurately summarize the current condition of the harbors. The TMDL is developed from inaccurate and outdated information. (Comment Table 2, Items 1 through 24) This is particularly true because the harbor has shown vast improvement in water quality in recent years. (Attachments 1 and 2.) Moreover, in developing the TMDL, insufficient weight was given to the most recent and reliable data. (Id.) When evaluated using the methodologies set out in SQO Part 1, the current sediment condition is healthy with some isolated areas requiring more study. (See SQO map in Attachment IA)* As fully detailed in Comment Tables 1 to 3 and the attachments, every stage in the development and calculations of **this TMDL is fundamentally flawed and must be**	Section 2.4 of this TMDL summarizes available monitoring data for Dominguez Channel and greater Los Angeles and Long Beach Harbor waters for the listed pollutants in water, fish and sediments. This section includes more recent data than the listing data, in some instances, and provides more detail in terms of whether impairments are in water, tissue or sediment. The summary includes water quality, fish tissue, and sediment quality data from various monitoring sources, for the period of 1992 to 2010. The assessment and problem statement sections of this TMDL reflect current water quality conditions in Dominguez Channel and greater Los Angeles and Long Beach Harbor waters.

[1] The requirement for scientific peer review of TMDLs is not limited to state law. *See also 40* C.F.R. 130.7(c)(1)(ii); U.S. Environmental Protection Agency Region IX (2000) Guidance for Developing TMDLs in California, p. 15.

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		corrected, prior to issuing the final TMDL. Specifically, Attachment 7 describes how the TMDL does not provide an adequate, comprehensive, science-based assessment of the source of contaminants to the harbor impairments, does not provide adequate linkage analyses to link pollutant sources to the harbor, and does not consider assimilative capacity. Furthermore, Attachment 7 explains how it is not possible for the methodology presented in the TMDL to differentiate which specific watershed sources are contributing to harbor sediments, and therefore, is it not possible to develop allocations. Finally, Attachment 7 demonstrates that the modeling efforts are not sufficient to establish linkages between specific sources and specific impairments. The TMDL also misinterprets the model results, leading to an arbitrary selection of allocations. This is confirmed by the resulting negative allocations for sediments in the harbor, which contradict the definition of an allocation (i.e., the portion of the pollutant an entity is allowed to discharge). The linkage analyses were also not sufficient to support load allocations made for air deposition, which assumes that all of the contaminants from air deposition on the surface of each water body deposits in the sediment bed of the same water body. This assumption does not take into account the assimilative capacity of the water body. In addition, no site-specific linkage analysis was conducted to link fish tissue concentrations with the sediment contaminant concentrations that were used to determine the polychlorinated biphenyls (PCB) numeric target. Further, with other sources of PCBs and DDTs in the region, including the Palos Verdes Shelf, there is evidence that the fish tissue impairments could be the result of sources outside of the harbor waters. Finally, the conclusions and data contained in the TMDL were not properly subjected to scientific peer review. For	The EFDC and LSPC models are widely-used, public domain models that have been extensively used in TMDLs to establish linkages between sources and water and/or sediment quality. These models were configured and calibrated/ validated using the best available data at the time of modeling. Model fit could be improved in the future with the collection of additional data. Allocations were not arbitrarily selected. We used a combination of model results—no changes vs. no upland loading scenario to elucidate the watershed portion—and used subtraction to define other sources. Negative allocations arise from our policy decision to presume that the air deposition loads will not reduce for most pollutants. Staff has interpreted the negative allocation to be zero loading allowed. See Appendix III, for more explanation on how allocations were calculated. The biota-sediment accumulation factor (BSAF) accounts for the sediment concentration, the associated food web and the desired fish tissue level to protect wildlife or human health consumption. The current development of Sediment Quality Objectives – Part 2 – Indirect Effects is using a foodweb spreadsheet model to determine sediment concentrations (BSAFs) that correspond to specific fish tissue levels. For DDT, chlordane and dieldrin, the ERL value is lower and more protective than BSAF values. For PCBs, the BSAF value is lower and more protective than the ERL value.

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		example, the sediment fish targets from San Francisco Bay were not peer reviewed for appropriateness for use in the Los Angeles and Long Beach Harbors. Additionally, the development of the linkage analyses and load allocations were not peer reviewed. Therefore, the Board failed to comply with Health and Safety Code section 57004. The fact that the Functional Equivalent Document (FED) may have been peer reviewed does not satisfy this requirement. (FED Appendix B at B-3.) No evidence is provided in the TMDL or related documents which indicates that the Board complied with Health and Safety Code section 57004 in drafting or adopting the TMDL.[1] The Board should initiate a peer review process prior to final adoption of the TMDL.	When the Sediment Quality Objectives – Part 2 is complete, the TMDL may be reconsidered to accommodate the new policy. The TMDL including the appropriateness of the numeric targets has been fully peer reviewed by Patrick L. Brezonik, Ph.D. from University of Minnesota, and Arturo J. Keller, Ph.D. from University of California Santa Barbara. Comments from peer reviewers have been reviewed, responded to, and incorporated into the tentative BPA and draft Staff Report.
20.3		**3. Targets Regarding Fish Tissue Are Not Environmentally Sound And Require Significant Revision** The Fish Contaminant Goals (FCGs) used in the TMDL were not intended to be used as numeric targets. (Office of Environmental Health Hazard Assessment (OEHHA), *Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene* (OEHHA 2008.) In addition, the technical basis for applying these FCGs as the fish tissue numeric targets for DDTs and PCBs has not been established. Throughout the 2008 document, OEHHA indicates that FCGs were not intended to be used as screening values or numeric targets and that other agencies intending to use these numbers should either consult OEHHA for advice in their application or modify the tissue concentrations on a project and site-specific basis. (OEHHA 2008 and Attachment 5A.)	The OEHHA document provides that "Fish Contaminant Goals can be used as a starting point for agencies to develop fish tissue-based criteria. Agencies that require screening criteria for mandated activities may still seek OEHHA's advice for their development." There is no statement in the OEHHA document clarify that that FCGs were not intended to be used as screening values or numeric targets. As of the time the TMDL is written, the OEHHA 2008 document represents current knowledge of the toxicity of seven common fish contaminant levels in fish. FCGs have been used as numeric targets in previously adopted TMDLs in the Los Angeles Region including the Colorado Lagoon OC Pesticides, PCBs, Sediment Toxicity, PAHs, and Metals TMDLs and Machado Lake Pesticides and PCBs TMDLs.

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		The TMDL provides no evidence that OEHHA was consulted for advice or that the tissue concentrations were modified to account for site-specific conditions. The TMDL incorrectly attempts to justify the use of the FCGs, without consultation or site-specific modifications, by stating "Fish tissue targets for DDT and PCBs are selected from `Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish . . . ,' which are recently developed by OEHHA in June 2008 to assist other agencies to develop fish tissue-based criteria with a goal toward pollution mitigation or elimination and protect humans from consumption of contaminated fish or other aquatic organisms." (TMDL, p. 51.) This statement incorrectly implies that the purpose of the 2008 FCGs is to provide other agencies with fish-tissue based criteria to use for their programs. The full statement, however, on page 1 of the OEHHA documents states that: "Fish Contaminant Goals (FCGs) are estimates of contaminant levels in fish that pose no significant health risk to individuals consuming sport fish at a standard consumption rate of eight ounces per week (32 g/day), prior to cooking, over a lifetime and can provide a starting point for OEHHA to assist other agencies that wish to develop fish tissue-based criteria with a goal toward pollution mitigation or elimination." (Page 1 of the OEHHA 2008 documents.) The full quote demonstrates that on page one, as throughout the OEHHA document, OEHHA is clear that the FCGs are provided as a <u>starting</u> point for further development of site-specific criteria and should not be used as an end point, as they were applied in the TMDL.	

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		The TMDL sets generic, non site-specific sediment targets that bear no relationship to the fish tissue target in this TMDL for PCBs and DDT. The U.S. EPA *Guidance for Developing TMDLs in California* states that "The TMDL document must describe the relationship between numeric target(s) and identified pollutant sources." *(Guidance for Developing TMDLs in California,* EPA Region 9 (Jan 7, 2000) (2000 EPA Guidance) at 4.) However, no relationship between sediment bio-accumulative-i.e., PCBs and DDTs-concentrations and the fish tissue numeric target have been demonstrated. Instead, the sediment target described to be in association with the fish tissue target for total PCBs in the TMDL was taken from a San Francisco Bay food web bioaccumulation model, which looked at linkages between tissue concentrations in San Francisco Bay organisms and associated sediment concentrations (Gobas and Arnot 2010.) The sediment target (provided in association with the fish tissue target) for total DDT is the low sediment threshold for DDT effects on human health, based on data collected from Newport Bay Harbor. (SFEI 2007.) Thus, the sediment targets in the TMDL were established specifically for other sites which have different assemblages of organisms, food webs, circulation patterns, sources, and sediment and water column concentrations. They also bear no relationship to the selected fish tissue targets. The total PCB fish tissue target is based on OEHHA guidance and the total PCB sediment target is taken from a San Francisco Bay bioaccumulation study. Likewise, the total DDT target is based on an OEHHA guidance fish tissue value of 0.021 mg/kg (Table 3-8), while the total DDT sediment target is based on low tissue threshold level of 0.0098 mg/kg from a	

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		study in Newport Bay. Accordingly, the required link between the sediment and fish tissue targets is wholly absent from the TMDL. Furthermore, there is no scientific link between ERLs, which were derived based on data related to direct toxicity to benthic organisms, and fish tissue concentration. The only justification given for use of ERLs as a target for addressing fish tissue is the following: "For DDT, chlordane, and dieldrin, the ERL value is lower and more protective than BSAF values. For PCBs, the BSAF value is lower and more protective that the ERL value" (Staff Report, page 96). This justification implies an arbitrary selection of the lowest published value regardless of applicability. Finally, the linkage analyses conducted to establish sediment targets for fish tissue are not sufficient to demonstrate that sediment contaminant flux is the major nonpoint source of pesticides and PCBs to the greater harbor waters; the relative contributions between the watershed source and the re-suspension/redistribution of existing bed contaminants cannot be differentiated. More importantly, the linkage between sediment and fish is key to setting a sediment concentration target to protect fish consumers. It is premature to determine the necessary reductions in sediment bioaccumulative compound concentrations prior to understanding what proportion of fish body burdens are derived from harbor sediments. (See Comment Table 2, Items 31, 32, and 47 to 50, and Attachment 5.) Given that this TMDL does not identify the current sources of PCBs in fish tissue, further study will be required to identify the sources and establish the proper linkages, before a sediment target can be established.	

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		For the reasons summarized above and detailed in the enclosed documents, the Port is deeply concerned that the TMDL is wrong in its assessment of the current conditions of the harbor and has improperly assigned targets, LAs, and WLAs that, if not addressed, will result in a TMDL that could potentially cause remedial actions to be taken that will cause greater environmental harm than benefit. **Therefore, the final TMDL should defer setting targets until they can be established through the SQO Phase 1 and Phase 2 (or similar) assessment process.**	
20.4		4. **The TMDL Fails To Demonstrate Necessary Linkages** U.S. EPA guidelines (2000) state, "The TMDL document must describe the relationship between numeric target(s) and identified pollutant sources, and estimate total assimilative capacity (loading capacity) of the waterbody for the pollutant of concern." (40 CFR 130.7(d) and 40 CFR 130.2 (i) and (f).) Based on the TMDL documentation, the following linkage analyses were not conducted to establish the required relationships between numeric targets, pollutant sources, and loading capacities. These linkages analyses should be conducted prior to setting TMDLs. a. The linkage between sediment numeric targets and pollutant sources needs to be demonstrated. b. The linkage between existing sediment bed sources and sediment bed concentrations needs to be demonstrated. c. The linkage between water column concentrations (e.g., California Toxic Rule [CTR] and sediment concentrations [i.e., benthic impairment]) needs to be demonstrated. d. The site-specific linkage between fish tissue targets and sediment numeric targets needs to be demonstrated.	Language has been added in the Staff Report to address these comments. Flux studies of air/water and sediment/water interfaces were a component of the 2006 studies by both Ports, their contractors and SCCWRP (in contract with the Regional Board). Measurements of bulk sediment, porewater and overlying water concentrations of PAHs, PCBs, DDT and metals were from Inner, Middle and Outer Harbor waterbodies. Results show that pollutant levels were highest in sediment and lowest in overlying waters at each sampling site, with porewater levels in between, confirming that diffusive flux from sediment to water column is the expected pathway for these pollutants. Additional measurements of air deposition and surface water concentrations were collected by SCCWRP. These data were interpreted by SCCWRP (2007) to yield air/water and sediment/water flux estimates for each pollutant. Flux rates from sediment to water were always greater than air/water interchanges, ranging from 2 to 10 times larger. These linkage results indicate that contaminated sediments are a significant pollutant source and therefore it is appropriate to assign allocations to the sediments.

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			It is also reasonable to assume that fish are exposed to bioaccumulative pollutants through exposure pathways including water and consumption of organisms in or associated with contaminated sediments. Whereas the commenter asserts that food web dynamic studies must be completed in the subject waters, we assert is it reasonable to utilize conceptual model results based on similar studies in San Francisco Bay to provide a connection between sediment values and fish tissue targets. Such studies are optimally supported by concurrent measurements of sediment, water and organism/fish tissue levels. Numeric targets are established for water, sediment and fish tissue based on applicable CTR criteria or water quality objectives, including both narrative and numeric. Water and sediment targets are intended to protect direct exposure to aquatic organisms living within the water column or the sediments. For example, water pollutant concentrations should not exceed numeric criteria nor create adverse effects on algae, invertebrates, fish, mammals, birds within subject waters. Additionally, water, sediment and fish tissue targets are intended to address bioaccumulative compounds that exist in the water column or enter the food web and not result in fish tissue levels that will create human health or ecological risk via consumption.
20.5		**B. The TMDL Requires Modification In Terms Of Measuring And Achieving Compliance** **1. The TMDL Should State That Sediment Targets Are Not Intended To Be Remedial Action Goals, Clean-Up Levels, Or Levels To Which Individual Dredging Projects Will Be Held** The Port is very encouraged to see SQO Part 1	Sediment condition objectives identified as sediment targets for this TMDL were determined using the State Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (SQO Part 1) and the sediment quality guidelines. Compliance with the sediment TMDL, as identified in the BPA and the Staff Report, is based on

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		incorporated into the Draft Implementation and Sediment Monitoring Program. The Port believes that many of the concerns raised in our general and specific comments can be addressed through the establishment of a clear and comprehensive SQO-based Sediment Management Plan. However, the Port is very concerned that the TMDL does not adequately ensure that all required sediment management actions will be determined through this process and that specific clean-up actions or dredging clean-up goals will not be issued based on the sediment targets. The TMDL must clearly state that the numerical sediment targets are **not** intended to be remedial action goals, clean-up levels, or levels to which individual dredging projects will be held. Such levels should be determined through the risk-based approach identified through the SQO Part 1. Specific redline text changes that provide this clarification have been attached. (See Recommended Rewrites.)	achieving the loads and waste load allocations or, alternatively, demonstrating attainment of the SQO Part 1 through the triad/multiple lines of evidence approach. The BPA and Staff Report are revised to clarify compliance options as appropriate.
20.6		**2. Compliance For NPDES Measured At The Point Of Discharge Is Inappropriate** Until *appropriate* linkages between contaminants and specific water body impairments are completed, compliance for Port NPDES permits measured at the point of discharge is inappropriate. Furthermore, CTR values are designed **to establish ambient water quality criteria to be protective of aquatic ecosystems and human health.** CTRs are designed to be compared against monitoring data in the water column, not monitoring data related to samples collected at the end-of-pipe. Therefore, achieving CTRs at end-of-pipe should not be used for the Port's NPDES discharges. Further, since CTRs are related to human health and aquatic life exposures, they are not linked to protection of sediment quality or prevention of sediment impairments.	Section 2.6 Assessment Findings for Each Water Body provides that water results showed elevated levels of DDT and PCBs in Los Angeles Harbor and Consolidated Slip (SCCWRP, 2006). For Los Angeles and Long Beach Inner Harbors, DDT and PCBs in the water column have been detected via solid phase microextraction (SPME) devices; DDE results showed exceedances of CTR human health criteria (Zeng, et al. 2005). For Outer Harbor, DDE measured in the water column showed 2 of 4 exceedances of CTR criteria (Zeng, et al. 2005). Based on review of available data, including information with

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		As the data demonstrates, there are no water column CTR exceedances in the Port. Therefore, there is no evidence that establishes a link between achieving the TMDL water column targets for these sources and addressing the impairments. The Port requests that the language provided in the Recommended Rewrites attachment be inserted into Section 7.5. If site-specific stressor and source identification studies determine that specific discharge points are impacting sediment quality, NPDES permits should be modified accordingly to control those particular sources for the identified stressors.	2008-2010 303(d) list factsheets and more recent monitoring information, the water-quality limited segments are identified in Table 2-18 of the Staff Report. Each waterbody-pollutant combination is required to be addressed through TMDL development.
20.7		**3. Compliance With Fish Tissue** The assessment of indirect impacts of sediment contamination via bioaccumulation is currently under development by the State Board and the Southern California Coastal Water Research Project (SCCWRP) as part of the state's Sediment Quality Plan - Part 2. Site-specific scientific information obtained through the application of this assessment tool will be appropriate for determining the relationship between concentrations of bioaccumulatives in sediments and local fish species. Until the SQO Part 2 assessment tool is adopted or a similar approach is applied, the extent to which sediment concentrations need to be reduced to comply with the TMDLs is uncertain, and thus it is not possible to allocate the necessary load reductions for bed sediments. For final WLAs, the SQO Part 2 assessment or similar approach will assist in the development of site-specific sediment levels necessary to achieve site-specific fish tissue targets. Following the site-specific linkage analysis, attainment of these bioaccumulative TMDLs may be	See response to **Comment 20.3.**

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		achieved via two different means: (1) meet fish tissue targets for trophic level-4 (TL-4) species, or (2) demonstrate attainment through the SQO Part II evaluation or similar approach. Therefore, interim WLAs for addressing fish tissue impairments, determined either as loads or water column concentrations, should not be established in the TMDL or used in setting permit levels until such time as the final SQO Part 2 methodology is available, and site-specific attainment conditions are established.	Interim WLA for fish tissue have not been established. Interim WLAs for sediment are established and are intended to not allow any degradation in current sediment quality.
20.8		**C. The CEQA Document Does Not Adequately Analyze The Impacts And Thus Does Not Inform The Decision Makers Of The Potentially Greater Negative Impacts Of The TMDL** The Substitute Environmental Document (SED) does not meaningfully analyze the potential impacts of the TMDL and therefore does not provide the decision makers, other regulatory agencies, and the public the required understanding of whether the environmental benefits of the proposed TMDL outweigh the significant and unavoidable environmental impacts. In *City of Arcadia v. State Water Resources Control Board,* 135 Cal.App.4th 1392 (2006), a number of permittee cities challenged the Board's adoption, and the State Water Board's approval, of a trash TMDL concerning the Los Angeles River and its surrounding watershed. The court held, in part, that the Water Board failed to prepare an EIR. The Board's completion of a California Environmental Quality Act (CEQA) checklist in a manner supporting a negative declaration was not sufficient, particularly in light of evidence in the record concerning potential adverse	Staff disagrees. The California Secretary of Resources has certified the State and Regional Boards' basin planning process as exempt from certain requirements of the California Environmental Quality Act (CEQA), including preparation of an initial study, negative declaration, and environmental impact report (California Code of Regulations, Title 14, Section 15251(g)). The Regional Board is prohibited from specifying the manner of compliance with its regulations (Water Code §13360). As a certified regulatory program, the Regional Board must include a description of proposed activities, analyze alternatives, and identify mitigation measures. These TMDL documents, including the SED, have identified the likely methods of compliance and analyzed potential environmental effects and identified potential mitigation measures, at a programmatic level, without speculation. Staff does not anticipate one method of compliance that will completely solve the existing problems. Rather, staff

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		environmental impacts that could arise from the TMDL (despite its water quality enhancement purposes). The court concluded that the Board had not performed the requisite analysis by checking off boxes on a CEQA checklist form and summarily concluding that there were no significant potential environmental impacts. The court found that the Board ignored impacts likely to be experienced during the implementation of the TMDL, including soil disruption and displacement, an increase in noise levels, changes in traffic circulation, and effects on air quality. Even though these impacts would only occur temporarily and would ultimately result in environmental benefits, the court held that the TMDL was not lawfully adopted in compliance with CEQA and that a full EIR and alternatives analysis, or their functional equivalent, were necessary. Because the Board did not conduct a thorough analysis of the temporary environmental impacts that some public commenters had opined would result from the implementation of the TMDL, nor consider mitigation measures or alternative approaches, the court held that adoption of the TMDL failed to comply with CEQA. There is evidence in the record here that the TMDL and its implementation plan may have a significant physical adverse impact on the environment, even if only temporary in duration, which requires adequate CEQA analysis by the agency. Because the objective of the TMDL is to protect and restore fish tissue and sediment quality in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters, the environmental analysis should take into account the environmental impacts from feasible implementation measures required within the general vicinity of the ports of Long Beach and Los Angeles to meet TMDLs. As stated on page 8 of the SED and in the California Code of Regulations	anticipates a variety of structural and non-structural BMPs maybe necessary in both upstream and downstream portions of the watershed to meet the targets of the TMDL. While dredging may remove historic loading of pollutants, it does not address existing loads from upstream sources (or ongoing aerial deposition). Responsible parties implementing the TMDL will also have responsibilities under CEQA as they plan specific projects to comply with the TMDL. To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance.

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		(Title 23, Division 3, Chapter 27, Section 3777): "The environmental analysis shall take into account a reasonable range of environmental, economic, and technical factors, population and geographic areas, and _____ **specific sites."** If the TMDL is enforced as written, dredging or dredging then capping are the only implementation alternatives that would achieve the sediment targets in the implementation time frame; therefore, the lead agency can reasonably foresee that specific large scale dredging will be required and the SED must adequately and quantitatively analyze the environmental impacts of dredging/capping within the Los Angeles/Long Beach Harbor and San Pedro Bay to meet the TMDL. In addition, other landside implementation methods such as infiltration systems, vegetative swales, and low-flow diversion systems are infeasible within the ports and therefore will not adequately achieve the CTR target set in the TMDL for General NPDES discharges, or the WLA for MS4s. The only available method to feasibly approach achieving compliance with water quality WLAs at the ports is treatment control BMPs. (Attachments 11B and 11C.) Therefore, the lead agency can reasonably foresee that the specific implementation measure of stormwater treatment and the SED must adequately and quantitatively analyze the impacts associated with the installation of treatment control BMPs throughout the Port complex and the watershed. The Port is very concerned that all potential environmental impacts from the project have not been properly addressed,	

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		analyzed, and mitigated. The SED fails in many respects to comply with the requirements of CEQA. While certified regulatory programs may use the SED, the Board is required to comply with all the substantive requirements of CEQA. This SED does not accurately identify or analyze the significant environmental impacts that would result from this project. Further, it fails to provide sufficient mitigation for impacts that it does identify, and fails to consider alternatives that would effectively protect the environment, while causing less environmental and economic costs to implement. Given the unavoidable regional and local impacts of the proposed project, it is especially important that the SED contain the necessary analysis to enable both the decision makers and the public to understand the significant environmental repercussions of the project. Because there can be no meaningful public review of the project due to the following inadequacies, the Board should correct the deficiencies to provide a complete discussion of the environmental issues at stake.	
20.9		**1. Inadequate Descriptions Of Structural Implementation Alternatives Result In Underestimated Environmental Impacts** By underestimating the magnitude of the amount of sediment needed to be removed by dredging to comply with the TMDLs, and the compliance methods of achieving CTR and WLAs, the existing environmental analysis does not fulfill the Board's obligation under CEQA. The SED lacks an adequate discussion of the numerous environmental impacts associated with dredging and stormwater treatment alternatives, as well as an accurate and complete assessment of air and transportation impacts resulting from a dredging project of this size. These numerous impacts are not provided	Staff disagrees. Estimates of potential dredging were made with the Ports' assistance. Staff anticipates that the Ports and other responsible parties will pursue cost effective methods of complying with the TMDL and will not dredge if not necessary. Ports and other responsible parties may also find that they can dredge less then the estimated amounts in the staff report as they collect sediment data over the 20-year schedule of the TMDL. Both Ports conduct dredging annually for navigation and project purposes. According the Port of Los Angeles Channel Deepening Final SEIS/SEIR, to date the Port of Los Angeles

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		to the public for review, and do not give the public a true indication of the significant environmental impacts of the project. The SED incorrectly describes dredging to be small in scale and extent. Based on this inaccurate statement, the environmental analysis incorrectly assumes most dredging impacts to be less than significant or no impact. According to the draft Board staff report (Table 7-3 at 125), it is estimated that 11 to 35 million cy of sediment would have to be removed within the ports of Long Beach/Los Angeles and San Pedro Bay to meet the ERL and/or SQO requirements of the TMDL. In order to comply with fish tissue targets stated in the TMDL, approximately 38 million cy of material would need to be dredged. (Attachment 9.) This is a monumental and unprecedented amount of material that would need to be dredged within a span of 15 years and would have significant adverse impacts in a number of resource areas such as air quality, plant life, animal life, climate change, traffic, etc. (Comment Table 4, Items 8 through 33 and Attachment 9D.) The environmental impacts of dredging have been grossly underestimated in each of the resource areas, and the SED needs to be revised to rectify these deficiencies. For a proper CEQA analysis to be performed, detailed assumptions need to be discussed and analyzed such as the amount of material likely to be dredged, methods of dredging (clamshell and hydraulic), methods of disposal (truck or rail), and disposal areas (upland and port landfill). The document only states that hydraulic dredging would be usedwhich is not accurate, since clamshell dredging is an equally likely method of dredging. Additionally, the option of capping is inadequately analyzed and there is no discussion or assumptions about capping in the project	has dredged over 12.7 mcy of material for channel deepening purposes. The Ports are able to conduct dredging projects generally without significant negative impacts. The TMDL has set forth alternatives to the project and provides detailed evaluation of reasonably foreseeable methods of compliance. The associated adverse impacts have been appropriately described in the SED. The SED, page 5, explains that CEQA requires the Board to perform a program-level of analysis, not a project- level analysis. The Regional Board is prohibited from specifying the manner of compliance with its regulations (Water Code §13360). To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance. Also see response to **Comment 20.8**. For costs see response to **Comment 23.9.**

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		description to allow the public to understand what is involved with the capping option. Capping is a major undertaking and also needs to be properly analyzed for environmental impacts.	
20.10		**2. The Following Analyses Are Deficient Because No Impact And Less Than Significant With Mitigation Determinations Are Not Supported By Substantial Evidence** Further analysis needs to be performed to determine potential significant impacts and appropriate mitigation measures. The CEQA analysis inappropriately dismisses any likelihood of impacts or determines that impacts will be less than significant with mitigation. Additionally, potential mitigation measures are vague and there is no substantial quantitative evidence to support how the mitigation measures will actually ensure that significant impacts will be reduced to less than significant with mitigation. Provided below are the major analyses that are deficient, and in which further analysis needs to be performed to determine potential significant impacts and appropriate mitigation measures. (Comment Table 4, Items 8 through 33.) **a. Air Quality and Greenhouse Gases (2.a, 2.c)** The document incorrectly states that the project will have less than significant impacts to air quality with mitigation and that the project will result in less than significant impacts in climate change. Dredging up to 38 million cy of sediment within 15 years to meet the TMDL would cause adverse impacts in air quality in terms of the continuous, long-term duration of dredge operations, as well as truck trips to dispose of the sediment. It would take 2.6 million round trip truck trips to dispose of 38 million cy of material.	The SED, page 5, explains that CEQA requires the Board to perform a program-level of analysis, not a project- level analysis. The Regional Board is prohibited from specifying the manner of compliance with its regulations (Water Code §13360). To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance. The SED anticipates potentially significant impacts to ambient air quality from additional air emissions. Checklist item 2c has been modified to indicate potentially significant impacts. See response to **Comment 20.9** regarding the amount of materials to dredge and program-level and project-level analysis.

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		(Comment Table 2, Item 94.) The estimated air emissions and greenhouse gas emissions from truck trips and from the dredge equipment need to be quantified. The identified mitigation measures for dredging are inadequate because they only target trucks and heavy construction equipment. They do not address the dredge equipment itself. One mitigation measure to address air emissions from the dredge equipment that is not discussed is electric dredging. There is no substantial evidence supporting the statement that mitigation measures will reduce these impacts to less than significant levels without a quantitative analysis. Additionally, stormwater treatment systems capable of achieving the water quality targets and WLAs set in the TMDL will be large-scale construction projects that can result in substantial air quality impacts and greenhouse gas impacts from construction and operation. These impacts also need to be properly analyzed. **b. Earth (1.a, 1.b, 1.c, 1.d)** The document incorrectly states that dredging would not be to the depth or scale to cause unstable conditions or changes in geological substructures; result in disruptions or displacement of soil/sediment; impact topography or ground surface relief features; and result in the destruction, covering, or modification of unique geologic features. In order to meet the TMDL targets, dredging and sediment capping would be large in scale, would affect most of the harbor, and would result in significant changes. This section needs to be revised to properly analyze the potential significant impacts of dredging and/or sediment capping and include a discussion on feasible mitigation measures or alternatives that would reduce potentially significant environmental impacts. Additionally, the document incorrectly states that infiltration systems and vegetated swales would not be of the size or	The SED will be revised to include electric dredging. To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance. Implementation, operation, and maintenance of sub-regional structural BMPs discussed in the SED for source reduction, may result in adverse impacts. However these impacts are temporary during construction and maintenance. The SED includes an analysis of a range of reasonably potential methods of compliance and mitigation measures. The SED is not required to analyze all potential methods of compliance or mitigation measures. Staff disagrees that filtration and infiltration may result in adverse impacts to topography within the Port as the sub-regional structural BMPs listed in the SED should be sited in the upstream watersheds. See response to **Comment 20.9** regarding the amount of materials to dredge and program-level and project-level analysis.

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		scale to result in a change in topography and ground surface relief figures. Providing adequate infiltration for large volumes of stormwater would require substantial changes to the topography of the port. Therefore the level of analysis performed is insufficient and there is no substantial evidence supporting the statement that these alternatives would have no impact. **c. Plant (4.a, 4.b, 4.c) and Animal Life (5.a, 5.b, 5.c)** The document incorrectly states that significant impacts to plant and animal life from dredging and capping can be mitigated to less than significant. Further, the mitigation measure of limiting the extent and duration of dredging to lessen impacts to plant and animal life is infeasible. If sampling indicates that an area does not meet numerical sediment or fish tissue targets, dredging will need to be performed to remove the contaminated sediment. Dredging cannot be "sited" in another location to prevent impacts to plant and animal life. Because existing harbor conditions are healthy (Attachments 1 and 2), dredging may be more detrimental and destructive than beneficial since dredging/capping would destroy benthic habitat that is thriving and healthy. This is a significant impact. If this impact cannot be mitigated, it should be stated that this is an unavoidable significant impact. **d. Noise (6.a)** The document incorrectly states that increases in existing noise levels from dredging and the installation of structural BMPs will be reduced to less than significant once mitigation measures have been properly applied. There is no substantial evidence to back up these determinations. Without any quantitative analysis comparing the difference between baseline noise levels and future noise levels versus	If existing harbor conditions are healthy then the sediment will achieve the sediment quality objectives (SQO) and no dredging will be necessary. Any identified, necessary, dredging can be timed so that benthic organisms recover in one place while the next is dredged during the 20 year implementation schedule of the TMDL. Staff note that the harbors both have dredged sediment many times and benthic communities recover ("existing harbor conditions are healthy"); see response to **Comment 20.9**. Noise comment noted. The SED will be revised to address this comment.

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		significance thresholds, it cannot be determined whether mitigation measures would reduce the impacts to less than significant. A quantitative analysis of noise impacts needs to be performed to support the determination that implementing proposed mitigation measures would reduce noise impacts to less than significant. **e. Transportation/Circulation (13.a, 13.c, 13.d, 13.e)** The document incorrectly states that dredging operations and installation of structural BMPs will not result in the generation of substantial additional long-term vehicular traffic. The determination that impacts upon existing transportation systems, circulation or movement of people and/or goods, and alterations to rail or waterborne traffic can be reduced to less than significant with mitigation is also incorrect. Disposal of dredged sediment in a Port fill site is limited, and the majority of the sediment will need to be disposed of in an upland landfill, most likely out-of-state. It is estimated that 2.6 million round trip truck trips would be needed to dispose of 38 million cy of sediment in an upland landfill. This is a substantial increase of truck trips within the vicinity of the port and the regional transportation network. In addition, there are not enough certified trucks available for that level of waste movement and so rail cars may be the only option for moving that volume of sediment, which could have significant impacts on the rail network. Truck trips/rail trips resulting from dredging operations and installation of structural BMPs will not be limited and short-term. There will be substantial impacts upon the existing transportation systems and significant impacts to the circulation of people and goods. A traffic management plan is not an adequate mitigation measure to address the significant impact to transportation systems as a result of the project. Further analysis is needed and potential significant	To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance. The SED includes an analysis of a range of reasonably potential methods of compliance and mitigation measures. The SED is not required to analyze all potential methods of compliance or mitigation measures. Staff disagrees that filtration and infiltration may result in adverse impacts to topography within the Port as the sub-regional structural BMPs listed in the SED should be sited in the upstream watersheds. See response to comment 20.9 regarding the amount of materials to dredge and program-level and project-level analysis. Regarding mitigation measures, the SED will be revised to address this comment.

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		traffic impacts should be quantitatively and adequately analyzed. **f. Human Health (17.a, 17.b)** There is no discussion in this section of the health impacts from diesel particulates from substantial increases in truck trips or rail operations needed to dispose of dredge material, or from heavy construction equipment for dredging and installation of structural BMPs. This section needs to be revised to properly and quantitatively analyze the potential significant public health impacts from toxic air contaminant emissions that would result from the project. Increase in human health risk is a significant concern for the already impacted communities near the ports. The ports have made substantial efforts and progress in addressing this concern through implementing air quality measures and reducing human health impacts from new projects. Consistent with these efforts, the ports have committed to reduce human health risk from port operations in the local communities and throughout the local area by 85% by 2020. The increased human health risk associated with meeting the requirements of this TMDL will run counter to those efforts and result in significant impacts. All recent Port development projects, which are not this large in magnitude, have included substantial Human Health Risk Assessment evaluations to justify alternatives. This impact should be adequately analyzed. **g. Economics** The document fails to consider the potential significant economic impact of these requirements to the ports of Los Angeles and Long Beach or other involved stakeholders. The evaluation of economic impacts and a consideration of other alternatives that reduce the economic impact are required under CEQA.	See response to comment 20.9 regarding the amount of materials to dredge and program-level and project-level analysis. Regarding mitigation measures, the SED will be revised to address this comment. The California Secretary of Resources has certified the State and Regional Boards' basin planning process as exempt from certain requirements of the California Environmental Quality Act (CEQA), including preparation of an initial study, negative declaration, and environmental impact report (California Code of Regulations, Title 14, Section 15251(g)).

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		h. Water Quality The use of a small cutterhead dredge for a project of this size is infeasible. Creation of new fill sites to handle hydraulic slurry would have numerous tangential impacts, and typically require years to evaluate and permit. Impacts to water quality are not adequately described, and lack understanding of the impacts of dredging at this scale. These impacts should be adequately analyzed. **i. Public Services** The document does not address the stress on regional landfill capacity, or the effect of the project on the capacity of offshore disposal sites. The volumes proposed in this project would far surpass available capacity at available port fills, upland disposal sites, or offshore disposal sites.	As such the basin planning process is exempt from analyzing potential economic impacts. Staff disagrees. Cutterhead dredges were presented as just a form of dredge available. Other dredges are available and can be determined during individual project planning. Impacts to water quality have been adequately described. To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance. The SED includes an analysis of a range of reasonably potential methods of compliance and mitigation measures. See response to **Comment 20.9** regarding program-level and project-level analysis. Staff anticipates additional upstream storage facilities may need to be constructed. Non hazardous sediments may also be reused in future port development projects and facilities.
20.11		**3. The SED Fails To Provide Adequate Findings Of Significance** The SED states that potential impacts of the project will not cause significant degradation to the environment, significant cumulative impacts, or substantial adverse effects on human beings with appropriate implementation of available mitigation measures. Since there is no quantitative analysis of environmental impacts in the SED, there is no evidence that mitigation measures would reduce significant impacts to less than significant. There are significant impacts to plant and animal life, air quality, climate change, traffic, etc. that cannot be mitigated. Also the no impact determination, in terms of achieving short-term to the	Staff disagrees. Quantitative analysis for certain impacts were included in the SED (air and noise). The commenter also seems to incorrectly state the goals of the TMDL. The TMDLs sets forth to achieve long term water quality goals, while acknowledging the capacity for potential adverse short term impacts. To the degree that certain methods of compliance may result in significant adverse impacts, a statement of overriding considerations has been included in the SED.

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		disadvantage of long-term environmental goals, is incorrect and unsupported by substantial evidence. While the project will have beneficial impacts to water quality over the short and long term, it may result in negative long-term impacts to the environment in terms of air quality and climate change. Discussions in this section are inadequate and unsupported by substantial evidence and need to be revised.	
20.12		**4. The SED Fails To Provide An Adequate Cumulative Impact Analysis Of The Project** The cumulative impact analysis is inadequate and needs to be revised. The only projects mentioned are Machado Lake and Dominguez Channel TMDLs. There are other TMDLs in place in the vicinity such as Los Angeles River TMDL, Colorado Lagoon TMDL, etc. that are not discussed and analyzed. In terms of project cumulative impacts, only certain environmental impacts are addressed, and not others, such as biological resources (plant and animal life), GHGs, and human health risk. These areas will have significant cumulative impacts and need to be properly analyzed. Also, the areas discussed mention that due to mitigation measures being implemented there would be no significant long-term cumulative impacts from the project. There is no evidence that mitigation measures would reduce significant impacts to less than significant, and there are significant impacts to plant and animal life, air quality, climate change, traffic, etc. that cannot be mitigated.	Staff disagrees. The SED includes an analysis of both program level and examples of project level cumulative impacts. Also implementation of the other upstream watershed TMDLs will result in an improvement to human health risk and biological resources in the long term. To the extent that there are significant adverse impacts to air quality and traffic, these impacts are short term. The other TMDLs within the watersheds have been included in the SED.
20.13		**5. The Statement Of Overriding Considerations Is** **Inadequate** The statement of overriding considerations is inaccurate	See response to **Comment 20.12 and 20.13**.

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		and inadequate. It states that the benefits of the project outweigh the unavoidable adverse environmental effects, but it does not specify what the unavoidable adverse environmental effects of the project are. Section 15126.2 (b) of the CEQA guidelines requires a discussion of the significant environmental impacts which cannot be avoided if the proposed project is implemented. There are significant impacts to plant and animal life, air quality, climate change, traffic, etc. that cannot be mitigated. Without a proper discussion on these unavoidable environmental impacts, it is difficult to determine whether a statement of overriding considerations sufficiently discusses how the benefits of the project outweigh the unavoidable environmental impacts of the project. Consequently, the SED also states that there area variety of alternative implementation measures and mitigation measures that would reduce environmental impacts to less than significant. This is not true because many of the mitigation measures identified are not feasible, and further, there was no evidence to support the determinations that the mitigation measures would reduce impacts to less than significant. The statement of overriding considerations needs to be revised to provide the public and decision makers a clear picture of the unavoidable significant environmental impacts, and a sufficient justification on why the benefits of the project outweigh the negative environmental impacts of the project. Until this can be clearly described, the statement of overriding considerations is inadequate and the document fails to comply with CEQA.	
20.14		**6. The SED Is Inadequate As An Informative Document Under CEQA And Meaningful Public**	Staff disagrees. Adverse impacts, alternatives, and mitigation measures were properly analyzed in the SED. See response

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		Review And Comment Could Not Be Performed The SED does not adequately address the environmental impacts of the Project. The SED does not meet the objectives of CEQA which are to: a. Disclose to the decision-making body and the public the potential environmental impacts of proposed activities. b. Propose feasible alternatives or mitigation measures that avoid, eliminate, or reduce project-related environmental effects. c. Describe the analytical process which led to the public agency's decision on the project. The CEQA analysis does not meaningfully analyze the potential impacts of the implementation alternatives, nor does it provide any explanation of how proposed mitigation measures will lessen significant environmental impacts. It does not provide the necessary information and analysis to enable decision makers, other regulatory agencies, and the public to understand the significant environmental impacts of the project. The document deficiencies should be corrected and a revised SED should be re-circulated for public review to provide a complete discussion of the environmental issues at stake.	to **Comments 20.8-20.13**. In addition, a CEQA scoping meeting, along with numerous other public meetings, was held with responsible municipalities and other stakeholders including with both Ports.
20.15		**D. The Board Has Failed To Adequately Consider Water Code Sections 13000 And 13241** Water Code section 13000 mandates that the Board's regulations must be "reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." Water Code section 13241	See response to **Comment 1.5**. In addition, for costs, see response to **Comment 23.9.**

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		requires the Board to consider a number of factors when adopting its regulations, including economic considerations and the need for developing housing in the region. In the Tentative Resolution to the TMDL, the Board has stated its belief that the standards set forth in section 13241 do not apply to the TMDL because the TMDL does not "establish" Water Quality Objectives (WQOs) but only "implements" those that have already existed. (Tentative Resolution at ¶¶ 5, 6.) This argument is the same one that was most recently made by the State Board in ***San Joaquin River Exchange Contractors Water Authority v. State Water Resources Control Bd.,*** 183 Cal.App.4th 1110, 1119-1120 (2010). In that case, however, the Court of Appeals once again failed to hold that section 13241 would not apply to a TMDL. Though the Court of Appeals in ***San Joaquin River Exchange*** noted that the distinction made by the State Board did have merit, it ultimately stated that it did not want to be accused of "splitting hairs" by distinguishing between WQOs that "established" water quality objectives and TMDLs that "implemented" them. ***(Id.*** at 1119.) Thus, instead of deciding the issue, the court instead found that the TMDL in question did consider the economic factors in section 13241 through a detailed analysis of each of the provision's requirements, including all of the economic considerations. *(Id.* at 1119-21.) This has been the same position other California courts, including the Supreme Court, have taken when considering whether section 13241 applies to TMDLs. ***City of Arcadia v. State Water Resources Control Bd.,*** 135 Cal.App.4th 1392, 1415 (2006) (refusing to accept State Board's argument that section 13241 did not apply to TMDL, instead siding with State Board because TMDL did comply with section	

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		13241's requirements); ***City of Burbank v. State Water Resources Control Bd.,*** *35* Cal.4th 613, 625 (2006) (holding that TMDLs complied with section 13241). Thus, it would seem that the best course of action for the Board regarding this as-yet undecided issue would be to consider the factors in section 13241 in implementing the TMDL, as all the previous court cases that have addressed the issue have done. In considering the cost factors required by that statutory provision, the Board should recognize that the TMDL constitutes a significant financial burden for the Port. As shown by the cost estimation study, Attachments 9C and 11C, the actual cost of implementation may be significantly higher than the Board's estimates. In short, the estimates to comply with the TMDL as written in the harbor area alone are as high as $10 billion. Furthermore, with the proposed TMDL there are broad economic, social, and environmental impacts on the community that the Board has thus far failed to consider. Prior to adopting the TMDL, the Board should conduct a full economic analysis.	
20.16		**E. The TMDL Amounts To An Unfunded Mandate** By imposing this new regulatory requirement, the State and Regional Boards are attempting to impose new programs and/or require a higher level of service of existing programs than are specifically mandated under the Clean Water Act or any federal regulations thereunder. The imposition of unfunded programs and mandates in the TMDL is inconsistent with the provisions of the California Constitution, specifically Article XIII B, Section 6, which requires a state agency which mandates a new program or a higher level of service to provide a "subvention" of funds to reimburse local governments for the costs of the program or increased level of service.	The Regional Board staff does not agree that the TMDL provisions contain unfunded state mandates, as that term is used in the California Constitution. This claim is not a proper comment to the Regional Board. Nevertheless, if the commenter believes the TMDL, when implemented, would constitute an unfunded mandate, the commenter is free to file a test claim for subvention before the Commission on State Mandates, which has exclusive jurisdiction over unfunded mandate issues. In any event, the claim is not valid for a variety of reasons. First, the TMDL is compelled by federal law and as such is

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		The TMDL does not fully consider the fiscal impact on the Port, especially considering the fiscal difficulties imposed on the Port by the current economic climate. The TMDL will require a substantial capital investment in a non-revenue-generating project at a scale that is above and beyond any previous capital investment, that individual agencies will have to fund despite the fact that the state will provide no funding mechanism nor any assistance, financial or otherwise, to the Port. According to the Regional Board's estimates, the TMDL will cost the Port and other regulated entities upwards of $9 billion for sediment remediation in greater San Pedro Bay and $500 million to $1.5 billion to treat stormwater in the two ports over the next 10 years. (Attachments 9C and 11C.) Article XIII B, Section 6 of the Constitution prevents the state from shifting the cost of government from itself to local agencies without providing a "subvention of funds to reimburse that local government for the costs of the program or increased level of service . . ." State agencies are not free to shift state costs to local agencies without providing funding, even if those costs were imposed upon the state by the federal government. If the state chooses to impose costs upon a local agency as a means of implementing a federal program, then those costs should be reimbursed by the state agency. ***Hayes v. Commission on State Mandates*** (1992) 11 Cal.App.4th 1564, 15931594. If the state refuses to appropriate money to reimburse a city, the enforcement of the state mandate can potentially be enjoined by a court. ***Lucia Mar Unified School District v. Honig*** (1988) 44 Cal.3d 830, 833-834. The TMDL contains new programs and mandates that go beyond the specific requirements of either the Clean Water Act or EPA's regulations implementing the Clean Water	not an unfunded state mandate, but a federal mandate. The requirement that states develop TMDLs for impaired waters is clearly set forth at 33 U.S.C. 1313(d)-(e). Second, the TMDL requirements are not exclusive to municipalities, but apply with an even hand to all responsible parties, municipal and private alike. As a result, the TMDL is generally applicable and not subject to subvention requirements in Article XIII. Third, the affected responsible parties have sufficient time to conduct planning and implementation activities, and to explore and select any necessary funding options, including loans, grants and revenue increases. The availability of such funding mechanisms precludes a claim for subvention. In addition, for costs, see response to **Comment 23.9.**

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		Act. This includes, but is not limited to, the development of massive public works projects such as dredging, sampling, testing, etc. If the state wishes to impose this program, it needs to provide a means to pay for its implementation. Furthermore, the TMDL contains numerous data collection requirements. These activities go beyond the requirements of EPA's regulations implementing the Clean Water Act. Any information collection demands mandated by federal regulations must be submitted for approval to the Office of Management and Budget under the provisions of the Paperwork Reduction Act. 44 U.S.C. §§3501 *et seq.* Implementing the programs outlined in the TMDL would require the ports to collectively hire dozens of additional employees to implement these mandates. The Port does not believe that these additional burdens were contemplated by EPA, nor are they consistent with the requirements of the federal Paperwork Reduction Act. 44 U.S.C. §3507. Accordingly, these requirements are invalid for failure to comply with the Paperwork Reduction Act, the Clean Water Act, its implementing regulations, and the California Constitution. Finally, it is not sufficiently clear from the TMDL documents and from subsequent comments made by Regional Board staff (RWQCB meeting related to the TMDL held February 7, 2011), which entities will ultimately be responsible for the implementation of remediation activities to achieve compliance in the harbor sediments. The impairments are the result of historic inputs into the harbor sediments from activities in the harbor and from activities upstream, throughout the watershed, that have resulted in contaminants being transported to the harbor and deposited in the sediments. Therefore, the ports are not solely responsible for the impairments and therefore should not be held solely	See response to **Comment 19.8.**

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		responsible for remediating the sediments to address those impairments. The TMDL should clearly identify that all parties that have contributed to historical inputs into the watershed are responsible for their fair share of the compliance actions.	
21.	City of Los Angeles		
21.1		1. WET WEATHER FRESHWATER METALS TARGETS, ALLOCATIONS, AND THE MARGIN OF SAFETY FOR THE DOMINGUEZ CHANNEL SHOULD BE REVISED TO BE CONSISTENT WITH THE INTENT OF THE CALIFORNIA TOXICS RULE AND USEPA'S TRANSLATOR GUIDANCE <u>Targets and Allocations</u> The California Toxics Rule (CTR) establishes hardness adjusted dissolved criteria for copper, lead, and zinc. By selecting a singular hardness and using the total fraction to establish a TMDL target, the waterbody could meet the dissolved CTR criteria (i.e., the protective condition) but not meet the TMDL targets and corresponding allocations. As the goal of the TMDL is to meet the criteria protective of the corresponding beneficial use (i.e., the CTR criteria), the TMDL target should be set as the dissolved hardness dependent equation rather than a singular total target. The need to set allocations based on total metals is understood; however, it would be more appropriate to convert the dissolved targets into total allocations within either the linkage analysis or allocations sections of the TMDL. <u>Margin of Safety</u> The Dominguez Channel freshwater allocations include a 10% explicit margin of safety (MOS) to account for uncertainty in the wet-weather TMDLs (e.g., flow conditions and the use of a site-specific translator). The use of a flow	The tentative BPA includes the CTR dissolved metals concentration as numeric targets for the protection of the aquatic life (tentative BPA, page 3). The U.S. EPA Metals Translator Guidance is used to calculate site specific translators and associated total metals concentration based on available paired dissolved and total metals data. Total recoverable metals are provided in the same section which are used to calculate the WLAs and implemented as permit limit as required in the CFR (40CFR 122.45 (c)) Regional Board staff acknowledge that the 95th percentile or other extreme percentile of f_D (e.g., 90th percentile) may be used as an alternative method of including a MOS in TMDLs or WLAs. However, the observed dissolved-to-total metals ratios are not similar to CTR default conversion values, there appears to be very poor correlation between the fraction of particulate metals and TSS and added uncertainty regarding stream flow rates during wet weather conditions, when the highest metal loads occur, thus an explicit margin of safety is justified.

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		duration curve approach to establish the loading capacity based on CTR TMDL targets removes uncertainty related to setting allocations to attain the protective condition since the numeric target has to be met instream to meet the loading capacity and allocations. Establishing an explicit MOS therefore results in requiring responsible parties to discharge well below the CTR criteria. As the CTR criteria were established at levels that are protective of beneficial uses, the additional MOS implies that the CTR criteria were not established appropriately. In terms of the use of site-specific conversion factors resulting in uncertainty, the TMDL follows the USEPA's 1996 Metals Translator Guidance and California's State Implementation Plan (SIP) procedures for calculating translators. Further, the TMDL uses 29 data points for calculation of the conversation factors exceeding the minimum requirements (see page 15 of the 1996 Metals Translator Guidance). Additionally, per the SIP, the TMDL uses the 90th percentile value to calculate site-specific conversation factors to result in a conservative estimate. The 1996 Translator Guidance (page 15) suggests that an extreme percentile (e.g., 90^{th} percentile) of the dissolved metals fraction (fo) may be used as an **alternative** method of including a MOS in TMDLs or WLAs. Therefore, the current application of an explicit 10% MOS is inconsistent with the intent of the California Toxics Rule and USEPA's Translator Guidance by: 1) double applying an MOS by using the 90^{th} percentile fD in addition to an explicit 10% MOS and 2) establishing a MOS on the CTR criteria which were established at levels that are protective of beneficial uses. Additionally, there is precedent for not including an explicit MOS for metals in the Los Angeles region: The Los Angeles River Metals TMDL utilized a load	

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		duration curve approach to set allocations (including the use of site-specific translators) and specifically stated that an explicit MOS was not needed. *Requested Actions: Please make the following changes to ensure the TMDL is consistent with the CTR and applicable USEPA guidance: 1) revise the Dominguez Channel freshwater metals targets and allocations to be set equal to the CTR dissolved metals hardness based equations and 2) remove the 10% MOS. Alternatively, add language to the allocations section stating that "Compliance with the freshwater metals allocations may be demonstrated via the following means: a) final allocations are met, b) CTR dissolved criteria are met instream, or. c) CTR dissolved criteria are met at the point of discharge."*	The Basin Plan Amendment has been clarified to include these compliance options. Compliance with the freshwater metals allocations may be demonstrated via three different means: a. Final allocations are met. b. CTR total metal criteria are met instream. c. CTR total metal criteria are met at the point of discharge.
21.2		2. ADDITIONAL CLARIFICATION IS NEEDED FOR TERMINAL ISLAND WATER RECLAMATION PLANT (TIWRP) TREATMENT PROCESSES, FLOWS AND ALLOCATIONS A number of concerns related to the way in which TIWRP is addressed in the TMDL have been identified 1. The TMDL Staff Report states: "The Terminal Island Treatment Plant discharges secondary treated effluent to the Outer Harbor and this POTW is under a time schedule order to eliminate their discharge into surface waters." However, the TIWRP is a tertiary treatment plant that is not under a time schedule order to eliminate their discharge. This language should be corrected. 2. The final sediment allocations for the TIWRP are based on one year of flow data (15.9 MGD) rather than the design capacity for the plant (30 MGD). TMDLs	Comment noted. The Staff Report is revised accordingly Design capacity can be used to calculate WLAs when actual flow data are not available. Final sediment allocations for TIWRP are based on available flow data which provide

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		developed in Region 4 have consistently utilized design flow rates to calculate allocations for WRPs (i.e., the LA River Metals TMDL). The design flow rate should be used to calculate final allocations for TIWRP. 3. The sediment allocations were calculated in a manner that is inconsistent with the other discharges to the Harbor. As a result, the waste load allocations are not representative of the effluent limits that should be applied to the WRP to achieve the necessary concentrations in the sediment. Following is a more detailed discussion of this issue. [See City of Los Angeles comment letter for detailed discussion] *Requested Actions: Revise inaccurate information related to the TIWRP's treatment facilities and remove reference to a time schedule order that is not in place.* *Add the following clarifying language prior to the mass-based allocation tables "The mass-based sediment allocations indicate the allowable settleable load to bed sediments from each source. These allocations do not represent discharge limits." Additionally, incorporate the aforementioned approach to determining TIWRP effluent limits into the allocations section of the BPA so that NPDES permit writers can clearly and appropriately incorporate the intended Waste Load Allocations into the TIWRP permit.*	higher level of confidence and reduce uncertainty. The draft Staff report and the tentative BPA are revised as follows: "The Terminal Island Treatment Plant discharges ~~secondary~~ tertiary treated effluent to the Outer Harbor and this POTW is ~~under a time schedule order~~ in the process of eliminating their discharge into surface waters." Comment noted. At this point, there is no special study or site-specific deposition rate available for calculation of sediment WLAs for TIWRP discharge. The proposed WLAs are currently calculated based on the CTR multiplied by annual average flow rate.
21.3		3. ADDITIONAL CLARIFICATION IS NEEDED RELATED TO THE FINAL MASS-BASED SEDIMENT ALLOCATIONS There are three components of the final mass-based sediment allocations that require clarification to support implementation of the TMDL: 1. Identifying the appropriate assessment point for the mass-based allocations	

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		2. Defining an averaging period consistent with the assumptions inherent in the allocation approach 3. Including means of compliance consistent with the intent of the TMDL <u>1. Assessment Point for Mass-Based Allocations</u> The final mass-based sediment TMDLs for metals, PAHs, total DDT and total PCBs represent the mass of an individual pollutant that could be deposited in bed sediment and meet the calculated loading capacity. However, there is no language in the BPA or TMDL Staff Report that clearly indicates the mass-based allocations are assigned to what is deposited. Rather, the BPA on page 16 states "Compliance with mass-based WLAs shall be measured at designated discharge points." The BPA should clearly indicate that the WLAs (including WLAs for TIWRP) apply to what settles on the bed sediment and does not directly correspond to an allowable effluent concentration. Basing compliance with mass-based WLAs at designated discharge points is not only contradictory to the allocations, which are based on an acceptable bed sediment condition rather than a discharge condition, but also causes dischargers to reduce loadings well below a level that would cause or contribute to an impairment. <u>2. Averaging Period</u> Establishing the mass-based WLAs as annual limits does not account for the number of years it would take for sediments assigned allocations to affect the active sediment layer the TMDL is intended to address (i.e., the top 5 centimeters [cm] of sediment). Based on the information provided in the TMDL it would take between three (3) and 900 years for sediments to accumulate to a depth equivalent to the active layer (5 cm) (see the table below). The slow rate of deposition requires the use of a more appropriate averaging period.	1. The exact method of including the WLA into the NPDES permits is not determined by this TMDL, but will be based on the administrative record for the permit at the time. The final WLA must be met at the end of the implementation schedule; staff anticipates several iterations of the discharger permits during the TMDL implementation period. The assigned mass-based sediment WLAs were developed based on hydrodynamic modeling of the amount of sediment deposited. The allocations for MS4 permittees and aerial deposition represent the allowable settleable load; however, the WLAs for TIWRP represent the allowable mass that may be discharged in effluent. Appropriate special studies to analyze applicable deposition rates will be necessary to refine the assigned mass-based sediment WLAs for TIWRP. 2. The WLAs are selected to protect sediment dependent biota – aquatic life. Consideration of the number of years for sediment accumulation to maximum 5cm of active sediment layer in establishing averaging period for sediment WLAs is not appropriate or protective for aquatic life. The assigned WLAs are set as annual limits due to long term effect of pollutants in sediment to which aquatic life can be exposed and sufficient time to see changes in sediment

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<tr><th>No.</th><th>Author</th><th>Comment</th><th>Response</th></tr>
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<tr><th>Waterbody Name</th><th>Area (acres)</th><th>Total Deposition (kg/yr)</th><th>Depth of Deposition (centimeter</th><th>Years to Accumula te 5</th></tr>
<tr><td>Dominguez</td><td>140</td><td>2,470,20</td><td>0.283</td><td>17.7</td></tr>
<tr><td>Consolidated Slip</td><td>36</td><td>355,560</td><td>0.157</td><td>31.8</td></tr>
<tr><td>Inner Harbor -</td><td>1,539</td><td>1,580,80</td><td>0.015</td><td>322</td></tr>
<tr><td>Inner Harbor -</td><td>1,464</td><td>674,604</td><td>0.007</td><td>719</td></tr>
<tr><td>Outer Harbor -</td><td>1,454</td><td>572,349</td><td>0.006</td><td>782</td></tr>
<tr><td>Outer Harbor -</td><td>2,588</td><td>1,828,40</td><td>0.011</td><td>436</td></tr>
<tr><td>Fish Harbor</td><td>91</td><td>30,593</td><td>0.006</td><td>850</td></tr>
<tr><td>Cabrillo Marina</td><td>77</td><td>38,859</td><td>0.009</td><td>557</td></tr>
<tr><td>San Pedro Bay</td><td>8,173</td><td>19,056,2</td><td>0.037</td><td>136</td></tr>
<tr><td>Los Angeles River</td><td>207</td><td>21,610,2</td><td>1.540</td><td>3.24</td></tr>
<tr><td>Cabrillo Beach</td><td>82</td><td>27,089</td><td>0.005</td><td>913</td></tr>
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<u>3. Means of Demonstrating Compliance</u>
For demonstrating compliance with direct effects allocations, the BPA states (page 16):

Compliance with these sediment TMDLs for Cu, Pb, Zn, and total PAHs may be demonstrated via two different means:

a. Final sediment allocations, as presented above, are met.
*b. The qualitative sediment condition of **Unimpacted** or Likely **Unimpacted** via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met.*

For demonstrating compliance with indirect effects (i.e., bioaccumulative) allocations, the BPA states (page 19):
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quality. It is reasonable to evaluate discharges and improvements in water quality over a longer time period. Regional Board staff has incorporated a 3-year averaging period into the TMDL WLAs. The 3-year averaging period appropriately protects the beneficial uses of the Dominguez Channel and Harbors over longer periods. The 3-year averaging period also acknowledges that implementation strategies will focus on sediment reduction, and that the levels of contaminants in sediment originating in the watershed may vary over time and space.

3. The goal of this TMDL is to protect and restore fish tissue, water and sediment quality. Regional Board staff agrees that the goal of the TMDL is to meet the TMDL targets. Therefore sediment numeric target can be considered as third option of compliance with direct effects allocation for sediment.

The draft Staff report and the tentative BPA are revised as follows:
Compliance with these sediment TMDLs for Cu, Pb, Zn, <u>Cd, Cr, Hg</u> and total PAHs may be demonstrated via any <u>one of three</u> <s>two</s> different means:

a. Final sediment allocations, as presented above, are met.
b. The qualitative sediment condition of **Unimpacted** or **Likely Unimpacted** via the interpretation and integration of multiple lines of evidence as defined in
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		Compliance with these bioaccumulative TMDLs may be demonstrated via two different means: *a. Fish tissue targets are met.* *b. Final sediment allocations, as presented above, are met.* However, the goal of the TMDL is to meet the TMDL targets. As such, an additional means of compliance should be allowed based on discharges meeting the TMDL targets (which are not the same as the allocations). Additionally, attainment of the fish tissue targets should be linked to meeting fish tissue targets in species resident to the TMDL waterbody. The nearby Palos Verdes Shelf Superfund Site is an area contaminated by DDT and PCBs. USEPA's September 2009 Interim Record of Decision for the Palos Verdes Shelf Superfund Site is based on allowable levels of DDT and PCBs in sediment and tissue that are orders of magnitude higher than what is proposed in the Harbors TMDLs. Pollutant levels in transient fish that are sampled within the TMDL waterbodies may have little to no relationship to the level of pollutants in sediments in the TMDL waterbodies themselves. The findings in the Staff Report for Cabrillo Marina (Pg. 40) and Cabrillo Beach (Pg. 41) are an example of the importance of considering resident species and/or the foraging range of such species. The staff report states "sediment results did not show elevated levels of metals or other organic compounds" yet there is a fish consumption advisory in place for DDT and PCBs in certain fish species. Therefore, focusing compliance on resident species is important given that non-resident species can bioaccumulate pollutants in waterbodies not addressed by the TMDL. While elevated fish tissue levels would still likely	the SQO Part 1, is met, with the exception of Cr, which is not included in the SQO Part 1. *c.* Sediment numeric targets are met in bed sediments over a three-year averaging period The draft Staff report and the tentative BPA are revised as follows: Compliance with these bioaccumulative TMDLs may be demonstrated via either of two different means: a. Fish tissue targets are met in species resident to the TMDL waterbodies[3]. b. Final sediment allocations, as presented above, are met.

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		need to be addressed by the State, implementation measures are only effective if they are directed at the source of exposure. *Requested Action: Incorporation of the following requested clarifications would help guide responsible parties as they design and implement* BMPs *to meet the protective conditions and ensure compliance with the TMDL:* ▪ *Add the following clarifying language prior to the mass-based allocation tables "The mass-based sediment allocations indicate the allowable settleable load to bed sediments from each source. These allocations do not represent discharge limits."* ▪ In *the alternative means to demonstrate compliance following both the direct and indirect effects allocations tables two additional means for demonstrating compliance should be included:* *-TMDL sediment targets are met in the TMDL waterbody* *-Discharge concentrations meet the TMDL sediment targets on a five year averaging period in all waterbodies except for the Los Angeles River Estuary where the averaging period would be set at three years. The suggested averaging period is consistent with the approach used to develop the averaging period in the Machado Lake Toxics TMDL* ▪ *In the alternative means to demonstrate compliance for indirect effects, add the following underlined language "Fish tissue targets are met in species resident to the TMDL waterbodies."* ▪ *For the TIWRP WLAs, incorporate the approach in Comment #4 to develop appropriate effluent limits for inclusion in the NDPES permit.*	For TIWRP, see **Comment 21.4**, below.

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21.4		4. INTERIM ALLOCATIONS FOR METALS IN THE DOMINGUEZ CHANNEL SHOULD BE REVISED TO BE CONSISTENT WITH CURRENT CONDITIONS The TMDL establishes interim concentration-based allocations for freshwater metals in the Dominguez Channel that are effective on the effective date of the TMDL. Per discussions with Regional Board staff, the intent of the interim allocations is to ensure that conditions do not get worse prior to attaining final allocations. The Bureau is committed to improving water quality and meeting the end goals of the TMDL. However, the calculation approach results in interim allocations that potentially will subject responsible parties to permit violations even if existing conditions are maintained. As discussed below, the Bureau is recommending potential solutions that address the concern of permit violations while maintaining the Regional Board's goal of maintaining or improving the existing water quality. <u>Interim Allocation Application</u> Interim allocations are established to ensure that water quality does not get worse during the implementation period. In setting the interim allocations, the BPA states that permitted dischargers shall ensure that concentrations do not exceed levels that can be attained by performance of the facility's treatment technologies. Although this approach is consistent with NPDBS permitting methodology for wastewater treatment plants (WTPs), it is not consistent with stormwater permitting methodology. WTPs have treatment technologies that are in place and are operated to maintain a certain level of performance. Because WTPs are actual facilities, a 95$^{`i'}$ percentile value can be used to ensure facilities continue to operate in a manner consistent with previous performance (i.e., if a WTP violated an interim allocation, plant operations could be modified to return to previous levels of	Interim WLAs are established and are intended to not allow any decrease in current performance (BPA, page 9) with or without treatment. Interim WLAs for freshwater metals in Dominguez Channel are now recalculated based on all data collected from January 2006 to January 2010 including the two outliers and additional data collected in 2007.

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		performance), However, MS4 dischargers do not have treatment technologies in place within the watershed upon which to base "current" performance. As such, from a practical perspective, if responsible parties exceed the interim limits on the effective date of the TMDL, they will not be able to do anything more than continue to develop their implementation plans per the schedule since the responsible parties do not yet have treatment in place. Interim Allocation Calculation The interim allocations are established using the 95`x' percentile values of existing data. The use of the 95`h percentile value essentially guarantees the exceedance of an interim allocation as there is a 5% probability that samples will exceed the interim allocations. Thus, if the goal of interim allocations is to "keep things from getting worse," use of a 95`1' percentile will periodically subject responsible parties to permit violations even if existing conditions are maintained. Additionally, the interim allocations exclude data from the calculations without providing justification, thereby lowering the interim allocations. Per discussions with Regional Board staff, the data were excluded in order to ensure the interim limits were meaningful. However, in reviewing the two data points that were excluded (December 2006 and April 2007), the total suspended solids (TSS) data on those days do not suggest unusually high TSS may have caused the high metals results. These data therefore are representative of existing conditions in the watershed. As those data points were excluded from the calculation of the interim allocations,, if a future sample was at the same concentration, the discharger would be out of compliance with the interim allocation, Suggested Solutions	

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		TMDL development guidance documents, including USEPA's 2000 Guidance for Developing TMDLs in. California, do not require the inclusion of interim allocations. As such, if the Regional Board chooses to establish interim allocations, the Regional Board has considerable discretion on the approach and timing for the establishment of such interim allocations. The following provide suggested solutions to address the issues identified above that we feel would address the goals of the Regional Board and are consistent with cur[r]ent conditions: 1. Set the interim limits equal to the maximum observed values of all data (including the cur[r]ently censored data), or 2. Calculate the interim limits using the currently censored data, or 3. Exclude all future data considered outliers determined in a manner consistent with the currently censored data when determining compliance with the interim allocations, or 4 Compare annual median values of samples to the interim limits to determine compliance rather than comparing a single sample to the interim limits. *Requested Action: Incorporate one of the aforementioned suggestions into the TMDL and include language indicating that the means to demonstrate attainment of interim allocations is consistent with the means to demonstrate attainment of final allocations.*	
21.5		5. ESTABLISHMENT OF INTERIM ALLOCATIONS FOR SEDIMENT SHOULD BE DELAYED AND, IF NECESSARY, EITHER ESTABLISHED AFTER STRESSOR IDENTIFICATION IS COMPLETED AND/OR	

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		IMPLEMENTATION PLANS HAVE BEEN COMPLETED The TMDL establishes interim concentration-based allocations for metals and organics in sediment that are effective on the effective date of the TMDL. Per discussions with Regional Board staff, the intent of the interim allocations is to ensure that conditions do not get worse until final allocations are required to be achieved. As discussed in the previous comment, although the calculation approach is consistent with NPDES permitting methodology for wastewater treatment plants (WTPs), it is not feasible or appropriate for regulating bed sediments. For these reasons, we feel that the inclusion of interim sediment allocations is not appropriate at this time. Additionally, the Bureau feels that interim sediment allocations are being established for constituents that have not yet been demonstrated to be causing beneficial use impairments and it is prudent to wait until further data are collected before establishing interim allocations. A number of studies have demonstrated that ERLs do not appropriately link sediment concentrations to effects on the benthic community and are orders of magnitude below toxicity thresholds for benthic organisms. While the interim sediment allocations are based on the 95‴ percentile of existing data, the impairments themselves, leading to the establishment of interim and final allocations for particular chemicals, have been established using the ERLs. Establishing interim allocations for impairments identified using the ERLs and not the State's adopted and USEPA approved sediment quality objectives may subject responsible parties to permit violations where no actual impairment exists and where causality has not been demonstrated. Existing data from the Outer Harbor supports the need for	The interim WLAs are based on the 95th percentile of current condition (with or without treatment of the discharges). As discussed in the previous response to comment, the established interim WLAs are intended to not allow any decrease in current condition of the discharges. Therefore, the interim WLAs should be met at the time the TMDL becomes effective. The draft Staff Report and the tentative Basin Plan Amendment are revised as follows: Language added to the BPA, after the Sediment, interim concentration-based allocations table: **Compliance with the interim concentration-based sediment allocations may be demonstrated via any one of three different means:** 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 SQO Part 1, is met; or 2. Meet the interim allocations in bed sediment over a three-year averaging period; or 3. Meet the interim allocations in the discharge over a three-year averaging period.

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		evaluating data using the applicable sediment quality objectives (the SQOs) and conducting stressor identification as individual chemicals are not exceeding the sediment guidelines. Page 40 of the Staff Report states: *"Sediment toxicity has been observed in 7 of 26 samples, including 3 of 7 moderately toxic samples in Bight 03. No individual contaminants were above sediment guidelines in more recent studies."* <u>Suggested Solutions</u> As discussed above, since TMDL guidance documents do not require the inclusion of interim allocations, if the Regional Board chooses to establish interim allocations, the Regional Board has considerable discretion on the approach and timing for the establishment of such interim allocations. The inclusion of interim sediment allocations at this time subjects responsible parties to permit violations for chemicals in sediment that may not be the cause of impairments. Based upon the recent memorandum from USEPA regarding the incorporation of WLAs into NPDES permits, it is reasonable to expect that the interim allocations could be included in responsible parties' permits as numeric effluent limits. However, Section VII.B of the State's sediment quality objectives require [emphasis added]: *Effluent limits established to protect or restore sediment quality shall be developed only after* *a. A clear relationship has been established linking the discharge to the degradation,* *b. The pollutants causing or contributing to the degradation have been identified, and* *c. Appropriate loading studies have been completed to estimate the reductions in pollutant loading that will restore sediment quality.*	

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		These actions are described further in Sections VHF and VII. G. Therefore, it is appropriate and consistent with the Phase I SQOs to delay the establishment of interim allocations until the requirements of Section VII.B of the Phase I SQOs are met. As the TMDL already includes a specific reopener to consider the results of the stressor identification and other applicable special studies, interim allocations could be established at that time. If. the Regional Board chooses to establish interim allocations at this time, the issue of potential permit violations of the interim allocations could be mitigated with the inclusion of language for permit writers that clearly identifies the intent of the interim allocations. The suggested language is as follows: "These interim allocations are established to ensure that conditions in receiving waters are not further degraded during the time period responsible parties are implementing actions to achieve the final allocations. Compliance with the interim allocations may be achieved via the following different means: 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 SQO Part 1, is met; or 2. Meet the interim allocations in bed sediment on a five year averaging period in all waterbodies, except for the Los Angeles River Estuary where the averaging period is three years; or 3. Discharge concentrations meet the interim allocations on a five year averaging period, except for	

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		the Los Angeles River Estuary where the averaging period is three years. *Requested Action: Remove interim sediment allocations and, if appropriate, establish interim allocations at the year six reopener either based on the results of stressor identification studies and/or the timeliness presented in the responsible parties implementation plans. If the Regional Board chooses to establish interim allocations at this time, incorporate the aforementioned suggestions into the TMDL and include language indicating that the means to demonstrate attainment of interim allocations is consistent with the means to demonstrate attainment of final allocations.*	
21.6		TOXICITY INTERIM AND FINAL ALLOCATIONS SHOULD BE REMOVED FROM THE BPA OR IMPLEMENTED AS TRIGGERS TO IDENTIFY THE TOXICANT Toxicity is an effect, not a pollutant. Therefore, inclusion of a toxicity target as a numeric value representative of the goal condition to ensure the waterbody is supporting beneficial uses is appropriate. However, it is not appropriate to then translate that value directly into an allocation as toxicity is an "effect" that does not represent an individual "pollutant" that can be controlled. For example, copper can cause toxicity and to address the effect (toxicity), copper (the pollutant) must be controlled. An appropriate approach to address toxicity can be found by looking at the approach utilized by the Regional Board and USEPA for TMDLs addressing algae. TMDLs to address algae impairments often set an algae target to be achieved, but the TMDL assigns allocations based on the	Regional Board staff agrees that effluent limits for specific toxicants can be established by the Regional Board to control toxicity identified under Toxicity Identification Evaluations as interim limits. The Staff Report and BPA are revised to clarify that the interim toxicity allocation shall be implemented as a trigger to prompt Toxicity Identification Evaluations. See response to **Comment 14.6.**

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		pollutant (i.e., total nitrogen and total phosphorus) that may need to be controlled to address the "effect" (e.g., algae). This cause and effect relationship is reflected in the Basin Plan. The narrative toxicity objective first defines what constitutes toxicity and then defines how it is to be controlled - by regulating the specific toxicants causing the toxic effect: "Effluent limits for specific toxicants can be established by the Regional Board to control toxicity identified under Toxicity Identification Evaluations (TIEs)." Given that a TUc target 1) cannot be divided amongst responsible parties as allocations, 2) numeric allocations are set for individual pollutants believed to be causing toxicity within the TMDL watersheds, and 3) future monitoring will require the identification of the causes of toxicity, the TUc interim and *final* allocations should be removed from the BPA. Alternatively, the interim and final TUc allocations could clearly state that the allocations are established as triggers consistent with NPDES permitting practice within the region and State at the time of permit issuance, reissuance, or revision. It is important that these changes occur within the allocations section of the TMDL because NPDES permit writers must write permits consistent with the assumptions presented in the allocations section. *Requested Action: Remove the interim and final toxicity allocations, or alternatively, explicitly state within the allocations section of the BPA that the allocations are to be incorporated into permits consistent with. NPDES permitting practices within the region and State at the time of permit issuance, reissuance, or revision and at the time of TMDL adoption the practice is to implement* ***these*** *allocations as a trigger.*	

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21.7		RESPONSIBLE PARTIES TO THE DOMINGUEZ CHANNEL ESTUARY BED SEDIMENTS On pages 13 and 16 the BPA states: "The bed sediment LA is assigned to the City of Los-Angeles (including the Port of Los Angeles), the City of Long Beach (including the Port of Long Beach) and the State Lands Commission." However, on page 27, the BPA states: "The Los Angeles County Flood Control District (District) owns and operates Dominguez Channel; therefore, the District and the cities that discharge to Dominguez Channel shall each be responsible for conducting implementation actions to address contaminated sediments in Dominguez Channel." On page 28 of the BPA, sediment reductions within the Ports are assigned to the cities of LA and Long Beach and it is assumed they are assigned the responsibilities as the owner operators. In the recently adopted Machado Lake Toxics TMDL, the City of LA was assigned the bed sediment allocations as the owner operator of the lake. For consistency with this TMDL and previously adopted TMDLs, the bed sediment allocations and associated implementation actions in the Dominguez Channel should be assigned only to the Los Angeles County Flood Control District. Furthermore, the Flood Control District collects fees to maintain the channel from the surrounding cities and has responsibilities for all activities that occur within the channel. *Requested Action: For consistency with previously adopted TMDLs and consistency within this TMDL, please revise the allocations and implementation sections to assign the bed sediment load allocations and corresponding implementation actions for the Dominguez Channel and Estuary to the Los Angeles County Flood Control District.*	The Staff Report and Basin Plan Amendment have been revised to clarify the responsible parties for the different waterbodies. See the revised tentative Basin Plan Amendment Implementation Plan No. 6. (page 31 in tentative Basin Plan Amendment).

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21.8		8. THE MONTROSE SUPERFUND SITE NEEDS TO BE APPROPRIATELY CONSIDERED PERTAINING TO RESPONSIBILITY FOR REMEDIATION AND TIMEFRAME FOR IMPLEMENTATION ACTIVITIES ' There are two Superfund sites located within Dominguez Channel Watershed: the Montrose Superfund Site and the Del Amo Superfund Site. A final remedial decision with respect to certain of the Montrose Superfund Site Operable Units (OUs) that remain contaminated with DDT has not been established. The TMDL responsible parties are required to consult with US EPA's Superfund Division in advance of taking actions to remediate bed sediment in the Dominguez Channel and Estuary. However, it is unreasonable to require responsible parties to implement actions to remediate contaminated sediments that are the responsibility of a Superfund site. Further, remedial activities could not occur prior to USEPA making a final remedial decision. The Dominguez Channel Watershed load allocation responsible parties have no control over the USEPA's timeframe for making a final remedial decision for the Montrose Superfund Site. As such, the timeframe for the load allocation responsible parties within Dominguez Channel Watershed to meet the TMDL should be directly tied to USEPA's decision making process. *Requested Action: Revise the BPA to acknowledge 1) that cleanup of contaminated sediments associated with the Montrose Superfund Site are not required of the load allocation responsible parties and 2) to the extent that the cleanup is necessary to meet the 11254 responsibilities, such actions are not expected prior to the adoption and implementation of a final remedial decision for the Montrose Superfund Site.*	The TMDL does appropriately consider the Superfund sites in the Dominguez Channel watershed. We remind commenter that primarily one pollutant, DDT, is associated with the Superfund site and also addressed by the TMDL. The TMDL addresses numerous pollutants and utilizes a different process than Superfund. The other pollutants – heavy metals, PAHs, PCBs and other legacy pesticides are not within Superfund's focus at the Montrose OU2 Site – the stormwater pathway including Torrance Lateral, Dominguez Channel Estuary and Consolidated Slip. The fact that other pollutants and corresponding allocations for other pollutants exist within the TMDL makes it reasonable to require other responsible parties to participate in cleanup of those sediments. Superfund does not need to make a remedial decision prior to any potential entity or collective action (by City of LA and/or County of LA) on sediments within the OU2 pathway. Rather, as discussed in TMDL implementation plan, EPA Superfund must be consulted prior to any such remediation activity. The goal of consultation is to ensure the proposed sediment cleanup wouldn't aggravate the situation or further interfere with the OU2 site. In addition, a change sheet for the Basin Plan Amendment will be prepared with additional clarification on DDT monitoring and reconsideration of allocations.

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21.9		9. REQUIRING ATTAINMENT OF WASTE LOAD ALLOCATIONS AND LOAD ALLOCATIONS ON THE SAME SCHEDULE WILL RESULT IN DUPLICATIVE REMEDIATION ACTIVITIES As presented in the BPA, current discharges from watershed sources result in impairments to bed sediments. However, the TMDL schedule essentially requires responsible parties to concurrently implement watershed BMPs **and** conduct bed sediment cleanup activities. The implications of this requirement are that remediated bed sediments will be subject to recontamination. Recontamination will necessitate additional cleanup activities, which in effect, will require responsible parties to pay for clean up twice. This can be avoided by requiring cleanup of impaired areas that **are not** affected by watershed sources during the current implementation schedule (20 years) and require clean up of areas that **are** affected by watershed sources over the following 10 years. *Requested Action: Revise the Implementation Plan section and schedule of the BPA and Staff Report to acknowledge the issue with requiring cleanup before sources are addressed through BMPs and extend the implementation schedule for areas affected by watershed sources for 10 years following the completion of Phase III by WLA responsible parties.*	Actions to achieve WLA and LA may be implemented in phases with information from each phase being used to inform the implementation of the next phase. The implementation may be adjusted, as necessary, based on information gained during each phase to attain the assigned WLAs and LAs. The assigned WLAs and LAs can be attained at different times before the end of implementation period.
22	The Port of Los Angeles		
22.1		**1. The TMDL Uses Old Data And Neglects Recent Improvements In Water Quality.** The TMDL does not accurately summarize the current	TMDLs are based on monitoring results outlined in Table 2-8, which includes recent data from (not limited to): -Ports Biobaseline 2008

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		condition of the harbors as it was developed from inaccurate and outdated information. The Harbor has shown vast improvement in water quality in recent years, yet the inadequate weight was given to the most recent and reliable data. For instance, evaluating the most recent, relevant data per the SQO Part 1 methodology, the current harbor sediment condition is healthy with some isolated areas requiring more study (see SQO map in Attachment 1). In contrast, the TMDL relies on the outdated assessment method which looks at only a single line of evidence, ERLs.	-Ports Sediment survey 2006 -SCCWRP flux study 2006 -Ports enhanced water quality data 2005, 06, 08 -Bight 2003 -LA RWQCB SWAMP 2003 -EPA SuperFund 2002 Commenter provided DRAFT results from Bight 08, which includes sampling sites within Inner, Outer Harbor and San Pedro Bay. Staff notes only sediment toxicity Bight 08 results are final, while sediment chemistry and benthic community results are still draft. Staff has performed an assessment review using SQO Part 1 methodology to evaluate sediment quality conditions. Using station assessment results of Clearly Impacted, Likely Impacted and Possibly Impacted as not meeting the protective condition, there are sufficient exceedances within each waterbody to confirm impairment based on SQO Part 1. This SQO direct effects assessment information is summarized in the Staff Report and compiled in Appendix III. Staff acknowledges the Harbor has shown water quality improvements over the years; however, it has not yet attained the applicable water quality objectives, nor achieved the desired condition to support all beneficial uses. Once Bight 08 sediment triad results are final then those can be similarly evaluated and integrated with mentioned results above.
22.2		**2. Sediment Quality Objectives (SQOs) Rather Than NOAA's Effect Range Low Values (ERLs) Should Define Sediment Targets.**	See response to **Comment 20.1**

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		The establishment of appropriate targets is perhaps the most critical element of a TMDL. With respect to sediments, the TMDL uses a measure that was never intended for use in regulation and that has been abandoned by the State Water Resources Board. The author/developers of the ERLs admit that ERLs have insufficient predictive ability to be useful in setting remedial goals. Studies reveal that too often, ERL exceedances are observed without corresponding biological effects (false positive) or that concentrations below ERLs are observed in conjunction with a biological effect (false negative). ERL is not a threshold above which sediment impairment is likely. It is merely a concentration at the extreme low end of a continuum roughly relating bulk chemistry with toxicity. Any relationship between the exceedance of an ERL and a biological effect is coincidental, not necessarily causal. Categorizing sediments on the basis of whether individual chemical concentrations include one or more ERL exceedances leads to misperceptions of the actual probability that sediments are toxic. This is confirmed by data in the harbor, where sediment chemistry indicates numerous ERM and ERL exceedances but little or no corresponding toxicity or benthic effects are observed. Hence our concern that use of ERLs as a sediment target would lead to unnecessary and environmentally damaging dredging. The State Water Resources Control Board has abandoned the ERL and ERM approaches to sediment quality guidelines owing to their intrinsic unreliability and has opted instead for SQOs, an integrated assessment of concentration of selected chemicals, measured toxicity, and alterations in benthic organism assemblages for the evaluation of sediments quality. The SQO standard is set forth in the Water Quality Control Plan For Enclosed Bays and Estuaries - Part 1 Sediment Quality (SQO Part 1) adopted on August 25, 2009.	

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		The State Water Resources Control Board determined that the SQOs provided "scientifically-defensible sediment quality objectives for bays and estuaries, which can be consistently applied statewide to assess sediment quality, regulate waste discharges that can impact sediment quality, and provide the basis for appropriate remediation activities." SQOs were developed pursuant to Water Code sections 13240 through13247, which require, among other factors: consideration of past, present and probable future beneficial uses of estuarine and bay waters that can be impacted by toxic pollutants in sediments; environmental characteristics of waters; water quality conditions that can reasonably be achieved through the control of all factors affecting sediment quality; and economic considerations. SQOs were developed precisely because the legislature recognized the need to develop a better means of regulating sediment impairment in bays and estuaries. SQOs are more closely aligned with the goals of the TMDL and should replace ERLs as the sediment target value.	
22.3		**3. OEHHA's Advisory Tissue Levels (ATLs) Rather Than OEHHA's Fish Contaminant Goals' (FCGs) Should Define Sediment Goals And The TMDL Should Be Based On Site Specific Linkage Between Fish Tissue And Sediment Quality.** OEHHA's Advisory Tissue Levels (ATLs) provide a more appropriate basis than Fish Contaminant Goals (FCGs) because ATLs include the benefits of fish consumption (e.g., protection from cardiovascular disease, stroke, cognitive impairment, etc.) as an offset to the potentially harmful effects of contaminants. FCGs were not intended to be used as numeric targets and are considered overly conservative because they do not pose any greater health risk to people than the ATLs. In addition to selecting an overly conservative target for fish	See response to **Comment 20.3.**

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		tissue, the TMDL was developed without establishing the required site-specific linkage between the sediment and fish tissue targets. As a result, this TMDL bears no relationship to the fish tissue-related sediment cleanup targets set by the EPA for the Palos Verde shelf, which are 20 times higher than the numeric targets assigned to the harbor in this TMDL. If, as we suspect, the TMDL's assumption that contaminants observed in fish tissue are sourced in harbor sediments is wrong (i.e. the fish migrated and/or do not feed in the harbor), then dredging to achieve sediment compliance would not result in any fish tissue improvement.	
22.4		**4. The TMDL Uses A Flawed Model That Does Not Accurately Describe The Linkage Between Contaminant Sources And Water Body Impairments.** The TMDL does not provide the required, comprehensive, science-based assessment of the source of contaminants to the harbor impairments, and does not provide adequate analyses to link pollutant sources to the sediment impairments. The TMDL was thus derived without determining which specific watershed sources are contributing to harbor sediments and the source allocations are therefore arbitrary and inaccurate. By way of example, this is confirmed by the resulting negative allocations for sediments in the harbor, which contradicts the definition of an allocation (i.e., the portion of the pollutant you are allowed to discharge). A fair share of allocations would result in each input being controlled. As the TMDL is currently written, no effort is made to reduce air inputs, which the TMDL states are the largest.	See response to **Comment 20.4** for linkage. See response to **Comment 20.2**. Watershed sources were identified and quantified based on their associated land use. Allocations were provided for the various MS4 dischargers, associated with point source stormwater contributions. Allocations are required for the various permittees, but are not required as part of a TMDL for specific sources. This approach provides flexibility for the dischargers on implementation activities to achieve their allocations.
22.5		**5. TMDL Action Items Are Biased Toward Remedial Action.** The Port believes that the TMDL's action items show a bias toward remediation efforts within the harbor as opposed to	Detailed discussion of all sources that discharge to Dominguez Channel and Greater Los Angeles and Long Beach harbor waters and associated contaminant loading are provided in the Sources and Linkage Analysis Sections of the

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		the control of upstream dischargers. It is premature to consider dredging harbor sediments without an accurate understanding of the linkage between upstream discharges and their potentially adverse effects. Without this linkage, the Port would have to redredge the harbor repeatedly to manage ongoing contamination from upstream sources. Furthermore, if the TMDL is enforced as written, dredging or dredging then capping are the only implementation alternatives that could possibly achieve the sediment targets in the implementation time frame. However, sediment remediation programs will not be completed within the 20-year timeline due to the logistical constraints of construction programs in an active port. The areas requiring management will be identified and actions will be made to promote the remediation actions, but tenant relocation, alignment with port projects to accommodate the material being dredged, EIR/EIS approval, and permitting will ultimately dictate remediation schedules.	TMDL. Upstream sources in Dominguez Channel are assigned allocations to reduce loading to the channel and the harbors. Los Angeles River Watershed and San Gabriel River Watershed responsible agencies identified in metals TMDLs, which are already in effect, for Los Angeles River and San Gabriel River are responsible for conducting water and sediment monitoring above the Los Angeles River Estuary and at the mouth of the San Gabriel River, respectively, to determine the Rivers' contribution to the impairments in the Greater Harbor waters. Additional TMDLs to allocate contaminant loads between dischargers in the Los Angeles and San Gabriel Rivers watersheds may also be developed in the future, if necessary, to support the downstream TMDL. The phased implementation plan also allow responsible parties implementing *Prioritization Assessment for Contaminated Sediment Management* in Phase 1 to identify and prioritize sites to be managed by the Ports and coupled with Port projects when feasible. This process will prioritize management efforts on sites that have the greatest impact to the overall health of the benthic community and allow sites with lower risks to be addressed in later phases.
22.6		The SED Fails to Disclose the Significant Adverse Impacts Associated with Implementation of the TMDL CEQA requires that the SED serve as a disclosure document that analyzes the potential environmental impacts of the TMDL such that decision makers, other regulatory agencies and the public are informed in a meaningful way. The SED fails in this basic CEQA obligation as there is no salient analysis of the environmental impacts that allow for the determination that these significant unavoidable impacts are outweighed by the benefits. The TMDL and its implementation, according to the evidence	See response to **Comment 20.14**.

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		found in the SED and record generally, will likely have a significant physical adverse impact on the environment both temporarily and as an ongoing matter. These significant adverse impacts require further analysis and possible mitigation. *However,* there *is scant* discussion of any kind in the SED of the significant adverse environmental impacts of the TMDL.	
22.7		I. The TMDL / SED's Baseline is Inaccurate and Does Not Comply with CEQA In order to properly identify the environmental effects of implementing the TMDL CEQA requires that baseline conditions be established. The analysis must begin with a proper understanding of current environmental conditions: "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they *exist at the time the notice of preparation is published,* or if no notice of preparation is published, *at the time environmental analysis is commenced,* from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." *(Sunnyvale West Neighborhood Association v. City of Sunnyvale City Council,* (2010) 190 Cal. App.4th 12 (quoting CEQA Guidelines section 15125(a)). As extensively documented in the Port's technical comments on the TMDL, the chemistry relied upon to establish the baseline condition for the TMDL and the SED is obsolete and not reflective of existing conditions when environmental analysis began - which is improper under CEQA. In fact, vast improvements in water quality and sediment chemistry at the	The California Secretary of Resources has certified the State and Regional Boards' basin planning process as exempt from certain requirements of the California Environmental Quality Act (CEQA), including preparation of an initial study, negative declaration, and environmental impact report (California Code of Regulations, Title 14, Section 15251(g)). As the proposed amendment to the Basin Plan is part of the basin planning process, the environmental information developed for and included with the amendment is considered a substitute for an initial study, negative declaration, and/or environmental impact report. The current environment conditions are described in the Staff Report under Problem Statement and Environmental Setting sections. If existing conditions are better than the baseline plan conditions, WLAs and LAs would be more easily attained. Staff acknowledge the Ports have shown water quality improvements over the years; however, they have not yet attained the applicable water quality objectives, nor achieved the desired condition to support all beneficial uses throughout all the sediments. TMDLs are based on monitoring results outlined in Table 2-8, which includes recent data from (not limited to):

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		Port have been achieved which the data relied upon *in the* SED fails *to* reflect. Consequently, *as the Sunnyvale* decision makes clear, the SED's analysis of significant impacts is necessarily flawed under CEQA as the baseline does not represent the relevant conditions. The SED should use the most current data available and tailor its analysis to the actual environmental setting.	-Ports Biobaseline 2008 -Ports Sediment survey 2006 -SCCWRP flux study 2006 -Ports enhanced water quality data 2005, 06, 08 -Bight 2003 -LA RWQCB SWAMP 2003 -EPA SuperFund 2002
22.8		III. The SED Fails to Analyze the Feasibility of Its Implementation Methods. The SED's analysis of the TMDL must consider the feasibility of methods identified for achieving the objectives of protecting and restoring fish tissue and sediment quality in the watershed. The feasibility of methods of compliance set forth in the TMDL must be analyzed at specific sites as required by the California Code of Regulations (Title 23, Division 3, Chapter 27, Section 3777). Due to its lack of analysis, the SED fails to recognize the infeasibility, of the infiltration systems, vegetative swales, and low flow diversion systems suggested in the TMDL. These systems are not feasible at the ports due to the shallowness and/or salinity of groundwater and consequently will not obtain the CTR targets found in the TMDL for General NPDES discharges, or the WLA for MS4s. Indeed the only feasible method of compliance with water quality WLA's in the context of the ports is treatment control BMPs. As this is reasonably foreseeable, the lead agency must quantitatively analyze the environmental impacts at both ports and throughout the watershed pursuant to CEQA.	The regional structural BMPs listed by the commenter were listed in the SED and staff report as means of reducing upstream loading. See response to **Comment 20.9** regarding program-level and project-level analysis.
22.9		IV. Reasonably Foreseeable Environmental Impacts of TMDL Compliance are not Analyzed as Required by	Staff disagrees. The staff report has accurately gauged the amount of sediment that maybe dredged to meet WLAs in the

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		CEQA To meet the compliance deadlines imposed by the TMDL massive dredging projects or dredging and capping projects would have to be undertaken. Because such projects are reasonably foreseeable, the SED must analyze their environmental impacts. However, the level of analysis in the SED fails to meet CEQA requirements as it fails to accurately depict the scale of the dredging that would be necessary to meet the TMDLs and to identify methods for meeting the CTR standards imposed on stormwater. The SED must contain a discussion of the reasonably foreseeable environmental effects of the actions the TMDL necessitates. Without such an analysis and discussion the document fails in its basic purpose as a public disclosure device. The public and the decision makers who rely upon this document must have an accurate and fully analyzed CEQA document to understand the true environmental picture. Implementation of the TMDL will cause foreseeable and significant environmental impacts and the public and the decision makers have a right, as CEQA demands, to an accurate picture of those impacts. It is only when those significant impacts are recognized and analyzed that the public and decision makers can decide whether or not the negative impacts inherent in the TMDL are worth its benefits. The dredging impacts are of particular note. The SED inaccurately describes the necessary dredging as small in scale with impacts that are less than significant or non-existent. However, to comply with the TMDL's fish tissue targets approximately 40 million cubic yards of material would have to be dredged (roughly the equivalent of the amount of debris caused by hurricane Katrina) within 15 years. Dredging on this scale would have massive negative impacts upon air quality, animal and plant life, traffic, and	TMDL. However, Regional Board is prohibited from specifying the manner of compliance with its regulations (Water Code §13360). To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance. The SED includes an analysis of a range of reasonably potential methods of compliance and mitigation measures. The SED is not required to analyze all potential methods of compliance or mitigation measures. See response to **Comment 20.9** regarding the amount of materials to dredge and program-level and project-level analysis.

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		other areas. The underestimation of the impacts of the dredging necessitated by the TMDL is glaring and the SED should be revised to rectify these deficiencies. An analysis of the issues attendant to dredging on this scale must, under CEQA, include detailed analysis of the impacts of and information about the amount dredged (40 million cubic yards), the methods of dredging (clamshell or hydraulic), the methods of disposal (an estimated 2.6 million round trip truck trips), and location of disposal. Likewise, the SED's discussion of capping is inadequate. It fails to describe the magnitude of the construction project that capping entails and all of its incumbent impacts. Finally, it does not analyze the impact massive dredging will *have on existing* plant and animal life *in the* harbor - *such as the* harbor's eelgrass habitat, which is not even mentioned in the SED.	
22.10		V. The SED is Fraught with Conclusionary Findings Lacking the Required CEQA Analysis and Discussion Incumbent Upon a Disclosure Document The SED often states its finding without any analysis. There are simple assertions that there will be no significant impact, no impact, or that impacts that can be mitigated without any explanation as to why such conclusion was reached. Due to this summary approach there is a lack of substantial evidence to support any findings of no significant impact or no impact. CEQA requires that such findings be supported by substantial evidence - this enables the public and decision makers to understand the true environmental impacts that are being recommended. Indeed, this information is the heart of CEQA; this form of explanation or analysis is what makes a CEQA document a disclosure document. For example, the entire discussion of air emission and ambient air quality is less than two pages long. The environmental impacts and mitigation of dredging fails to	Staff remind commenter that the analysis required under CEQA with these TMDL documents is a programmatic level of analysis which, while not requiring or assuming certain compliance methods, analyzes a reasonable range of compliance methods and mitigation methods. Responsible parties implementing the TMDL will also have responsibilities under CEQA as they plan specific projects to comply with the TMDL. To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance. Many of the questions the commenter poses "*...what kind of equipment needs to be utilized, how long will it take to complete the dredging...*" are questions appropriately answered at the project stage, when the specific project is planned and when the project-level CEQA documents are

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		analyze any of the salient issues: Dredging or sediment capping requires the use of heavy equipment (i.e., the dredge itself and trucks to transport dredge material). The adverse impacts to ambient air quality may result from short-term operation of the dredge and an increase in truck traffic for dredge material transportation. These impacts are temporary and can be mitigated. Mitigation measures for increased air emissions due to increased vehicle trips or for heavy equipment due to hydraulic dredging operations may include, but are not limited to, the following: 1) use of construction and maintenance vehicles with lower-emission engines, 2) use of soot reduction traps or diesel particulate filters, 3) use of emulsified diesel fuel, 4) proper maintenance of vehicles and equipment so they operate cleanly and efficiently, and 5) construction equipment should be turned off when not in use. (SED 44) There is no analysis here. The two most basic questions this section should answer are not addressed: What is being emitted into the atmosphere? What quantity of that material is being released into the atmosphere? There needs to be a discussion of how much needs to be dredged, what kind of equipment needs to be utilized, how long will it take to complete the dredging, what does the equipment emit into the atmosphere and how much does that equipment emit. Further, there is no analysis of how the mitigation measures would mitigate the significant environmental impact. In that there is no analysis of the nature and extent of the impact it follows that there can be no discussion of how proposed mitigation measures can mitigate them. Similarly, in regard to land use impacts, the SED's assertion that "[t]he installation of infiltration systems, vegetated swales, stormwater capture systems, media filters, oil/water separators, diversion and/or treatment BMPs, and catch basin	prepared. See response to **Comment 22.8** regarding upstream filtration/infiltration BMPs.

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		inserts are not expected to result in substantial alternations or adverse impacts to present or planned land use" stands without analysis. (SED 78) These BMPs would all have a substantial footprint at the port. Although the SED states that it would have no impact on present or planned land use - present or planned land use is not discussed or analyzed at all. There is no suggestion or discussion of where such devices might be placed at the port. As indicated in the Port's detailed comments, similarly inadequate analyses occurs throughout the SED, specifically: Air Quality and Greenhouse gases (2.a, 2.c), Earth (1.a, 1.b, 1.c, 1.d), Plant and Animal Life (5.a, 5.b, 5.c), Noise (6.a), Transportation (13.a, 13.c, 13.d, 13.e), Human Health (17.a, 17.b), Economics, Water Quality, Public Services, the Significance Findings, Cumulative Impact Analysis, and the Statement of Overriding Consideration.	
22.11		VI. Conclusion The CEQA analysis does not meaningfully analyze the potential impacts of the TMDL implementation alternatives, nor does it provide any explanation of how proposed mitigation measures will lessen significant environmental impacts. It does not provide the necessary information and analysis to enable decision makers, other regulatory agencies, and the public to understand the significant adverse environmental impacts associated with implementation of the TMDL. The document deficiencies should be corrected and a revised SED should be recirculated for public review to provide a complete discussion of the environmental issues at stake.	See Response to **Comment 20.14.**
23.	City of Los Angeles Department of Water and Power		
23.1		**How the Draft Basin Plan Amendment would be implemented in NPDES permits is unclear**	

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		It is LADWP's understanding that the following allocations will be in effect: **Final Water Column Allocations.** Final water column allocations are included in the Draft Basin Plan Amendment (BPA) for discharges to Dominguez Channel (which would; not apply to Harbor Generating Station (HGS) or Haynes Generating Station (HnGS) and for discharges to the Inner Harbor. Concentration-based final Wasteload Allocations (WLAs) were assigned to non-MS4 point sources in the Dominguez Channel Estuary and Inner Harbor, including power generation stations. These allocations were set equal to the saltwater targets for metals and human health targets for organic compounds (see Table 1), which were derived from the California Toxics Rule (CTR). Many of these concentrations are very low, and may be exceeded in ambient Harbor waters that supply cooling flows to the HGS. As these are final WLAs, LADWP understands that they would be applied in NPDES permits only after year 20 of the Implementation Period. The long implementation period is necessary to evaluate and implement measures to meet the targets, and to allow evaluation of sediments in the Harbor using the Sediment Quality Objectives (SQO) Policy prior to implementing costly and extensive control measures. **Table 1: Receiving water column concentration-based final WLAs for the Inner Harbor (applicable 20 years after TMDL adoption). Taken from p. 12 of Attachment A to Resolution No. R11-XXX.** * The Draft BPA indicates that the concentration-based WLAs for metals were converted from the saltwater dissolved CTR criteria using default saltwater translators.	Harbor Generating Station is assigned concentration-based WLAs .It is correct that compliance with the final WLAs will be required in the relevant permits 20 years after the effective date of the TMDL. Haines and Alamitos Generating Stations discharge to the San Gabriel River, the subject of separate TMDL.

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23.1a		**Sediment Allocations** **Interim Sediment Allocations.** Interim concentration-based sediment allocations were based on the 95th percentile of sediment concentration data collected from 1998-2006 (see Table 2 below) and appear to apply to bedded sediments. Although the Draft BPA and Staff Report are silent regarding how these allocations might be implemented in NPDES permits, the Draft BPA states, "Regardless of the allocation, permitted dischargers shall ensure that effluent concentrations and mass discharges do not exceed levels that can be attained by performance of the facility's treatment technologies existing at the time of permit issuance, reissuance or modification." (Attachment A to Resolution No. R11-XXX at p. 10) Based on this statement, LADWP believes that interim sediment allocations would be implemented in the NPDES permit for the Greater Los Angeles Harbor waters as performance standards starting year 20 of the Implementation Period. Recommendation: Regarding Water Column and Sediment Allocations and compliance, the RWQCB should explain more clearly that final compliance for the Greater Los Angeles Harbor waters will be after the 20 year implementation period. In addition, LADWP requests that the Regional Board provide additional information on the interim sediment allocations presented in the Draft BPA (see Table 2), including the dataset upon which the calculation was based and the methods used to derive the values shown. LADWP was unable to reproduce the values shown in Table 2. **Table 2: Interim concentration-based sediment allocations for the Los Angeles Inner Harbor. Taken from p. 10 of Attachment A to Resolution No. R11-XXX.**	Interim WLAs are established to ensure no degradation from current conditions and apply immediately upon the effective date of the TMDL.. See response to **Comment 21.4** and **21.5.**

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23.1b		**Final sediment allocations**. Final sediment allocations are included on p. 14 and p. 15 of the draft BPA for copper, lead, zinc, and total PAHs in the Inner Harbor and in San Pedro Bay. Final sediment allocations are included on p. 17 for DDT and PCBs in the Inner Harbor and on p. 18 for DDT and PCBs in San Pedro Bay. These allocations are expressed in units of kg/yr or g/yr, and are divided into waste load allocations (WLAs) and load allocations (LAs). WLAs are applicable to MS4 discharges for LA County et al., for the City of Long Beach, and for Caltrans. LAs are included for air deposition and bed sediments. WLAs are not included for discharges from NPDES permits other than the MS4 permits, and LADWP understands that these allocations would not be implemented as numeric effluent limitations or as receiving water limitations within non-MS4 NPDES permits. Recommendation: RWQCB should clarify that non-MS4 permits would not be covered by the final sediment allocations.	Non-MS4 point sources such as General Construction, General Industrial, individual industrial permittees, including power generating stations, minor permits and irregular dischargers into Dominguez Channel Estuary and Harbor Waters are assigned water column concentration-based allocations. Any future minor NPDES permits or enrollees under a general NPDES permit are also assigned the concentration-based waste load allocations. The allocations are set equal to the saltwater targets for metals and equal to the human health targets for the organic compounds in CTR. The non-MS4 Terminal Island WRP is assigned sediment allocations based on CTR.
23.1c		**Greater Los Angeles and Long Beach Harbor Waters (including Consolidated Slip)** Because HGS is located within the Inner Harbor, LADWP assumes that the implementation provisions included in pp. 28-29 of the Draft BPA would apply to HGS, and interprets those requirements as detailed below. The implementation provisions of the Draft BPA specify that "responsible parties" shall develop a Monitoring Plan, an Implementation Plan, and a Sediment Management Plan. It appears that the Monitoring Plan would be developed by all responsible parties for the water body as a whole; developing	Regional Board staffs find that the TMDL will require extensive coordination among the diverse responsible parties, therefore, it is appropriate to extend the submittal date for the Monitoring Plan for additional 3 months. [See revised draft Staff report and tentative BPA]

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		the Monitoring Plan will require extensive coordination amongst the diverse responsible parties, and as such, requiring the plan to be completed within six (6) months is unreasonable. The Draft BPA should be revised to require submittal of the Monitoring Plan at least 12 months after TMDL adoption and implementation of the Monitoring Plan at least 12 months after that date. Recommendation: The Draft BPA should be revised to require submittal of the Monitoring Plan at least 12 months after TMDL adoption (increased from 6 months as written in the draft BPA), and implementation of the Monitoring Plan at least 12 months after that date.	
23.2		**Stormwater Wasteload Allocations** Page 12 of the draft Basin Plan Amendment (BPA) has concentration-based WLAs for General Construction and General Industrial Stormwater permits (as well as generating stations). For the stormwater permits, stormwater regulations compliance should be measured by the installation of Best Management Practices (BMPs). Recommendation: The BPA should clarify that compliance for stormwater requirements should be expressed as BMP implementation for construction and industrial stormwater permits. The BPA should also specify the maximum design storm that dischargers should use in planning BMPs for reduction of pollutants.	Regional Board staff disagrees. Concentration-based interim and final WLAs shall be incorporated into the permit accordingly when the permit is renewed.
23.3		**Use of Effects Range Low Values as TMDL Targets** For sediment toxicity, the WLAs given are based on Effects Range Low (ERLs) and Threshold Effects Concentrations	See response to **Comment 20.1**

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		(TECs) rather than quantities based on the triad approach specified by the California Sediment Quality Objectives. ERLs appear to be unreliable or unreasonably over-protective values to be used for WLAs. For this reason, the State required Sediment Quality Objectives to be developed'. As noted on page 7 of the SQO Policy, *"None of the individual LOE [line of evidence] is sufficiently reliable when used alone to assess sediment quality impacts due to toxic pollutants. Within a given site, the LOEs applied to assess exposure as described in Section V.A. may underestimate or overestimate the risk to benthic communities and do not indicate causality of specific chemicals. The LOEs applied to assess biological effects can respond to stresses associated with natural or physical factors, such as sediment grain size, physical disturbance, or organic enrichment. Each LOE produces specific information that, when integrated with the other LOEs, provides a more confident assessment of sediment quality relative to the narrative objective. When the exposure and effects tools are integrated, the approach can quantify protection through effects measures and also provide predictive capability through the exposure assessment."* The impairment assessment of the Draft BPA did not utilize the SQO Policy, and cannot be considered to have been done using best available science. In addition, the failure to perform stressor identification, as required by the SQO Policy, means that there is no information to support the assumption of the Draft BPA that the pollutants for which targets are included in the Draft BPA are responsible for sediment impairment. Perhaps more importantly, stressor identification would be necessary to identify additional pollutants (e.g., pyrethroids) that are more likely to cause impairment than the pollutants regulated by the Draft BPA.	

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		While a margin of safety is a requirement for TMDLs, use of the ERLs amounts to an excessively large margin of safety. Furthermore, Effects Range Median values (ERMs) and not ERLs were used to initially determine the sediment impairments. Recommendation: RWQCB should work with dischargers or interested parties to gather data and develop a method to express WLAs using a triad approach instead of inappropriate sediment quality guidelines (such as ERLs, TECs, and ERMs), as well as gather data necessary to support de-listing of the sediment.	
23.4		**Other Potential Sources of Toxicity** Pyrethroids have recently been cited as being significant sources of toxicity in regional waters. A recent study of Ballona Creek Estuary indicated that concentrations of TMDL listed compounds often exceeded target levels, but there was a poor correlation between these concentrations and toxicity. Furthermore, analysis of sediments and porewater found that pyrethroid pesticides were the likely primary source of toxicity within the estuary. Comparison of these pesticides' toxicity thresholds to chemical analysis results confirmed that sufficient pyrethroids were present in the estuary sediments to cause toxicity. Recommendation: The WLAs for sediment toxicity should be reexamined to verify the major source(s) of toxicity within the Dominguez Channel, Los Angeles Harbor, and Long Beach Harbor regions covered by the TMDL document.	These TMDLs are designed to incorporate the possibility that other chemicals may be contributing to sediment toxicity. This is consistent with stressor identification process outlined in SQO Part I. Future sediment toxicity identification evaluation studies (TIEs) within Dominguez Channel Estuary and Los Angeles River Estuary will help characterize the type of chemicals. It could be heavy metals, PAHs, pyrethroids, organophosphates or other pesticides; it could also be a synergistic effect caused by any combination of these pollutants. The continuing evidence of sediment toxicity implies that impaired conditions exist and therefore TMDL allocations specifically for pollutant category are appropriate.

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23.5		**Existing USEPA-Approved Variances** Page 3 of the draft BPA for this TMDL (also Page 44 of the Staff Report) states that the numeric toxicity target of 1 TUc is established for the TMDL. However, for some NPDES permits variances for best Available Technology Economically Achievable (BAT) for total residual chlorine and toxicity are allowed pursuant to Clean Water Act Section 301(g). These variances should not be superseded by the WLAs and TMDL targets in the BPA. Recommendation: RWQCB should clarify that EPA-approved variances are allowed for qualified dischargers.	Variances may indeed be superceded by TMDLs and associated allocations; therefore a TMDL may indicate that a water quality based decision is more appropriate (i.e., consistent with attaining WQS) than a BAT approach. This determination is best explored on a site-specific, chemical-specific basis, not as part of a watershed wide pollutant budget.
23.6		**Modeling Issues** Model predictions, used in the estimation of allocations, have limited or no agreement with observations, and major modeling assumptions appear to be flawed. Two models were used in the derivation of the TMDL. The LSPC watershed model was used to simulate flows and sediment loads from tributary watersheds to the water bodies regulated by the Draft BPA. The EFDC model was used to simulate the fate of these loads within the Harbors, including the fate of sediment particles (and associated pollutants) that enter the Harbor area via both dry and wet weather flows. LADWP has several primary concerns with the modeling efforts and with how the modeling results were used in the development of the Draft BPA, detailed briefly as follows:	See response to **Comment 19.6**.
23.6a		The loading capacity for each segment was calculated as the product of the model-estimated sediment flux to the Harbor	The method used to allocate point source loadings was based on the difference between two modeling scenarios (baseline

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		bed and the TMDL target. This total allocation was divided amongst point sources (MS4s permittees) and non-point sources (air deposition and bed sediments). The procedure used to divide the loading capacity amongst various sources is without scientific basis.	scenario and a scenario with only clean sediment inputs). Modeling scenarios are common and well-documented strategies for determining allocations in complex systems. The remaining sources were air deposition and bed sediments. Given that loading estimates were available for air deposition based on published studies, these allocations are also scientifically defensible (see also response to **Comment 36.52)**). Load allocations were assigned to bed sediments based on the remaining load because sediment is a source of pollutant exposure to benthic organisms as well as diffusive source of aqueous pollutants to aquatic life in the water column.
23.6a (i)		- As indicated in Appendix III (Tetra Tech memorandum dated November 29, 2010), two model scenarios were considered - an existing scenario ("base") and a hypothetical scenario of no upland contamination (i.e., only absolutely clean sediments delivered to the watersheds, called the "no upland sources" model scenario). Concentrations of pollutants in the sediments of the receiving water were estimated using the LSPC and EFDC models, for the various waterbodies in the TMDL for both the "base" and "no upland sources" model scenarios. The model results were used to calculate the difference between bed sediment concentrations in the base scenario and the "no upland sources scenario." For some pollutant/water body segments, the modeled difference was significant (e.g., for copper in Dominguez Channel estuary, the "no" upland sources" scenario was simulated to result in bed sediment concentrations about 28% lower than for the base case). But for many water body/pollutant segments, the difference in bed sediment concentrations was negligible (e.g., for copper in Cabrillo Marina), indicating that reducing pollutant loads from the watershed to zero would have no effect on pollutant concentrations in bed sediments. The loading capacity for each water body appears to have been	See response to **Comment 23.6a**. Dischargers are not being penalized as they have been identified as a source of pollutant loading and are therefore responsible to reduce their loadings. Dischargers have been assigned a proportion of the loading capacity consistent with the proportion of pollutant they are discharging during existing conditions.

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		divided into LAs and WLAs using these "% difference" values. In this manner, MS4 permittees discharging to Dominguez Channel estuary were assigned 28% of the total load capacity for that waterbody, and MS4 permittees discharging to Cabrillo Marina were assigned 1.49% of the load capacity for copper for that water body segment. The problem with this calculation method is that it actually penalizes dischargers to water bodies-i.e. dischargers are required to reduce their loadings to water bodies to near zero levels when model results indicate that their discharges have no effect on bed sediment concentrations, and when continued, discharge at current levels would result in an identical outcome. For example, in Cabrillo Marina, bed sediment concentrations are simulated to remain at about 235 mg/kg copper whether upland sources are held at existing levels or reduced to zero. The problem with the calculation is that the "% difference" calculated from the two model runs has no relationship to the division of the loading capacity between sources. LADWP requests that the Regional Board revisit and recalculate load and waste load allocations using an appropriate methodology.	
23.6a (ii)		As noted above, model-estimated sediment concentrations for the "no upland scenario" were found in many cases to exceed the TMDL targets, indicating that even if all upland contaminant inputs are completely eliminated, TMDLs would continue to be exceeded.	These additional exceedances are expected to be addressed through the load allocations for aerial deposition and existing bed sediments.
23.6a (iii)		An additional concern with the use of the model results in determining allocations is the fact that load allocations were assigned to bed sediment. A load allocation is defined as that portion of future or existing nonpoint source loads to a waterbody. As such, it is unclear how a load allocation can be assigned for bedded sediment, which is already contained within the water body. Rather, the combination of waste load	Sediment is a source of pollutant exposure to benthic organisms as well as a diffusive source of aqueous pollutants to aquatic life in the water column. Allocations are assigned to pollutant sources, it is appropriate to assign allocation to bed sediments.

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		(point source) and load (nonpoint source) allocations should be used to establish the amount of a particular pollutant that can be contributed to a water body. Because pollutants already present in bed sediments appear to be the main cause of exceedances of Draft BPA targets (e.g., Tetra Tech notes that "DDT bed sediment contamination is predominantly a legacy issue and upland sources appear to be contributing loads of sediment that are cleaner than what is currently in bed sediments...suggesting that sediment remediation is required in each [water body] zone to achieve sediment targets"), it appears that a TMDL, which regulates loads to a water body, is not a suitable regulatory vehicle for addressing these supposed sediment impairments.	
23.6a (iv)		As noted above, allocations were calculated as the product of the sediment flux to the bed and the TMDL target (i.e., and ERL or TEC value). It is unrealistic, particularly for storm flow conditions, to assume that all sediment will deposit on the sediment bed. Rather, some portion of the sediment transported to the Harbor, particularly during wet conditions, by streams/tributary watersheds will remain suspended in the water column and be carried out of the Harbor area. Failing to include the sediment flux out of the Harbor results in allocations that are unnecessarily and unrealistically low. For example, using LSPC model estimates of sediment inflow to the Harbor (Appendix I, p.56) and EFDC estimates of sediment deposition in the Harbor (Appendix Ill, p. III-4), about 65% of inflowing sediment passes through the Harbor and out to sea without depositing to the sediment bed within the Harbor. A large fraction of the loading to the watershed (e.g., for DDT about 72%97%) passes through the Harbor without depositing to the Harbor sediments. Thus, the Draft BPA requires that DDT loads from the watershed be reduced by 99.91% to 99.991%. Similar load reductions are required	Sediment (and associated pollutant loads) can be transported both in and out of the Harbor waters through the open ocean boundary (i.e., the system is not modeled as a box where all of the water and sediment must remain in the box – water and sediment can be exchanged in both directions with the open ocean). This fact has been clarified in the modeling report. In addition, the allocations are written for the sediment depositing in the Harbor waterbodies, so pollutants and sediment that pass through the system are not included in the calculations.

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		of other pollutants in the Draft BPA, even though the modeling of Appendix III suggests that reductions of this magnitude will have a modest or negligible impact on pollutant concentrations in bed sediments.	
23.6b		Pollutant concentrations for DDT and PCBs on sediments transported by tributary streams were assumed to be equivalent to pollutant concentrations on sediments in the top 5 cm of the sediment layer in the receiving water bodies. The modeling also assumed that all pollutants in the top-most sediment layers resulted from the recent deposition of sediments from streams and near-shore watersheds. This assumption is unrealistic and is contradicted by the fact that most measurements of these pollutants in tributary streams are present below detection levels. (e.g., all measurements of PCBs were below detection limits and only runoff from agricultural land use had detectable levels of DDT, see p. 40 of Appendix II).	DDT and PCB loadings are incorporated in the model based on their association with sediment. New loading of DDT and PCBs may not be occurring in the watershed; however, the sediment does contain historic loads of these pollutants that are being washed into the MS4, rivers, and receiving waters during rain events. Loads associated with these events are quantified in the TMDL. While certain pollutants may be non-detectable in water, detectable concentrations are observed on sediment. The TMDL incorporates the sediment-associated loads of the DDT and PCBs based on the best available data.
23.6c		The concentrations of pollutants in bedded sediments were assumed to be uniform with depth. This assumption is also unrealistic, particularly for legacy pollutants such as DDT, which was banned in 1972. This assumption has two important implications: (1) At least some, if not most, of the pollutant mass present in the surface sediment layers within the Harbor is likely the result of historic legacy discharges, and transport of pollutants from deeper sediment layers to the surface by processes such as porewater diffusion and bioturbation. Neglecting these processes results in over-estimating the pollutant load delivered by tributary streams and watersheds. (2) Higher pollutant concentrations at depth may be disturbed and exposed by remedial activities such as dredging.	The best available data were used during the modeling efforts. Detailed data throughout the harbors were not available to incorporate depth-varying *initial* DDT concentrations. The modeled sediment concentrations do vary with depth over the course of the simulation period as new watershed loadings are incorporated and taking into account the influences of other hydrodynamic processes along with porewater diffusion between the sediment bed surface layer, the overlying water, and the bed layer just below the surface layer. Ultimately, the TMDL incorporates the sediment-associated loads of the DDT and PCBs based on the best available data. Before dredging activities are conducted, monitoring should be performed to confirm the depth of dredging required as well as the specific area (existing loads in the TMDL are

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			average conditions throughout the receiving water and specific areas with the highest concentrations should be identified [that may be extremely influential on the average receiving water concentration]).
23.6d		The detailed model results and sensitivity analyses presented in the Draft Staff Report are for dry season conditions. However, pollutant mass fluxes are orders of magnitude larger during wet/storm conditions than during dry weather conditions. Failing to analyze wet conditions in detail is a significant shortcoming of the modeling effort. Recommendation: RWQCB should review the method of determining WLAs by taking into account the above concerns; especially including sediment that may drift out to the open ocean (this would allow more correct higher WLAs since the waterbody would have a higher assimilative capacity for pollutants).	The watershed pollutant loading estimates were based on the best available data, which were generally for dry conditions. These values could be refined in the future if new data, including storm event data within the Harbor waters, become available. As noted above in the response to **Comment 23.6a(iv)**, the existing load and TMDL calculations did consider transport of sediment and DDT out of the Harbor. This fact will be clarified in the TMDL report.
23.7		**It is not clear how the sediment load and waste load allocations were divided between and assigned to the responsible parties.** Once derived using model analyses, as described above, the overall allocations were divided into LAs and WLAs. No explanation is provided for how LAs and WLAs were derived, or what formula was used to divide the allocation amongst various categories. Of particular interest is the fact that LAs were assigned to bed sediment. A load allocation is defined as that portion of future or existing nonpoint source loads to a waterbody. As such, it is unclear how a load allocation can be assigned for bedded sediment, which is already contained within the water body. Rather, the combination of waste load (point source) and load (nonpoint	For the WLA and LA calculations, first, the total loading capacity was calculated. Second, wasteload allocations were assigned to dischargers. These wasteload allocations, along with the existing load from direct air deposition, were subtracted from the total loading capacity. The remaining loading capacity was assigned as a load allocation to the bed sediments, that is, those sediments existing in the estuaries and Harbors. However, direct air deposition of DDT in most waterbodies, and copper and zinc in Inner and Outer Harbor, consumes or partially consumes the available loading capacity. The wasteload allocations to the dischargers were not lowered to make up the difference but the 'negative' load allocations assigned to the existing bed sediment. For implementation

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		source) allocations is used to establish the amount of a particular pollutant that can be contributed to a water body. Recommendation: RWQCB should provide a more detailed explanation on how sediment pollutant loads were divided and allocated among responsible parties.	purposes, the negative load may be interpreted as zero. The negative values indicate that the contaminated bed sediment load must be reduced. 'Hotspot' investigation and targeted dredging may be a feasible implementation method to achieve these reductions. In addition, if future air deposition studies show lower direct air deposition for these contaminants or, if future sediment characterization studies show lower existing bed sediment loads, then these allocations may be adjusted. A description of a potential special study to adjust loading calculations is included in the Basin Plan Amendment. For an explanation of LAs assigned to bed sediment, see response to **Comment 23.6a(iii)**. Additional discussion has been added to Appendix III.1 to describe the assignment of WLAs including example calculations.
23.8		**Atmospheric Deposition Alone Appears to Exceed the TMDL.** For certain pollutants such as DDT, air deposition loading to the water surface alone exceeds the loading capacities calculated for certain water body. For example, the Draft BPA specifies that the total allocation for DDT in the Inner Harbor is 3.56 g/yr, but air deposition is assigned an allocation of 129 g/yr, based on measurements of ambient deposition made by SCCWRP. The allocation assigned to bed sediments is -125 g/yr, indicating that even if all other inputs are completely eliminated, TMDLs would continue to be exceeded and dredging or other remedial measures would be required on an ongoing basis. Moreover, as indicated in Appendix Ill (pg. III-46), the flux of DDT from the sediment to the Harbor waters is positive, indicating that the sediments	Atmospheric deposition measurements of DDT were performed by SCCWRP as part of a multi-media flux study examining movement of organic compounds across water/air and water/sediment interfaces. Three separate air deposition measurements were collected between Sept. 19 and Oct. 26, 2006. While these results are preliminary, the sampling site location was within the Los Angeles and Long Beach Harbors watershed, close to Dominguez Channel Estuary; therefore these results are most appropriate for characterizing local conditions. (Site location was based on several criteria, including location that obtained ancillary parameters; e.g. mean wind speed and direction.) Staff acknowledges the DDT TMDL is smaller than the air deposition load for certain waterbodies; however, staff does not find that this will require constant remediation of bed

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		are a significant source of DDT to the overlying water column. Thus, a failure to meet water quality standards for DDT in the water column cannot be regarded as indicating that current sources need to further reduce DDT loadings to the receiving water. Recommendation: RWQCB should focus on the sources of the air pollutants and on reducing the emissions of those sources that contribute to the air deposition applicable to this TMDL, and adjust the TMDL and implementation schedule accordingly.	sediments. Rather a more extensive DDT flux study within these waters will help clarify these results and perhaps provide more accurate characterization. The Implementation Plan includes recommendation for such a study within first five years of implementation. In addition, see response to **Comment 19.1**
23.9		**Economic and Environmental Impacts were Underestimated** Because of the way in which TMDL targets were derived and applied, the estimated cost of $ 680 million to dredge seven areas within the Harbor complex is likely a gross underestimate. The volume of material to be dredged was estimated by the Staff Report to be more than 11 million cubic yards (using the SQO Policy). If the targets of the Draft BPA are used, an estimated 36 million cubic yards would need to be dredged from the TMDL area. Indeed, as shown in the Atmospheric Deposition comment above, dredging could be required on an ongoing basis for the indefinite future since air deposition loadings exceed the allocations assigned to some of the waterbodies regulated by the Draft BPA by such a wide margin. Since many of the pollutants present in the Harbor are legacy pollutants, dredging could potentially last for years and result in extraordinary environmental impacts. Also as noted above, because many of the pollutants present in the Harbor are legacy pollutants, it is likely that the concentrations of these pollutants are higher at depth. Thus, it is reasonably	In response to several comments on estimated costs of implementation, Staff has re-evaluated estimates and finds that costs are likely to be lower than presented in the Staff Report. The range of cost estimates to achieve the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters TMDL is large. This is due in large part to the current uncertainty regarding the necessary extent of remediation of contaminated sediments (e.g. dredge volume) to meet the TMDL requirements. TMDL implementation cost estimates are largely driven by the costs of dredging to deal with the most contaminated bed sediments in the estuaries and harbors. The Ports of Los Angeles and Long Beach have provided an estimate of the location and volume of anticipated sediments required to be dredged in a memorandum prepared by the Ports' consultant Anchor QEA, entitled, "Current sediment conditions within the Los Angeles/Long Beach Harbor Complex based on chemical effects range Low (ERL) values and the integrated sediment quality objective". The Anchor QEA study estimated dredge volume in the categories "clearly

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		foreseeable that dredging activities could result in resuspension of sequestered contaminants, recontamination of sediments in the Harbor, and increased bioavailability of pollutants in Harbor sediments. It is also reasonably foreseeable that dredging activities would significantly increase air pollution, construction activities, energy consumption, and have a detrimental effect for NPDES compliance of facilities that use Harbor water for intake and discharge. Recommendation: RWQCB should use updated cost estimates based on 36 million cubic yards of dredging.	impacted", "likely impacted", and "possibly impacted." The quantities of sediments in these areas are estimated by waterbody in the Staff Report (p. 119). The Anchor memorandum states that 231 acres are either clearly or likely impacted, while 1658 acres are determined to be possibly impacted. The Anchor memorandum also states that the possibly impacted area would require additional data collection to determine impairment and if remediation is necessary. To convert the acreage to volume, Anchor used different presumed depths based on available data and dredging history. The average depth of dredging used by Anchor is 4.4 feet. Consequently, the volume of sediment required to be dredged to comply with the TMDL could range from 1.6 mcy (for the 231 acres) to 11.2 mcy (for the 1889 acres). Therefore, based on a 4% interest rate, the annual cost for the Ports for the next 20 years could range from $7.3 million per year, to remove sediments from the clearly and likely impacted areas only, up to a high of $50 million to fully address all areas identified as clearly, likely and possibly impacted. The costs presented in the Staff Report, which included only an estimate based on the 11.2 mcy dredging volume, and Anchor memorandum are more accurately presented as a range, as above. Another factor that significantly affects the cost of dredging is the location of disposal of dredged material. The Staff Report used a cost estimate of $60.84 per cubic yard, which included the cost of sediment dredging and sediment disposal. However, the cost for disposal on-site is approximately 70% less than the cost of off-site landfill disposal. Based on discussions with Shelly Anghera of Anchor QEA, it is estimated that the Ports may have capacity for on-site disposal of up to 2 mcy of dredged material over the next

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			twenty years (Personal communication; April 25, 2011). Thus, the unit cost for the first 2 mcy of dredged material may be significantly less than the estimated $60.84/yd3. See tables, below. Staff notes that the combined annual budget for 2010-2011 for Port of Los Angeles and Port of Long Beach is $1.625 billion. In addition, the Ports conduct dredging for navigation purposes and will also, in the 20 year implementation schedule, be able to address some remediation of contaminated sediment while dredging for other purposes for cost savings. For example, funds are already allocated to the Port of LA's $383-million Channel Deepening Project. Harbor areas such as navigation pathways and areas alongside piers that have recently been, or will in the near future be, dredged for navigation are likely to overlap in part with areas where remediation may be necessary to achieve this TMDL.

23.9 cont.

Dredging Scenarios	Dredged Volume	Total Cost	Annual Cost	**% of Budget**
For **Clearly and Likely** Impacted Areas	1,639,791	$99,767,764	$7,342,907	0.45%
For **Clearly, Likely and Possibly** Impacted Areas	11,173,066	$679,788,860	$50,032,460	3.08%
	Amortized over 20 years (4% interest rate) with dredging unit cost of $60.84/cubic yard			

Combination of Implementation BMPs	**Total Cost**	**Annual Cost**
Dredging and Sand Filters	$287,849,764	$21,877,884

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		Dredging and Bio-swales | $144,907,444 | $10,831,302 The annual cost was calculated based on interest rate 4% and amortized into 20 years.	
24	City of Manhattan Beach		
24.1		The City may wish to avail itself of the option to comply at the outfall of the permittee's drainage area as provided for in the proposed Basin Plan Amendment. However, the Basin Plan Amendment does not make clear what the Waste Load Allocations (WLAs) are for such a compliance option. Please clarify whether the individual WLAs for an MS4 Permittee are to be calculated based on its share on an area basis of the mass based W LA, or whether a concentration-based WLA is applied, or whether either approach can be used depending on the type of monitoring program to be proposed. Also, please clarify/confirm that if an a MS4 Permittee chooses to comply at the outfall of its drainage area, that the WLAs in fish would not apply to such an agency, but rather the WLA associated with the suspended solids fraction of the discharge would be sufficient to demonstrate compliance with the outfall-based WLAs in the discharge.	Compliance with mass-based WLAs at designated discharge points is provided in the tentative BPA (BPA, page 16). Group mass-based WLAs are currently assigned to MS4 permittees. The draft Staff Report and tentative BPA have been revised to clarify that the individual mass-based WLAs for individual MS4 Permittees will be calculated based on its share on an area basis of the mass based WLA or approved approach available at the time final mass-based WLAs are in effect and incorporated into the permit. The draft Staff Report and tentative BPA are also revised to include meeting sediment numeric targets as a third option of compliance, see response to **Comment 21.3.**
24.2		Throughout the document it states that responsible agencies are each individually responsible for conducting water, sediment and fish tissue monitoring, but that they are encouraged to collaborate or coordinate efforts to avoid duplication. With respect to fish and bed sediment monitoring in the receiving water, sharing this responsibility would necessitate undue inter-agency coordination and staff time. The City of Manhattan Beach believes that the responsibility for monitoring fish and bed sediments should be assigned to the agencies directly responsible for the operation of those water bodies.	Responsible agencies are each individually responsible for conducting water, sediment and fish tissue monitoring to demonstrate their compliance with the assigned allocation. Responsible agencies are encouraged to collaborate or coordinate efforts to avoid duplication and reduce monitoring cost. However, each responsible agency can choose to conduct monitoring individually. See also response to **Comment 21.7**.
24.3		The City of Manhattan Beach is tributary only to the Upper	As City of Manhattan Beach discharges to the upper

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		Dominguez Channel and is not tributary to the Torrance Lateral, thus the City of Manhattan Beach should not be listed as a responsible party for or assigned freshwater or sediment WLAs for the Torrance Lateral. Because the Torrance Lateral is being assigned separate final WLAs for freshwater and sediment, the proposed TMDL should be revised to create a separate list of dischargers strictly for the Torrance Lateral and the City of Manhattan Beach should not be included on that list.	Dominguez Channel, the City will be required to comply with Dominguez Channel freshwater WLAs only. See also response to **Comment 21.7**.
24.4		DDT, Chlordane, and Dieldrin are organochlorine pesticides that were widely used across the U.S and California in lawn, home and agriculture. Their manufacture and sale has been banned by USEPA for more than twenty years, in the case of DDT, for thirty years. PCBs are regulated under the Federal Toxic Substances Control Act (TSCA); however action levels for the management and control of PCB residuals under TSCA are currently several orders of magnitude higher than the targets being set by this TMDL. Addressing trace levels of these contaminants that may exist as background in soils due to historic and ubiquitous use is very likely beyond the fiscal resources of municipalities and outside the scope of reasonable municipal responsibility.	TMDLs must be established at levels necessary to achieve water quality objectives and fully protect beneficial uses. Additionally, TMDLs must address all water quality impairments by identifying pollutant sources and allocating responsibility for controlling those pollutant sources. This TMDL documents continued impairments due to DDT, chlordane, and dieldrin. This TMDL recognizes that some of the watershed loading of these pollutants may be addressed by controlling sediment transport to receiving waters. The TMDL implementation plan considers both remediation as well as fiscal resources. TSCA does not preempt the Regional Board's authority under the Clean Water Act to address PCBs through the adoption of a TMDL; abatement and prevention of water pollution by toxic substances, including PCBs, falls within the purview of the CWA. (SED, Inc. v. City of Dayton (S.D. Ohio 1981) 519 F.Supp. 979, 991.) Pursuant to 15 U.S.C. section 2617(a)(1) of TSCA, states generally retain the authority to regulate chemical substances or mixtures, and pursuant to section 2617(a)(2)(B)(ii), if the Administrator prescribes a rule or order applicable to a chemical substance or mixture to protect human health or the environment, nothing precludes the state from regulating that substance or mixture so long as the regulation is adopted pursuant to a federal law, such as the

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			Clean Water Act. In other words, if a hazardous substance comes within the purview of both TSCA and another federal law, such as the Clean Water Act, the authority of the state to regulate the hazardous substance is controlled by the Clean Water Act, not TSCA. Therefore, the TMDL is valid as it relates to toxic substances under TSCA, even if the toxic targets in the TMDL are more stringent than the action levels set forth under TSCA.
24.5		Unless the two superfund sites in the Dominguez Channel Watershed are controlled and the Records of Decision for those sites developed consistent with the TMDL, the other WLAs for DDT and Toxicity in this TMDL will be irrelevant. The two sites should be monitored separately to assess the magnitude of the Waste Loads in those discharges.	See response to **Comment 19.7.**
24.6		This TMDL places the responsibility for control of indirect air deposition of metals solely on the MS4 agencies when they have no or limited jurisdictional authority over the sources of those pollutants. This limited jurisdiction is acknowledged by the Los Angeles Regional Water Quality Control Board in finding B.2. Nature of Discharges and Sources of Pollutants in the LA County MS4 Permit as follows: Certain pollutants present in stormwater and/or urban runoff may be derived from extraneous sources that Permittees have no or limited jurisdiction over. Examples of such pollutants and their respective sources are: PAHs which are products of internal combustion engine operation, nitrates, bis (2-ethylhexyl) phthalate and mercury from atmospheric deposition, lead from fuels, copper from brake pad wear, zinc from tire wear, dioxins as products of combustions and natural occurring minerals from local geology	See response to **Comment 17.4**.

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		Because the authority for regulation of such extraneous sources rests with the State and USEPA, MS4 agencies should not be held unilaterally responsible for controlling water pollution that results from these extraneous sources.	
24.7		Provision for reduced frequency of toxicity testing should be included in the TMDL if it is established that a storm drain outfall is in compliance with the toxicity standard. Toxicity testing twice per year at the storm drain outfall of a permittee's drainage area may prove to be overly burdensome to municipal budgets and such frequency should be unnecessary once compliance is established. Similarly, if initial monitoring for organochlorine pesticides and PCBs indicates that the TMDL objectives for these compounds are already met in a particular storm drain discharge, then a reduced frequency of monitoring should also be afforded the responsible agency since these compounds are no longer manufactured and they are unlikely to increase in concentration in the future.	Regional Board staff agrees that if the results of TMDL monitoring show TMDL allocation continuously being met, monitoring frequency can be reduced. The Regional Board Executive Officer may reduce, increase, or modify monitoring and reporting requirements, as necessary, based on the results of the TMDL monitoring program (first paragraph on page 23 of the revised, tentative BPA). The discharger can submit the request to reduce monitoring frequency with associated evidence showing ongoing compliance with the assigned allocations for the EO consideration on a case by case basis.
25	City of Monrovia		
25.1		The Board staff, by introducing at the same time a complex Toxic TMDL and requesting a full review of that separate TMDL by no later than February 22, 2011 for a hearing on the same day as the Board will consider an entire MS4 permit (and incorporated bacteria TMDL) (April 7, 2011) imposes an intolerable burden on the City and its staff. Moreover, most of the TMDL appears to be primarily focused upon the harbor areas of Los Angeles and Long Beach. Thus, it is more than a little surprising to the City of Monrovia, which drains into the Los Angeles River, to suddenly be confronted with the Toxic TMDL and asked to provide meaningful comments on such a TMDL. The proposed TMDL, as written, is extremely confusing, and	See responses to **Comments 17.1-17.2.**

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		yet it would seemingly apply to virtually every city within Los Angeles County, since most cities drain into either the Los Angeles or San Gabriel Rivers at some point. Yet, we are not aware of any formal public workshops that have been conducted on the purpose and scope of the TMDL, and our limited review of the TMDL documentation has raised a series of questions regarding its goals, as well as over the obligations to be imposed on the various municipalities as responsible parties under the TMDL. For this reason, we would ask that the TMDL not be adopted at this time until the affected local governmental agencies have been given sufficient opportunity to not only fully consider the TMDL and its impact, but also to be in a position to have further dialogue with the Regional Board over their necessity and scope. To the extent that the Board maintains the same hearing date (April 7, 2011) as the hearing on the LA Basin MS4 `interim' permit and the incorporation *of* the Santa Monica Bay Bacteria TMDL into that interim permit, then the City adopts and incorporates by reference the technical comments *of* the Port of Long Beach. As pointed out in. the comment letter filed by that Port, there are numerous technical difficulties with the proposed TMDL. As a legal matter, the Board should revise upward all of the numeric targets in the TMDL for those compounds that are described as currently having "targets that are lower than the readily available [laboratory] detection limits."(Attachment A to draft Resolution, p. 21). Otherwise, a responsible party would have to file a report of "non-compliance" as part of the annual reports simply because the current laboratory measurement would always be above the 'numeric target." While it may be that laboratory detection limits will decline over time, there is absolutely no assurance that this declining	See response to **Comment 17.3**. Currently several of the constituents of concern have numeric targets that are lower than the readily available detection limits. For constituents with numeric targets that are lower than readily available detection limits, testing results that are below detection limits are considered in compliance. The tentative Basin Plan Amendment also includes that as analytical methods and detection limits continue to improve (i.e., development of lower detection limits) and become more environmentally relevant, responsible parties shall incorporate new method

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		level will match the deadlines for compliance by LA River parties currently set forth in Table 7-40.2, which requires submittal of annual monitoring reports within 15 months after monitoring commences. This would subject a municipality such as the City to a lawsuit by a private party for such 'non-compliance' under the Clean Water Act as soon as the TMDL became incorporated into the applicable permit. Legally, the City also objects to the TMDL's concept of measuring compliance for a coordinated monitoring program. Monrovia is a small community which must, for fiscal reasons, take advantage of savings afforded by coordination with other communities in the Los Angeles River. But, to impose liability (or measure 'noncompliance') upon Monrovia for a legacy pollutant such as DDT, dieldrin or chlordane which are ubiquitous in the environment (Attachment A to Resolution at p. 5, "source analysis") that is measured downstream or downgradient from the City is entirely unfair and inconsistent with the Clean Water Act.	detection limits in the MRP and QAPP. See response to **Comment 9.2**. The City of Monrovia is not assigned any load or wasteload allocations pursuant to this TMDL. As such, there is no issue of compliance with respect to WLAs for the toxic pollutants. The City of Monrovia is only assigned monitoring requirements to determine pollutant contributions from the Los Angeles River to downstream harbor waters. Monrovia and other cities are encouraged to coordinate monitoring.
26	City of Palos Verdes		
26.1		The City submits that it should be removed from this TMDL because the City does not contribute to nor drain to the Los Angeles Harbor or any portion of the Dominguez Channel covered by the DC/LA Harbor Toxics TM DL.	Staff agree that the City of Palos Verdes is not included in the drainage area to the Greater Harbor Waters and has been removed from the list of Responsible Parties in the Implementation section.
27.	City of Rancho Palos Verdes		
27.1		As a legal and technical matter, the Board should revise upward all of the numeric targets in the TMDL for those compounds that are described as currently having "targets that are lower than the readily available [laboratory] detection limits."(Attachment A to draft Resolution, p. 21). Otherwise, a responsible party would have to file a report of "non-compliance" as part of the annual reports simply because the current laboratory measurement would always be above the	See response to **Comment 17.3**.

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		`numeric target." While it may be that laboratory detection limits will decline over time, there is absolutely no assurance that this declining level will match the deadlines for compliance by LA River parties currently set forth in Table 7-40.2, which requires submittal of annual monitoring reports within 15 months after monitoring commences. This would subject a municipality such as the City to a lawsuit by a private party for such `non-compliance' under the Clean Water Act as soon as the TMDL became incorporated into the applicable permit.	
27.2		Rancho Palos Verdes designated monitoring point appears to be in the salt water portion of the harbor itself. It should be made clear that any samples collected at this point are comingled with water from numerous sources and are not representative of runoff from the city. Legally, the City also objects to the TMDL's concept of `measuring compliance' for a coordinated monitoring program. Rancho Palos Verdes is a small community which must take advantage of savings afforded by a coordinated monitoring program with other communities in the area. But, to impose liability (or measure `noncompliance') upon Rancho Palos Verdes for, a legacy pollutant such as DDT, dieldrin or chlordane which are `ubiquitous in the environment'(Attachment A to Resolution at p. 5, "source analysis") that is measured downstream or down gradient from the City is entirely unfair and inconsistent with the Clean Water Act.	See response to **Comment 9.2** and **17.4.**
27.3		It appears the methodology for establishing the WLAs for the low density areas of Rancho Palos Verdes was the same as those for the high density residential and industrial/commercial areas of San Pedro. The water quality projections and thus the WLAs should be different on a per land usage as well as a per acreage basis	See response to **Comment 24.1.**

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27.4		Areas of Rancho Palos Verdes drain to Machado Lake which is already (or will soon be) covered by a Toxics TMDL. If this area is included, it should be included in a manner similar to the Los Angeles and San Gabriel River drainage areas where the only requirement is to continue implementing BMPs in accordance with those existing TMDLs.	Areas of Rancho Palos Verdes drain to the greater harbor waters and are therefore included as a responsible party for these TMDLs. These are in addition to allocations for Rancho Palos Verdes in the Machado Lake Toxics TMDL.
27.5		Wording should be inserted into the Tentative Basin Plan Amendment that: samples from the designated monitoring points shall be analyzed for all appropriate constituents. If a constituent is not detected in more than 75 percent of the samples after a period of 2 to 3 years of monitoring and that any investigative activities do not identify this outlet as a source of this pollutant(s), then future monitoring for this pollutant(s) can be scaled significantly back, and that these upstream permittees will be exempted from future abatement or corrective actions from the Regional Board.	The Regional Board Executive Officer (EO) may reduce, increase, or modify monitoring and reporting requirements, as necessary, based on the results of the TMDL monitoring program (last paragraph on page 20 of the tentative BPA). The discharger can submit the request to reduce monitoring frequency with associated evidence showing consecutive periods of compliance with the assigned allocations for the EO's consideration on a case by case basis.
28.	City of Rolling Hills		
28.1		The City of Rolling Hills has been mistakenly listed as a responsible party under the Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary MS4 Permittees. The City of Rolling Hills should only be listed as a responsible party under the Greater Los Angeles Harbor Waters MS4 Permittees, since the only drainage from the City of Rolling Hills into this watershed is to nearshore subwatersheds as depicted in Appendix III page III-40 Figure III-2 of the Regional Board staff report. The attached map of Regional Drainage of the City of Rolling Hills prepared by Geosyntec Consultants delineates stormwater runoff from the City of Rolling Hills as being tributary to three receiving waters: the Santa Monica Bay, Machado Lake, and Los Angeles Harbor nearshore. No runoff from the City of Rolling Hills is tributary to Dominguez Channel, Torrance Lateral or the Dominguez Channel Estuary. Please remove	The tentative BPA and draft Staff Report are revised accordingly. [Input from Thom]

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		the City of Rolling Hills from the list of responsible parties for the Dominguez Channel, Torrance Lateral and Dominguez Channel Estuary.	
28.2		**Relative to the City's inclusion for the Greater Los Angeles Harbor Waters,** To allow for a cost-effective approach to monitoring, it would be helpful for MS4 agencies to have the option to comply with either a concentration based or mass based standard so that MS4 agencies would be able to align monitoring requirements for other TMDLs. For example, the Machado Lake Toxics TMDL has assigned only concentration-based WLAs based on analysis of the sediment fraction from stormwater discharges at the outfall of the MS4 agencies' discharge; it would be useful to allow a similar approach for compliance with LA Harbor TMDL standards so that a single monitoring plan could be developed for both water bodies by an MS4 agency or group of agencies such as the Peninsula Cities have done for the Machado Lake Nutrient TMDL.	Comment noted and the draft Staff Report and tentative BPA are revised to include concentration-based numeric target as an alternative option for demonstrating compliance. See response to **Comment 21.3**.
28.3		**Page 31, Under Implementation, Item 5, second paragraph of the proposed Basin Plan Amendment states:** *The compliance point for the stormwater WLAs shall be at the storm drain outfall of the permittee's drainage area. Alternatively, if stormwater dischargers select a coordinated compliance monitoring option, the compliance point for the stormwater WLA may be at a storm drain outfalls or at a point in the receiving water, which suitably represents the combined discharge of cooperating parties discharging to Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters. Depending on potential BMPs implemented, alternative stormwater compliance points may be proposed by responsible parties subject to approval by the*	Comment noted. See response to **Comment 24.1**.

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		Regional Board Executive Officer. We appreciate the option to comply at the outfall of the permittee's drainage area or at a coordinated compliance monitoring point as this is clearly a means for the City to demonstrate that it is doing its part to achieve the TMDL objectives. However, the TMDL as currently written does not explicate the Waste Load Allocations (WLAs) for such a compliance option. Please clarify whether the individual WLA for an MS4 Permittee is to be calculated as its share on an area basis of the mass-based WLA, or whether a concentration-based WLA is applied, or whether either approach can be used depending on the type of monitoring program to be proposed. Please clarify/confirm that if an a MS4 Permittee chooses to comply at the outfall of its drainage area as described in the excerpt above, that the WLAs in fish would not apply to such an agency, but rather the WLA associated with the suspended solids fraction of the discharge would be sufficient to demonstrate compliance with the outfall-based WLAs in the discharge.	
28.4		Throughout the document it states that responsible agencies are each individually responsible for conducting water, sediment and fish tissue monitoring, but that they are encouraged to collaborate or coordinate efforts to avoid duplication. With respect to fish and bed sediment monitoring in the receiving water, this is an unwieldy and difficult requirement to share, necessitating undue inter-agency coordination and staff time. The City believes that the responsibility for monitoring fish and bed sediments should be assigned to the agencies within whose jurisdiction(s) the fish and bed sediments lie since they are directly responsible for the operation of those water bodies. Such an approach has been utilized in the Machado Lake Toxics TMDL.	Comment noted. See response to **Comment 24.2.**

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28.5		DDT was widely used in California in agriculture and for control of mosquitoes and other disease carrying insects. Its use in California peaked in the late 1960's, and it was officially banned by USEPA in 1972. Chlordane was used for the control of insects in lawn, home and agriculture and in particular for the control of termites from 1944 through 1988. In 1984 USEPA halted the manufacture and sale of chlordane for all uses except the control of termites, and it was banned for all uses in 1988. Dieldrin was an insecticide used in agriculture and also for mothproofing clothes and carpets. The U.S. EPA cancelled agricultural uses of Dieldrin in 1970; termiticide uses were cancelled in 1987. PCBs are regulated under the Federal Toxic Substances Control Act (TSCA); however, action levels for the management and control of PCB residuals under TSCA (50-500 parts per million, i.e., 50-500 mg/kg are currently several orders of magnitude higher than the concentrations being set by this TMDL of 3.6 parts per billion (3.6 fag/kg) in sediment and fish tissue. The City is concerned that this TMDL shifts the responsibility for controlling the residuals in soils to the cities, when the regulatory responsibility for these chemicals has always been with the California Department of Toxic Substances, the U.S. Environmental Protection Agency, and the Los Angeles Regional Water Quality Control Board. Addressing trace levels of these contaminants that may exist as background in soils throughout the watershed due to historic and ubiquitous use is beyond the fiscal resources of municipalities and outside the scope of reasonable municipal responsibility.	Comment noted. See response to **Comment 24.4.**
28.6		The WLAs assigned to point source discharges other than MS4 agencies such as the General Construction Permittees and the General Industrial Permittees and other point source dischargers are listed as water column concentrations. The WLAs for such point source dischargers should include analysis of the suspended solids fraction of the discharge in	Regional Board staff agrees. The tentative BPA requires that water samples and total suspended solids samples shall be collected and analyzed for a suite of compounds including, at a minimum, metals, including lead, zinc, and copper, DDT, PCBs, Benzo[a] anthrancene, Benzo[a]pyrene, Chrysene, Phenanthrene, and Pyrene during two wet weather events

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		the water sample for the bioaccumulative compounds Chlordane, DDT, Dieldrin, Total PCBs and PAHs because these compounds are hydrophobic. For construction sites in particular these pollutants, if present in stormwater discharge, would be associated with soils or sediments discharged from the site rather than dissolved in water. Please clarify whether the water column based WLAs for point source discharges require the collection of suspended **solids** and analysis in the bulk sediment fraction as described under water column monitoring on page 21 of the Proposed Basin Plan Amendment, in which case the WLA should be expressed as ug/kg on a dry weight basis in the sediment fraction. This was also done in the Machado Lake Toxics TMDL by requiring stormwater samples from all categories of permittees, whether MS4 or General Industrial or Construction permittees, to be analyzed for total suspended solids and that sampling be designed to collect sufficient volumes of suspended solids to allow for analysis of the bioaccumulative pollutants in the bulk sediment.	and one dry weather event each year. Sampling shall be designed to collected sufficient volumes of suspended solids to allow for analysis of the pollutants in the bulk sediment. (See tentative BPA, Monitoring Plan section on page 21)
28.7		Unless the two superfund sites in the Dominguez Channel Watershed are controlled and the Records of Decision for those sites developed consistent with the TMDL, the other WLAs for DDT and Toxicity in this TMDL will be irrelevant. The two sites should be monitored separately from MS4 agencies' discharges. The Montrose Superfund Site, as the Regional Board is well aware, is the primary cause of the Palos Verdes Shelf Superfund Site and may also be responsible for a majority of the DDT contamination in the Dominguez Channel and the Los Angeles Harbor. This TMDL is, indeed, a relevant and appropriate requirement (ARAR) for those sites.	The Regional Board agrees that the TMDL contains requirements that may be ARARs. The determination of ARARs, however, will be made in accordance with CERCLA when USEPA develops records of decisions for the sites. If any aspects of the TMDL are identified as ARARs, the cleanups will be required to be consistent with the ARARs. Also see response to **Comment 19.7.**
28.8		This TMDL places sole responsibility for control of indirect air deposition of metals on the MS4 agencies when they have	Recent U.S. Court of Appeals for 9th Circuit ruled that LA County Flood Control District (and MS4 parties) is

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		no jurisdictional authority over the sources of those pollutants, either mobile (trucks, automobiles) or stationary (industrial sources, boilers, etc.). This limited jurisdiction is acknowledged by the Los Angeles Regional Water Quality Control Board in finding B.2. *Nature of Discharges and Sources of Pollutants* in the LA County MS4 Permit as follows: *Certain pollutants present in stormwater and/or urban runoff may be derived from extraneous sources that Permittees have no or limited jurisdiction over. Examples of such pollutants and their respective sources are: PAHs which are products of internal combustion engine operation, nitrates, bis (2-ethylhexyl) phthalate and mercury from atmospheric deposition, lead from fuels, copper from brake pad wear, zinc from tire wear, dioxins as products of combustion, and natural-occurring minerals from local geology. However, the implementation of measures set forth in this Order is intended to reduce the entry of these pollutants into stormwater and their discharge to receiving waters.* The authority for the regulation of such sources rests with the State and USEPA thus MS4 agencies must not be held responsible for the costs of control of water pollutants from sources for which they have limited or no regulatory jurisdiction.	responsible for conveyance of pollutants via stormdrains, regardless if parties are 'source' of these pollutants. See *Natural Resources Defense Council (NRDC), et al. v. County of Los Angeles, et al.*, March 10, 2011.
28.9		It is well known that source control is one of the most, if not the most, effective means of. controlling the discharge of pollutants as well as the most cost-effective (witness the elimination of lead in gasoline and other such industrial sources to the extent that the final WLA for lead is already being met for this TMDL in the Dominguez Channel). Legislation for the control of copper in brake pads has been passed in the legislature with strong support from MS4	Comment noted.

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		agencies and will be implemented over the course of the next 20 years and is likely to achieve a similar significant result. Tires are, known to be a significant source of zinc and zinc is a 303d listed pollutant on a statewide basis, so similar such source control measures may be needed in order to achieve the zinc TMDL targets.	
28.10		Toxicity testing twice per year may become cost prohibitive and overly burdensome for MS4 agencies at the storm drain outfall of a permittee's drainage area. A reduced frequency of toxicity testing should be provided in the TMDL once it is established that a storm drain outfall is in compliance with the toxicity standard.	See response to **Comment 27.5.**
28.11		Statewide, it has been shown that most toxicity is associated with use of pesticides which are regulated by the State and USEPA. In such cases restriction or elimination of the use of the pesticides may be the most appropriate implementation measure.	Comment noted.
29.	City of Rolling Hills Estates		
29.1		The City of Rolling Hills Estates has been mistakenly listed as a responsible party under the Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary MS4 Permittees. The City of Rolling Hills Estates should only be listed as a responsible party under the Greater Los Angeles Harbor Waters MS4 Permittees, since the only drainage from the City of Rolling Hills Estates into this watershed is to nearshore subwatersheds as shown in Appendix III page III-40 Figure III-2 of the Regional Board staff report. As shown in the attached map of drainage for the City of Rolling Hills Estates prepared by Geosyntec Consultants, stormwater runoff from the City of Rolling Hills Estates is tributary to three receiving waters: the Santa Monica Bay, Machado Lake, and Los Angeles Harbor nearshore. No runoff from the	Rolling Hill Estates have been removed from the responsible parties list for Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary.

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		City of Rolling Hills Estates tributary to Dominguez Channel, Torrance Lateral or the Dominguez Channel Estuary. Please remove the City of Rolling Hills Estates from the list of responsible parties for the Dominguez Channel, Torrance Lateral and Dominguez Channel Estuary.	
29.2		**Relative to the City's inclusion for the Greater Los Angeles Harbor Waters,** To allow for a cost-effective approach to monitoring, it would be helpful for MS4 agencies to have the option to comply with either a concentration based or mass based standard in order to combine and coordinate monitoring requirements for other TMDLs. For example, the Machado Lake Toxics TMDL requires compliance with concentration-based..- Waste. Load Allocations (WLAs) based on analysis of the sediment fraction from stormwater discharges at the outfall of the MS4 agencies discharge; hence it would be useful to allow a similar approach for compliance with LA Harbor TMDL standards so that a single monitoring plan could be developed for both water bodies by an MS4 agency or group of agencies such as the Peninsula Cities have done for the Machado Lake Nutrient TMDL.	See response to **Comment 28.2.**
29.3		The City is in agreement with including a compliance monitoring option at the outfall of the permittee's drainage area; however the TMDL as currently written does not explicate the WLAs for such a compliance option. Please clarify whether the individual WLA for an MS4 Permittee is to be calculated as its share on an area basis of the mass-based WLA, or whether a concentration-based WLA is applied, or whether either approach can be used depending on the type of monitoring program to be proposed.	See response to **Comment 28.2.**
29.4		Throughout the proposed basin plan amendment it states that	See response to **Comment 28.4.**

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		responsible agencies are each individually responsible for conducting water, sediment and fish tissue monitoring, but that they are encouraged to collaborate or coordinate efforts to avoid duplication. It is an unwieldy and difficult requirement to share fish and bed sediment monitoring in the receiving water; that would necessitate undue inter-agency coordination and staff time. The City believes that the responsibility for monitoring fish and bed sediments should be assigned to the agencies within whose jurisdiction(s) the fish and bed sediments lie since they are directly responsible for the operation of those water bodies. Such an approach has been utilized in the Machado Lake Toxics TMDL. Please clarify/confirm that if an a MS4 Permittee chooses to comply at the outfall of its drainage area, that the WLAs in fish would not apply to such an agency, but rather the WLA associated with the suspended solids fraction of the discharge would be sufficient to demonstrate compliance with the outfall-based WLAs in the discharge.	
29.5		As the Board staff is aware, DDT was widely used in California in agriculture for control of mosquitoes and other disease carrying insects, and its use in California peaked in the late 1960's[1]. Its use was officially banned by USEPA in 1972. Chlordane was used for the control of insects in lawn, home and agriculture and in particular for the control of termites from 1944 through 1988. In 1984 USEPA halted the manufacture and sale of chlordane for all uses except the control of termites, and it was banned for all uses in 1988.[2] Dieldrin was an insecticide used in agriculture and also for mothproofing clothes and carpets. The U.S. EPA cancelled agricultural uses of Dieldrin in 1970; termiticide uses were cancelled in 1987[3]. The City is concerned that this TMDL shoulders the City with the responsibility for controlling what residuals may remain in soils from the historically-approved uses of these pesticides on private property, uses previously	See response to **Comment 24.4**.

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		approved by U.S. Environmental Protection Agency, and the State of California. Addressing trace levels of these contaminants that may exist as background in soils throughout the watershed due to historic and ubiquitous use may be beyond the fiscal resources of the City.	
29.6		The City has no authority to regulate the use in commerce of PCBs or the management of PCB-containing wastes, but is being required to control the discharge of PCBs in stormwater at concentrations in sediment that are far below USEPA regulatory standards under the Federal Toxic Substances Control Act (TSCA). Action levels for the management and control of PCB residuals under TSCA (50-500 parts per million, i.e., 50-500 mg/kg)[4] are currently four to five orders of magnitude higher than the concentrations being set by this TMDL of 3.6 parts per billion (3.6 pg/kg) in sediment and fish tissue. USEPA is contemplating regulatory action to further restrict authorized uses and regulate disposal of residuals under TSCA, and this along with control of stormwater from industrial facilities is the proper means for controlling PCBs, not by placing responsibility on MS4 agencies.	See response to **Comment 24.4**.
29.7		If an MS4 agency demonstrates through compliance monitoring at the outfall of its drainage area that the TMDL targets for organochlorine pesticides and PCBs are already being attained, further compliance monitoring should not be required of that MS4 agency. Given the fact that these pollutants have been banned from use or are no longer manufactured, it is very unlikely that the concentrations of these pollutants would increase, but rather they will continue to decrease, so continued monitoring would be a misuse of public funds.	See response to **Comment 24.7.**
29.8		The WLAs assigned to point source discharges other than	See response to **Comment 28.6** and **28.8.**

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		MS4 agencies such as the General Construction Permittees and the General Industrial Permittees and other point source dischargers are listed as water column concentrations. The WLAs for such point source dischargers should include analysis of the suspended solids fraction of the discharge instead of the water column for the bioaccumulative compounds Chlordane, DDT, Dieldrin, Total PCBs and PAHs because these compounds are hydrophobic. In particular, for construction sites subject to the General Construction Permit these pollutants, if present in stormwater discharge, would be associated with soils or sediments discharged from the site rather than dissolved in water. Please clarify whether the water column based WLAs for point source discharges require the collection of suspended solids and analysis in the bulk sediment fraction as described under water column monitoring on page 21 of Attachment A, in which case the WLA should be expressed as pg/kg on a dry weight basis in the sediment fraction. This approach was also used for the Machado Lake Toxics TMDL. Inconsistency between the monitoring requirements of TMDLs regulating the same pollutants in. the same region will create confusion among the regulated community, particularly contractors implementing the requirements of the General Construction Permit. This TMDL places sole responsibility on the MS4 agencies for control of indirect air deposition sources of metals when they have no jurisdictional authority over the sources of those pollutants, either mobile (trucks, automobiles) or stationary (industrial sources, boilers, etc.). The authority for the regulation of such sources rests with the State and USEPA. This limited jurisdiction is acknowledged by the Los Angeles Regional Water Quality Control Board in finding B.2. *Nature of Discharges and Sources of Pollutants* in the LA County MS4 Permit as follows:	

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		Certain pollutants present in stormwater and/or urban runoff may be derived from extraneous sources that Permittees have no or limited jurisdiction over. Examples of such pollutants and their respective sources are: PAHs which are products of internal combustion engine operation, nitrates, bis(2-ethylhexyl)phthalate and mercury from atmospheric deposition, lead from fuels, copper from brake pad wear, zinc from tire wear, dioxins as products of combustion, and natural-occurring minerals from local geology. However, the implementation of measures set forth in this Order is intended to reduce the entry of these pollutants into stormwater and their discharge to receiving waters.	
29.9		MS4 agencies must not be held responsible for the costs of control of water pollutants from such air and automobile sources when they have no regulatory control over the sources. It is well known that source control is one of the most, if not the most, effective means of controlling the discharge of pollutants as well as the most cost-effective; a prime example is the elimination of lead in gasoline and other sources to the extent that the final WLA for lead is already being met for this TMDL in the Dominguez Channel. Legislation for the control of copper in brake pads has been passed in the legislature with strong support from MS4 agencies and will be implemented over the course of the next 20 years and is likely to achieve a similar significant result. Similarly, tires are known to be a significant source of zinc pollutants in receiving waters on a statewide basis, so similar such source control measures may be needed in order to achieve the zinc TMDL targets.	See response to **Comment 17.4.**
29.10		Toxicity testing twice per year may become cost prohibitive and overly burdensome for MS4 agencies if it must be done at the storm drain outfall of a permittee's drainage area. A	See response to **Comment 27.5.**

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		reduced frequency of toxicity testing should be provided in the TMDL once it is established that a storm drain outfall is in compliance with the toxicity standard.	
30.	County of Los Angeles		
30.1		**The County of Los Angeles Cannot be Named a Responsible Party for the Dominguez Channel and the Greater Los Angeles and Long Beach Harbors as such Action Would Conflict with the Amended Consent Decree Entered by the Federal District Court** The designation of responsible parties under the proposed Total Maximum Daily Load (TMDL) for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor conflicts with an Amended Consent Decree entered by the federal district court in Los Angeles. Pursuant to the terms of the Amended Consent Decree, the proposed TMDL should be modified to delete the County of Los Angeles (County) as a responsible party for the Dominguez Channel, including the Torrance Lateral and Dominguez Channel Estuary, and the Los Angeles and Long Beach Harbors. In 1999 the United States and the State of California settled a lawsuit with local governmental entities over the environmental condition of the Dominguez Channel and the Los Angeles and Long Beach Harbors. The lawsuit was brought by the United States on behalf of the United States Environmental Protection Agency, the Department of the Interior and the National Oceanic and Atmospheric Agency, and by the State of California on behalf of the State Lands Commission, the Department of Fish and Game, the Department of Parks and Recreation, the Department of Toxic Substances Control and the Los Angeles Regional Water Quality Control Board (Regional Board).	See response to **Comment No. 1.1.** There is no conflict between the County of Los Angeles' Consent Decree (CD) and the proposed TMDL. The CD and the TMDL do address partially overlapping areas of contaminated sediments, but they rely on different authorities, address different concerns, and are not mutually exclusive. The proposed TMDL is necessary as part of a comprehensive approach to water quality in the Dominguez Channel and the Ports of Los Angeles and Long Beach, and nothing in the CD interferes with the Regional Water Quality Control Board's authority to adopt and implement TMDLs pursuant to Clean Water Act section 303(d), or to revise and enforce the Basin Plan. Compliance with TMDLs and related implementation plans does not constitute response action – either removal or remedial – and does not involve "Response Costs," as those terms are used in the CD. (See, e.g., *City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1414-15 ("A TMDL does not, by itself, prohibit any conduct or require any actions. Instead, each TMDL represents a goal that may be implemented by adjusting pollutant discharge requirements in individual NPDES permits or establishing nonpoint source controls. A TMDL forms the basis for further administrative actions that may require or prohibit conduct with respect to particularized pollutant discharges and water[]bodies.") (internal citations omitted)). In addition, the County of Los Angeles is listed as a permittee in the Los Angeles County MS4 permit, which is one of the regulatory mechanisms identified in the TMDL to implement

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		The settlement is set forth in an Amended Consent Decree entered by the Federal district court on August 24, 1999. The County was one of the parties to this settlement. The Regional Board also was a party, with the Executive Officer signing the Amended Consent Decree on behalf of the Regional Board. The Amended Consent Decree resolved all liability of the settling local governmental entities for all natural resource damages with respect to the "Montrose NRD Area" and all response costs incurred in connection with the "Montrose NPL Site" (Amended Consent Decree, page 19). The Montrose NRD Area was defined to include the Los Angeles and Long Beach Harbors (Amended Consent Decree, 6.J). The Montrose NPL Site was defined to include the Torrance Lateral, the Dominguez Channel from Laguna Dominguez to the Consolidated Slip, and that portion of the Los Angeles Harbor known as the Consolidated Slip (Amended Consent Decree, 6.1.). Under the Amended Consent Decree, the Regional Board explicitly agreed that, except for certain circumstances not applicable here, the Regional Board would not take any civil or administrative action against any of the settling local governmental entities, including the County, for any civil or administrative liability for natural resource damages (Amended Consent Decree, 11). Natural resource damages were defined to include loss of use, restoration costs and resource replacement costs, among other costs (Amended Consent Decree, 6.L). The Regional Board also agreed that, except for certain circumstances not applicable here, the Regional Board would not take any civil or administrative action against any of the	wasteload allocations. Furthermore, the County is responsible for ensuring that water discharged from its facilities does not cause or contribute to exceedances of water quality standards. Unless dischargers can demonstrate that their discharges did not contribute to the exceedances coming from the outfall, MS4 dischargers are jointly and severally liable for discharges from the common storm drain system. The inter-connected nature of the LA County MS4 makes it difficult to determine exactly where pollutants originate within the MS4. In such an integrated system, one or more permittees may have caused or contributed to violations. Thus, permittees are jointly and severally liable either because a permittee is one of several sources that discharge pollutants or a permittee conveys and ultimately discharges pollutants that may have originated further up the MS4.

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		settling local governmental entities, including the County to compel response activities or to recover response costs in connection with the Montrose NPL site (Amended Consent Decree, 17). Response costs were defined to include all costs of response as provided in 42 U.S.C § 9607(a)(1-4)(A) and as defined by 42 U.S.C § 9601(25) (Amended Consent Decree, 6.M). These response activities and costs included activities to remove hazardous substances from the environment, to monitor, assess, and evaluate the release or threat of release of hazardous substances (see 42 U.S.C. §9601(23)), and actions consistent with a permanent remedy such as diversions, dredging and excavations (see 42 U.S.C. §9601(24). The proposed TMDL's assignment of responsibility to the County for the Dominguez Channel and the Los Angeles and Long Beach Harbors violates this Amended Consent Decree. The obligations imposed by the proposed TMDL, such as preparing ' monitoring plans and implementation plans, monitoring, dredging of sediments and diverting stormwater, clearly fall within the definition of natural resource damages and response activities under the Amended Consent Decree. (See Amended Consent Decree, 6.L and M.) By naming the County as a responsible party for the Dominguez Channel and the Greater Los Angeles and Long Beach Harbors, the Regional Board is requiring the County to take these or related actions. Under the Amended Consent Decree, however, the Regional Board has explicitly agreed that it will not require the County to take these and other actions (Amended Consent Decree, 11 and 17). Accordingly, the proposed TMDL must be modified to delete the County as a responsible party for the Dominguez Channel, including the Torrance Lateral and Dominguez Channel Estuary, and the Los Angeles and Long Beach	

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		Harbors. Under the Amended Consent Decree, the Regional Board has agreed that it will not compel response activities by or seek natural resource damage or response costs from the County. Naming the County as a responsible party is barred by this Decree.	
30.2		**The Regional Board has Improperly Included Site Remediation and Monitoring in the Proposed TMDL** Phase II of the proposed TMDL's Implementation Plan for the Dominguez Channel and the Greater Los Angeles and Long Beach Harbors calls for the implementation of Best Management Practices (BMP) and site remedial actions. According to the proposed TMDL, "Phase II should include implementation of site-specific clean up actions. . . ." The proposed TMDL further provides that, should there be a Phase III, this phase should include implementation of "secondary and additional remediation actions as necessary ..." (Draft BPA, Attachment A, Paged 27, 28, 29 and 30) There is no authority, however, for the Regional Board to order site-specific remedial actions, including sediment monitoring, management or removal plans, as part of the proposed TMDL. A TMDL is meant to address the daily amount of a pollutant in a discharge. A TMDL does not address the cleanup of legacy pollutants that have been previously discharged. A TMDL sets forth the amount of pollutants which can be discharged to a water body on a daily basis without causing an exceedance of an applicable water quality standard. As set forth in 33 U.S.C. § 1313(d)(1)(C) "such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety ...." 40 C.F.R. § 130.2(i) defines a TMDL as "the sum of the individual WLAs for point sources and LAs for	TMDL Implementation plan does not order, nor define required site-specific remedial actions. It does discuss options. TMDLs are designed (in part) to identify and quantify pollutant sources. If bioaccumulative compounds are diffusing out of contaminated sediments then those sediments, amongst other sources, are necessarily included in the TMDL budget to attain WQS. The regulatory mechanisms to implement the assigned allocations may include cleanup and abatement orders among Board orders and actions.

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		nonpoint sources and natural background." A "WLA" or "waste load allocation" is defined as "the portion of receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution." 40 C.F.R. § 130.2(h). A "LA" or "load allocation" is defined as "the portion of receiving water's loading capacity that is attributed either to one of its existing or future non-point sources of pollution or to natural background sources." 40 C.F.R. § 130.2(g). The term "loading capacity" is defined as "the greatest amount of loading that water can receive without violating water quality standards." 40 C.F.R. § 130.2(f). Thus, a TMDL sets forth the amount of pollutants from existing and future point sources and non-point sources that a water body can receive without violating water quality standards. Nothing in the TMDL addresses legacy pollutants that have been previously discharged. No authority is given to the Regional Board to address historically discharged pollutants. This is not to say that the Regional Board might not have other authority to address contaminated sediments in the Dominguez Channel and/or the harbors. Both Federal and State law may provide tools to the Regional Board to address the contaminated sediments. These may include provisions such as cleanup and abatement orders under the Porter-Cologne Act, Water Code § 13304, or the right to recover response costs under Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42. U.S.C. § 9601 et seq. To invoke those remedies, the Regional Board must comply with the provisions of those statutes. The Regional Board has no authority, however, under a TMDL to require remedial actions or monitoring at sites with respect to pollutants that have already been discharged.	

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30.3		**Toxicity Waste Load Allocation for the Dominquez Channel Freshwater Should be Removed from the Proposed TMDL** The draft Staff Report states that "water column toxicity was repeatedly observed at S28 monitoring station from 2002 to 2010" (Draft Staff Report, Page 27). This statement is not accurate based on our review of available data. The table below presents the toxicity data collected at S28 and submitted annually to the Regional Board by Los Angeles County Department of Public Works (LACDPW) over the last 8 years. The same data was provided to the United States Environmental Protection Agency (USEPA) during the development of this proposed TMDL. The data shows *Ceriodaphnia dubia* tests with inhibited survival and reproductive success during wet weather events in 2002 and 2005, based on a 1 toxic unit (TU) target. There was no *C. dubia* toxicity detected during dry weather between 2002 and 2010. It appears that sea urchin test results having greater than 1 TU were inappropriately counted as toxicity observations in Dominguez Channel freshwater. Use of sea urchin, a marine species, to assess freshwater toxicity is inappropriate. The brining of freshwater samples by mixing with sea salt or saltwater significantly changes the chemical composition of the sample. Further, currently there are discrepancies in the laboratory methods being used for determining freshwater toxicity using sea urchin. While some laboratories use hypersaline brine to raise the salinity of freshwater sample, others prefer to use sea salt. The use of hypersaline brine leads to a detection limit higher than 1 TU, making it difficult to assess toxicity based on 1 TU. Adding sea salt is potentially toxic to embryo in fertilization tests, making it very difficult to determine the true cause of toxicity. While	Sea urchin was selected and has been used for toxicity testing since 2002 and collected data are used to confirm listing of impairment. Regional Board staff observes that responsible parties could submit a request to replace sea urchin with a toxicity testing species that they believe is more appropriate to assess fresh water toxicity. The current Freshwater Toxicity Allocation is based on available *Ceriodaphnia dubia* and sea urchin testing data. Staff disagrees that 'chronic toxicity tests are not an appropriate predictor of wet weather toxicity.' Aquatic organisms exposed to a pollutant may elicit a chronic biological response, regardless of acute or chronic time of exposure. See response to **Comment 19.2.**

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		the 2008-09 toxicity testing for sea urchin at S28 was conducted using hypersaline brine, sea salt was used in other years. Due to these inconsistencies and the lack of scientific basis for using a marine species as indicator for freshwater toxicity, the sea urchin toxicity data cannot be used in assessing water column toxicity in Dominguez Channel. It is also worth noting that there were only two toxic results between 2002 and 2005 *based on C. dubia tests,* and no toxicity was detected after October 2005 which coincides with USEPA's ban on urban use of diazinon. Further, chronic toxicity tests are not an appropriate predictor of wet weather toxicity because the exposure time of seven days for chronic tests is significantly longer than the duration of most wet weather events in Southern California which often last for less than a day. Because of the reasons discussed above, the proposed TMDL should be revised to remove the WLA for toxicity for Dominguez Channel freshwater, specifically on pages 3, 9, and 11 of the Draft Basin Plan Amendment (BPA).	
30.4		**The Determination of Total Recoverable Metals Should Use Consistent Values for Hardness and Conversion Factor** Freshwater targets for total recoverable metals as presented on page 3 of the Draft BPA were calculated using California Toxics Rule (CTR) acute dissolved criteria based on a median hardness and 90 percentile conversion factor. Using the median hardness and the 90 percentile conversion factor is arbitrary and not consistent. A more scientifically robust approach would be to use either the median or the 90th percentile values for both parameters. We recalculated the dissolved and total recoverable metals	The CTR State Implementation Plan (SIP) provides acute metals criteria conversion factors which shall be determined from the 90% value. The use of the median hardness value was also determined by CTR SIP guidance. Based on commenter's analysis, we have revised the final TMDL calculations to include the data points from the 2007-08 monitoring year, thereby increasing the total number of data points to 35. The numeric targets and the interim allocations in the BPA have been revised based on these new data.

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		targets based on two consistent scenarios: (i) using median hardness and median conversion factor and (ii) using 90 percentile hardness and 90 percentile conversion factor. We used the same data (2002-10 wet-weather data at S28) as the proposed TMDL with the addition of 5 data points from the 2007-08 monitoring year which was inexplicably and erroneously omitted in the proposed TMDL, increasing the total number of data points to 35. This omission renders staff's conclusion invalid. The table below presents the total recoverable metals targets under the two scenarios. Under both scenarios the values are significantly higher than what was presented in the proposed TMDL. Though either of the scenarios can reasonably be used, we recommend using the median values of the hardness and conversion factors. Therefore, we strongly urge that the metals targets and the corresponding allocations in the proposed TMDL be revised to reflect what is presented under Scenario 1.	
30.5		**The Dominguez Channel Freshwater Metals Interim Allocations are Incorrect and Need To Be Revised** As stated on page 10 of the Draft BPA and page 86 of the Draft Staff Report, the metals interim allocations for the Dominguez Channel freshwater are set to "the 95 percentile of total metals data collected from January 2006 to January 2010 with the exclusion of two outlier data points that occurred in December 2006 and April 2007." We have two main concerns regarding the approach used to determine the proposed TMDL's interim allocation. First, the two data points measured in December 2006 and April 2007 are inappropriately excluded from the calculations. It is not appropriate to exclude data simply because they are relatively high in magnitude; rather, it is potentially a trigger for further assessment. In our assessment we have found no evidence to indicate that these two data points are in error; instead, they appear to reflect the highly variable and unpredictable nature of stormwater quality	Based on commenter's provided data, we have included data from 2007 and 2008 as noted above. We have recalculated the interim allocations using data between 2006 and 2010.

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<tr><td></td><td></td><td>and represent actual water quality condition at the time of sample collection

Second, the calculation inexplicably and erroneously omits data from the 2007-08 monitoring year. This omission renders staffs conclusions invalid. The error in calculating the interim allocations is evident from the fact that the interim allocation for lead (35.8 µg/L) is less than its final allocation (39.3 µg/L).

<table>
<tr><td></td><td colspan="2">Interim Allocations for Dominguez Channel (µg/L)</td></tr>
<tr><td>Metal</td><td>Re-Calculated Interim Allocation</td><td>Current Interim Allocation in the Proposed TMDL</td></tr>
<tr><td>Copp</td><td>263</td><td>93.1</td></tr>
<tr><td>Lead</td><td>153</td><td>35.8</td></tr>
<tr><td>Zinc</td><td>1300</td><td>382.5</td></tr>
</table>

However, should the so-called outliers remain excluded in the interim targets calculation, the proposed TMDL should be revised for consistency and allow the same approach to be used during compliance determination, i.e., discharger's compliance with the interim allocations should be assessed by comparing the 95 percentile values of data collected at the discharge site (after omitting the outliers) with the proposed TMDL interim allocations.</td><td></td></tr>
<tr><td>30.6</td><td></td><td>Total Metals Waste Load Allocations and Interim Allocations for Torrance Lateral Should Be Re-calculated Using Site-Specific Data

As presented on pages 11-12 of the Draft BPA, the metals allocations for the Torrance Lateral are set to target values calculated based on hardness and conversion factors obtained from Station S28. Given that Torrance Lateral has its own</td><td>Commenter provided monitoring results from water samples collected (apparently during wet weather events) in Torrance Lateral between 2008-2010. We do not agree the 10 data points are sufficient to determine site-specific allocations. It is generally recognized that stormwater has considerable variability and therefore compiling a more robust data set is essential prior to evaluating hardness values and conversion factors used to set total metals targets. For example, we have</td></tr>
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<tr><td></td><td></td><td>water quality data, the extrapolation of targets at S28 to Torrance Lateral is inappropriate. Although the proposed TMDL recognizes the 10 wet-weather data points collected at the tributary station TS19 at Torrance Lateral, this data was not used on grounds that they were insufficient. We disagree with this assertion because assessments of numerous 303(d) listings and derivation of targets and allocations for several previous TMDLs in the Los Angeles region have relied on even smaller data sets. We believe 10 data points are sufficient to derive metals targets and allocations for the Torrance Lateral.

We calculated the metals targets for Torrance Lateral based on' the available data at TS19. The resulting total metals targets based on various combinations of site hardness and conversion factors are presented in the table below. We urge that the total metals allocations for Torrance Lateral be revised to reflect site-specific conditions using median hardness and conversion factor values as shown in Scenario 1. At a minimum, Scenario 3 should apply as it uses the same median hardness/90 percentile conversion factor approach in the proposed TMDL.

Similarly, the interim allocations for Torrance Lateral were re-calculated using site specific data collected at TS19 and the 95 percentile approach. The re-calculated interim allocations as shown below should apply for Torrance Lateral.

<table>
<tr><td></td><td colspan="2">Interim Allocations for Dominguez Channel (µg/L)</td></tr>
<tr><td>Metal</td><td>Re-Calculated Interim Allocation</td><td>Current Interim Allocation in the Proposed TMDL</td></tr>
<tr><td>Copp</td><td>156.7</td><td>93.1</td></tr>
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</td><td>used n=35 in Dominguez Channel freshwaters and EPA used n=30 in Los Cerritos Channel freshwaters.

We will consider revising the Torrance Lateral total metal targets when more wet weather monitoring results are obtained in the waterbody. In the meantime, the Dominguez Channel freshwater metals targets apply to Torrance Lateral.

While we believe it is appropriate to make 303d list decisions based on small data sets, as has been set forth in State's Listing Policy, in this situation we have a larger dataset from a similar and connected waterbody; therefore, for setting targets and allocations it is more appropriate and robust to use these data.</td></tr>
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<tr><td></td><td></td><td><table><tr><td>Zinc</td><td>1034</td><td>382.5</td></tr></table></td><td></td></tr>
<tr><td>30.7</td><td></td><td>The Use of Biota-Sediment Accumulation Factor Approach for Setting Sediment Targets is Not Appropriate

Sediment targets associated with fish tissue (Draft BPA, Page 5) appear to consist of criteria derived based on biota-sediment accumulation factor (BSAF) studies conducted in other parts of the country. Because BSAF-derived criteria are location specific, it is not appropriate to apply criteria derived for other areas to the proposed TMDL. Further, the BSAF approach disregards the complex bioaccumulation and biomagnification mechanisms of organic chemicals in the aquatic food chain.

In addition, the proposed TMDL uses the minimum of Effect Range Low (ERL) levels of the marine sediment quality guidelines and the BSAF-derived targets to calculate the WLAs and LAs. This manner of establishing targets and WLAs is arbitrary and leads to unreasonably strict standards.

Currently, the State Water Resources Control Board (State Water Board) is developing fish tissue associated Sediment Quality Objectives (SQO), referred to as SQO-Part 2. This useful tool will be available in the near future and can be used to refine the fish associated sediment targets during the reopener. In the meantime, ERL values should be used for all chemicals of concern to calculate sediment allocations. Accordingly, the sediment WLAs and LAs for total Polychlorinated Biphenyls (PCBs) should be recalculated using the ERL value of 22.7 µg/kg, in place of the BSAF-based value of 3.6 µg /kg.</td><td>The BSAF values used for bioaccumulative TMDLs (DDT and PCBs) are based on scientific studies evaluating aquatic food web dynamics just as are outlined in the SQO-Part 2 tool. Because the SQO-Part 2 is not final, it is appropriate to use scientific studies using the same technical approach to set sediment targets related to fish tissue goals for these TMDLs.

Once the SQO-Part 2 is final, then the tool can be applied to these waters and if necessary, sediment targets can be modified and incorporated into future TMDLs upon re-consideration.</td></tr>
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30.8		**Sediment Quality Objective Part 2 Should Be Considered as One Way of Compliance Demonstration for Bioaccumulative Compounds** The State Water Board is currently developing the SQO Part 2 which addresses the risk posed to fish and human health by pollutants in sediments in enclosed bays and estuaries. Similar to the option of using SQO Part 1 as a means for compliance assessment for sediment-associated risks to aquatic organisms (as indicated on page 16 of the BPA), SQO Part 2 should be used as a means of compliance determination for bioaccumulatives. Although SQO Part 2 has not been completed, *the* proposed TMDL should recognize this approach and allow for its use upon adoption by the State Water Board. We recommend that an item (c) be added on page 19 for SQO Part 2 as option under the means for compliance demonstration for bioaccumulatives.	The SQO-Part 2 technical approach has not been finalized and the sediment quality objectives have not been approved by SWRCB, therefore it is premature to include this in these TMDLs. SQO-Part 2, once final, can be incorporated into the TMDL upon its reconsideration.
30.9		**Load Allocations for Air Deposition Should Not Be Set to Existing Condition** The proposed TMDL sets direct air deposition allocations to the existing load estimates for copper, zinc, and Polycyclic Aromatic Hydrocarbons (PAHs). Only lead allocation is assigned based on air quality criteria. Although no air quality standard for other metals and PAHs currently exist, reductions of air-associated loading contributions for these pollutants should be considered in the proposed TMDL allocations. Many studies have shown that air deposition is a major source of water pollution, and allowing such pollutant inputs to continue at its current level places an unreasonable burden on stormwater discharges. The USEPA and California EPA, having authority over air pollution control, should implement	Only lead (Pb) has expected reductions from air deposition, based on recent USEPA and CalEPA regulations on air criteria for this heavy metal, as cited in the TMDL. Unfortunately there is no reason to believe that lead reductions will also yield some copper or zinc reductions, since the lead sources are very unique; e.g., battery smelter/recyclers, etc. The two agency have been investigating means of reducing Cu and Zn air sources; however no regulations have been enacted nor anticipated; therefore we have made realistic load allocations (no change) from these sources. See also response to **Comment 40.14.**

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		regulatory mechanisms to reduce or prevent the emission of pollutants of concern into the air. Studies conducted by the Southern California Coastal Water Research Project (SCCWRP) and the University of California, Los Angeles (UCLA) have found that air deposition accounts for 50 to 100 percent of trace metals loading in Los Angeles region. In the absence of control mechanisms on major air deposition sources, it could be impossible' to attain the allocations of the proposed TMDL. We urge the USEPA to re-evaluate the current LA for air deposition and commit to working with appropriate parties to reduce trace metals loading from air deposition.	
30.10		**Waste Load Allocations and Load Allocations for Stormwater Discharges Should Be Expressed as Mass Per Year** Where data are available, WLAs and LAs should be expressed as mass per year. Expressing loading in mass as opposed to concentration more appropriately reflects actual environmental impact. As currently presented in the proposed TMDL, allocations are expressed as mass per year only for the final allocations of metals (copper, lead, and zinc), PAHs, dichlorodiphenyltrichloroethane (DDT), and PCBs in sediment for the Estuaries and Harbors. Other allocations, for which sufficient data is available, should be revised and expressed in a similar manner. We request that the following allocations be modified: A) Dominguez Channel freshwater interim allocations for metals. (Draft BPA, Page 10) B) Estuaries and Harbors sediment interim allocations for metals, DDT, PAHs, and PCBs. (Draft BPA, Page 10) C) Dominguez Channel freshwater final allocations for	Interim allocations are expressed in measurements similar to currently available monitoring data, so as to be easily compared for (interim) compliance purposes. Final freshwater metals allocations are expressed in mass/day since these are acute criteria. Other sediment allocations are concentration-based since that is best use of available data and criteria.

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		metals. (Draft BPA, Page 11). Freshwater metals final allocations should be expressed in kg/year, as opposed to g/day. D) Consolidated Slip and Fish Harbor sediment final allocations for cadmium, chromium, and mercury. (Draft BPA, Page 15) E) Estuaries and Harbors sediment final allocations for chlordane, dieldrin, and toxaphene. (Draft BPA, Page 19)	
30.11		**The United States Environmental Protection Agency Should Be Named as a Responsible Party** As indicated in the proposed TMDL, two USEPA-managed Superfund sites are located within the drainage area of the proposed TMDL. However, USEPA is neither listed as a responsible party nor required to monitor or implement remedial actions. The proposed TMDL does not assign any responsibility to the USEPA other than stating that "the TMDL for DDT should be taken into account in the course of the remedial decision-making process" (Draft BPA, Page 27). Because these Superfund sites potentially contribute to receiving water impairments, the USEPA should be named as a responsible party on page 31-32 of the Draft BPA. Further, the USEPA should be assigned WLAs and required to conduct monitoring and take remedial actions during Phase I implementation.	USEPA is not a responsible party with respect to the USEPA-lead Superfund sites. Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), USEPA oversees the investigation and remediation at the Superfund sites; it is not a responsible party, but a regulatory agency. Other entities are responsible for the discharges of hazardous substances at the Superfund sites, such as DDT, including the owners of the property. No change will be made to the TMDL.
30.12		**Dry-Weather Monitoring for Dominguez Channel and Torrance Lateral Freshwaters Should Not Be Required** The proposed TMDL requires a dry-weather monitoring event in addition to two wet weather monitoring events every year for Dominguez Channel and Torrance Lateral. Requiring dry-weather monitoring for these water bodies is	Whereas dry weather TMDLs for metals are not defined in freshwaters, the water quality standards must still be attained and continued monitoring helps to evaluate compliance. Recall chronic criteria apply during dry weather conditions.

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		inappropriate because the proposed TMDL clearly indicates that they are impaired only during wet weather. Available data does not indicate impairment during dry weather. Consequently any monitoring and compliance requirements should be limited to wet weather. The proposed TMDL should be revised to remove dry weather-monitoring for Dominguez Channel and Torrance Lateral freshwaters.	
30.13		**Final Water Column WLA for Total PAHs for the Estuaries and Harbors Should Exclude Pyrene** Due to the absence of CTR human health criteria for total PAHs, the proposed TMDL assigns the lowest CTR human health criteria of 0.049 µg/L for individual PAHs to the sum of six PAH compounds of concern [benzo(a)anthracene, benzo(a)pyrene, chrysene, phenanthrene, pyrene, and 2-methylnaphthalene) (Draft BPA, Page 12). However, the CTR human health criteria for pyrene (one of the six PAH compounds of concern) is 11,000 µg/L, which is several orders of magnitude higher than the criteria for other PAHs. In other words, a pyrene concentration of anywhere between 0.049 and 11,000 µg/L would exceed the proposed total PAH criteria while meeting the criteria for pyrene. We urge that pyrene be removed from the sum of PAHs and, if necessary, be assigned its own CTR. criteria apart from other PAH compounds.	The final TMDL and BPA have been modified to include water column based PAH allocations consistent with CTR human health criteria; we have defined the criteria per individual compound. CTR human health criteria were not established for total PAHs. Therefore, the CTR criteria for individual PAHs of 0.049 µg/L are applied individually to benzo(a)pyrene, benzo(a)anthracene, and chrysene. The CTR human health criterion for Pyrene is 11,000 µg/L. Other PAH compounds in the CTR shall be screened as part of the TMDL monitoring.
30.14		**Urban Runoff and Stormwater Should Not Be Considered as a Source of Legacy Pollutants** The proposed TMDL states that the legacy pollutants, such as PCBs, DDT, dieldrin and chlordane, are being conveyed by urban and stormwater runoff into the receiving waters. This statement is not supported by evidence. Available data for both dry and wet weather at the Dominguez Channel Mass	Commenter is ignoring the reality that pollutants such as DDT, PCBs, dieldrin and chlordane exist within the urban areas and therefore are still entering the receiving waters via stormwater runoff. Banning the products has not removed them from the watershed. Monitoring results by County have not shown detections to date, however this is most likely due to lack of sensitivity of analytical methods and insufficiently low method detection limits. More specifically, County

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		Emission Station, S28, and its six tributary stations have not detected those legacy pollutants. The chemical products that were sources of these pollutants were banned from the market decades ago and, today, urban and stormwater runoff is not the source for these pollutants. The detection of these pollutants only in bottom sediments of relatively stagnant water bodies (lakes, estuaries, and bays) indicates that these pollutants were accumulated in those water bodies during the times of their legal use before the 1980s. In the absence of supporting evidence showing that legacy pollutants are still being transported by the municipal separate storm sewer system (MS4), a reference to urban runoff and stormwater as sources of legacy pollutants is inappropriate and should be removed.	results are reported as less than values, yet those values are above numeric CTR levels, so we have no evidence these compounds are indeed below standards. Responsible parties should use sampling and analytical methods (with MDLs at CTR levels) in the forthcoming TMDL Monitoring Plans.
30.15		**Monitoring Responsibilities of the Los Angeles River and the San Gabriel River Metals TMDLs Responsible Agencies Should Be Clarified** The proposed TMDL requires the responsible agencies identified in the previously promulgated metals TMDLs for Los Angeles River (LAR) and San Gabriel River (SGR) to conduct water and sediment monitoring (Draft BPA, Page 25). It should be noted that the LAR and SGR estuaries were not part of the respective effective metals TMDLs. The most downstream parts of the LAR and SGR covered under the respective metals TMDLs are fully channelized and contain no bed sediment, making sediment monitoring in these channels impossible. We request that the sediment monitoring locations and requirements for the LAR and SGR agencies under the proposed TMDL be clarified.	Los Angeles River Watershed and San Gabriel River Watershed responsible agencies identified in metals TMDLs already in effect for Los Angeles River and San Gabriel River watersheds are responsible for conducting water and sediment monitoring above the Los Angeles River Estuary and at the mouth of the San Gabriel River, respectively, to determine the Rivers' contribution to the impairments in the Greater Harbor waters. Sampling locations will be specified in the Monitoring Plans to be approved by the Executive Officer after the TMDL is in effect.
30.16		**Los Cerritos Channel Watershed Should Not Be Considered as Part of the Nearshore Subwatersheds**	See response to **Comment 19.4.**

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		As shown in Figure 4-1 of the Draft Staff Report and Figure III-2 of Appendix III, it appears that the Los Cerritos Channel Watershed is incorrectly considered as part of the Nearshore subwatershed. The Los Cerritos Channel is a receiving water body, which has its own 303(d) listings and TMDLs and should be excluded from the proposed TMDL's nearshore subwatershed boundary. Similar to LAR and SGR, this water body already has its own metals TMDL (effective March 2010) and the associated responsible agencies were assigned WLAs and LAs under the existing TMDL. Therefore, the nearshore subwatershed drainage area for the San Pedro Bay should be revised to exclude the area covered under the Los Cerritos Channel metals TMDL, and the associated allocations for San Pedro Bay should be recalculated and assigned to appropriate responsible agencies accordingly.	
30.17		**Deadline for Achieving the Interim Allocations Must Be Extended** The proposed TMDL currently requires compliance with the interim allocations at the effective date (Draft BPA, Page 33 Table 7-40.2). This is inappropriate for several reasons. First, the interim allocations are set to the 95 percentile of the current conditions, indicating that the interim allocations are currently being exceeded 5 percent of the time. In other words, the interim allocations are not representative of the current conditions and cannot be met immediately without implementation of control measures. Second, interim allocations are calculated based on limited data and therefore contain significant uncertainty. We request that the deadline to attain the interim allocations be extended by four years. This would be consistent with the Santa Clara River Bacteria TMDL which allows four years to attain the 95 percentile interim allocations.	See response to **Comment 14.6** and **18.1.**

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30.18		**Deadline to Submit the Monitoring Plan Should Be Extended** The proposed TMDL, addressing numerous pollutants, water body types, and responsible agencies, is much more complex than TMDLs previously developed for the Los Angeles Region. Yet, the proposed TMDL requires the submission of a monitoring plan within six months of the effective date. This is not a reasonable timeframe based on our experience in designing monitoring programs for previous TMDLs. Developing a monitoring plan of this complexity would require hiring outside experts as well as coordinating with multiple agencies throughout several watersheds. By comparison, the development of the monitoring plan for the Ballona Creek TMDL took over a year. Considering the complexity associated with the proposed TMDL, we request that the deadline for submitting the monitoring plan (Task 2 in Table 7-40.2) be extended to 18 months from the effective date.	See response to **Comment 23.1c.**
30.19		**Deadline to Submit the First Annual Implementation Report Should Be Extended** The deadline for the first annual implementation progress report is set at six months from the submittal of the Implementation Plan and Sediment Management Plan. This timeframe is too short to report meaningful progress on implementation. We request that the deadline for the first progress report be set to at least one year from the submission of the Implementation Plan.	Regional Board staff agrees and the deadline for the first annual implementation report is revised to 3 years after the effective date of the TMDL. (See revised tentative BPA and draft Staff Report).
30.20		**The Schedule for the Proposed Implementation Phases Should Be Modified** The proposed TMDL requires the completion of Phase 1, Phase II, and Phase III implementation in 5, 15, and 20 years,	Regional Board staff finds that a 20-year implementation period with built-in implementation phases that allow responsible agencies to develop and implement TMDL implementation plans and sediment management plans to comply with the TMDL is appropriate. The main component

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		respectively, from the effective date. With the submission of the first Implementation Plan set to two years, the responsible agencies are allowed only three years during Phase I to complete the implementation of structural and non-structural BMPs. Based on our previous BMP implementation experience, the proposed timeline is unrealistic. Project planning, design, land acquisition, budgeting, environmental permitting, and construction of water-quality improvement projects could minimally take from 8 to 10 years. Further, the final compliance date for the proposed TMDL should take into account the schedules of upstream watershed TMDLs, such as LAR and SGR metals TMDLs. Therefore, the implementation schedule for Phase I should be set at 10 years from the effective date and that of Phase II and Phase III should be set at 20 and 25 years, respectively.	of Phase I will be to secure the relationships and agreements between cooperating parties and to develop a detailed scope of work with priorities and achievable milestones. Responsible agencies are not required to complete structural and non-structural BMPs in three years. Detailed lay out of the implementation plan is provided in the tentative BPA.
30.21		**The Proposed TMDL Significantly Underestimates the Cost to Comply** The proposed TMDL estimates the cost to treat stormwater discharge from the Dominguez Channel Watershed to range from about $60 million to $250 million over 20 years depending on the type of BMP used. However, our preliminary analysis indicates that this may significantly underestimate the actual implementation cost. Our cost estimate for the same watershed using best available watershed data (excluding that associated with sediment management), ranges from $500 million to $1.5 billion depending on BMP implementation options. The proposed TMDL should include any limiting assumptions employed in its cost analysis that could have contributed to the significant underestimation such as the use of design storm (i.e., 85 percentile storm event). Additionally, the proposed TMDL does not consider the costs	Detailed information associated with BMP implementation options used for the preliminary analysis of the implementation cost of $500 million-$1.5 billion are not provided in the comment. In addition, see response to **Comment 23.9.**

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		associated with sediment management for the estuaries of Dominguez Channel and LAR, although the implementation section of the proposed TMDL requires the development of a Sediment Management Plan to address contaminated sediments in the estuaries, with such remedial actions to be considered during Phase II implementation. We urge that the proposed TMDL's economic analysis be revised to reflect a more realistic cost to comply including the cost to undertake necessary remedial actions with respect to sediment.	
30.22		**Miscellaneous Comments:** A) The County of Los Angeles and incorporated cities MS4 permit is erroneously referred to as "LACDPW NPDES MS4 permit" in several locations in the staff report. This should be corrected. B) Jurisdictional area maps for the various water bodies should be incorporated into the Staff Report. C) The Zinc freshwater chronic criterion is higher than the acute and appears to be erroneous. Please check for accuracy. (Draft BPA, Page 3). D) Water column and associated pollutant impairments are missing from Tables 2-5, 2-6, and 2-7 of the Draft Staff Report. Those tables need to be revised to reflect the correct pollutant-water body matrix combinations. E) Sediment WLAs are not applicable to Torrance Lateral because it is a concrete lined channel and has no contaminated sediments (Draft BPA, Page 12).	A) The corrections have been made. B) Jurisdictional maps are included in the Appendix II to the Staff Report. See Figure III.4-1 and III.4-2 C) Zn criteria are correct. The chronic criterion is accurately calculated and very slightly higher than acute criterion. D) These tables show the 303(d) lists. Table 2-18 shows the Assessment Findings for this TMDL. E) Sediment WLAs are provided for Torrance Lateral since sediments have been observed and monitored in that waterbody. See 1998 303(d) list. While the existence of sediments in the Lateral may be infrequent, it may contribute sediments downstream to Dominguez Channel Estuary.

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		F) The majority of dry weather loading from the SGR is much higher than that of LAR (Draft BPA, Page 7), despite less drainage area and development in SGR Watershed. For example, lead contribution is 73 percent for SGR compared to 20 percent for the LAR. The reasons for such loading are not independently clear and should be explained. G) The proposed TMDL sets the freshwater chronic total PCBs target for aquatic life to 0.0002 µg/L (Draft BPA, Page 3). This is incorrect. The CTR total PCBs criteria for the protection of aquatic life in freshwater is 0.014 µg/L. The PCB target and any corresponding analysis and/or allocations thereof should be corrected. H) "MS4-LA County et al" in each water body/source allocation should be clarified to list all responsible cities under the County of Los Angeles and incorporated cities MS4 permit for each water body/source allocation.	F) Dry weather flows are more dependent on discharge volume of upstream wastewater treatment plants, not correlated to watershed drainage area. G) The freshwater PCBs chronic aquatic life criteria has been revised. H) "MS-4 LA County et al." refers to the County of Los Angeles, County Flood Control District and the co-permitees with discharges to the Dominguez Channel and Greater Harbor Waters. See the responsible parties list Implementation Plan, No.6 (page 31 of the tentative BPA) for the detailed list of Los Angeles County MS4 Permittees subject to this TMDL.
31.	Los Angeles Flood Control District		
31.1		**The Los Angeles County Flood Control District Cannot be Named a Responsible Party for the Dominguez Channel and the Greater Los Angeles and Long Beach Harbors as such Action Would Conflict with the Amended Consent Decree Entered by the Federal District Court** The designation of responsible parties under the proposed TMDL for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor conflicts with an Amended Consent Decree entered by the federal district court in Los Angeles. Pursuant to the terms of the Amended	See response to **Comment 1.1.** and **30.1.** There is no conflict between the Los Angeles County Flood Control District's Consent Decree (CD) and the proposed TMDL. The CD and the TMDL do address partially overlapping areas of contaminated sediments, but they rely on different authorities, address different concerns, and are not mutually exclusive. The proposed TMDL is necessary as part of a comprehensive approach to water quality in the Dominguez Channel and the Ports of Los Angeles and Long Beach, and nothing in the CD interferes with the Regional Water Quality Control Board's authority to adopt and implement TMDLs pursuant to Clean Water Act section

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		Consent Decree, the proposed TMDL should be modified to delete the Los Angeles County Flood Control District (LACFCD) as a responsible party for the Dominguez Channel, including the Torrance Lateral and Dominguez Channel Estuary, and the Los Angeles and Long Beach Harbors. In 1999 the United States and the State of California settled a lawsuit with local governmental entities over the environmental condition of the Dominguez Channel and. the Los Angeles and Long Beach Harbors. The lawsuit was brought by the United States on behalf of the United States Environmental Protection Agency, the Department of the Interior and the National Oceanic and Atmospheric Agency, and by the State of California on behalf of the State Lands Commission, the Department of Fish & Game, the Department of Parks and Recreation, the Department of Toxic Substances. Control and the Regional Board. The settlement is set forth in an Amended Consent Decree entered by the federal district court on August 24, 1999. The LACFCD was one of the parties to this settlement. The Regional Board also was a party, with the Executive Officer signing the Amended Consent Decree on behalf of the Regional Board. The Amended Consent Decree resolved all liability of the settling local governmental entities for all natural resource damages with respect to the "Montrose NRD Area" and all response costs incurred in connection with the "Montrose NPL Site" (Amended Consent Decree, p. 19). The Montrose NRD Area was defined to include the Los Angeles and Long Beach Harbors (Amended Consent Decree, 6.J). The Montrose NPL Site was defined to include the Torrance Lateral, the Dominguez Channel from Laguna Dominguez to the Consolidated Slip, and that portion of the Los Angeles	303(d), or to revise and enforce the Basin Plan. Compliance with TMDLs and related implementation plans does not constitute response action – either removal or remedial – and does not involve "Response Costs," as those terms are used in the CD. (See, e.g., *City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1414-15 ("A TMDL does not, by itself, prohibit any conduct or require any actions. Instead, each TMDL represents a goal that may be implemented by adjusting pollutant discharge requirements in individual NPDES permits or establishing nonpoint source controls. A TMDL forms the basis for further administrative actions that may require or prohibit conduct with respect to particularized pollutant discharges and water[]bodies.") (internal citations omitted)). In addition, the District is listed as a permittee in the Los Angeles County MS4 permit, which is one of the regulatory mechanisms identified in the TMDL to implement wasteload allocations. Furthermore, the District is responsible for ensuring that water discharged from its MS4 does not cause or contribute to exceedances of water quality standards. Unless dischargers can demonstrate that their discharges did not contribute to the exceedances coming from the outfall, MS4 dischargers are jointly and severally liable for discharges from the common storm drain system. The inter-connected nature of the storm drain system makes it difficult to determine exactly where pollutants originate within the MS4. In such an integrated system, one or more permittees may have caused or contributed to violations. Thus, permittees are jointly and severally liable either because a permittee is one of several sources that discharge pollutants or a permittee conveys and ultimately discharges pollutants that may have originated further up the MS4. See *NRDC v. County of Los Angeles et al.* (9th Cir. Mar. 10, 2011) __F.3d ___((holding that the District's MS4 caused or contributed to

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		Harbor known as the Consolidated Slip (Amended Consent Decree, 6.1.). Under the Amended Consent Decree, the Regional Board explicitly agreed that, except for certain circumstances not applicable here, the Regional Board would not take any civil or administrative action against any of the settling local governmental entities, including the LACFCD, for any civil or administrative liability for natural resource damages (Amended Consent Decree, 11). Natural resource damages were defined to include loss of use, restoration costs and resource replacement costs, among other costs (Amended Consent Decree, IT 6.L). The Regional Board also agreed that, except for certain circumstances not applicable here, the Regional Board would not take any civil or administrative action against any of the settling local governmental entities, including the LACFCD to compel response activities or to recover response costs in connection with the Montrose NPL site (Amended Consent Decree, 17). Response costs were defined to include all costs of response as provided in 42 U.S.C § 9607(a) (1-4) (A) and as defined by 42 U.S.C § 9601(25) (Amended Consent Decree, 6.M). These response activities and costs included activities to remove hazardous substances from the environment, to monitor, assess, and evaluate the release or threat of release of hazardous substances (see 42 U.S.C. §9601(23)), and actions consistent with a permanent remedy such as diversions, dredging and excavations (see 42 U.S.C. §9601(24). The proposed TMDL's assignment of responsibility to the LACFCD for the Dominguez Channel and the Los Angeles and Long Beach Harbors violates this Amended Consent Decree. The obligations imposed by the proposed TMDL, such as preparing monitoring plans and implementation	pollution exceedances into the Los Angeles and San Gabriel Rivers: "In light of the evidence that the Los Angeles River and San Gabriel River mass-emission stations are in concrete portions of the MS4 controlled by the District, it is beyond dispute that the District is discharging pollutants from the MS4 . . . in violation of the Permit.")

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		plans, monitoring, dredging of sediments and diverting stormwater, clearly fall within the definition of natural resource damages and response activities under the Amended Consent Decree. (See Amended Consent Decree, 6.L and M.) By naming the LACFCD as a responsible party for the Dominguez Channel and the Greater Los Angeles and Long Beach Harbors, the Regional Board is requiring the LACFCD to take these or related actions. Under the Amended Consent Decree, however, the Regional Board has explicitly agreed that it will not require the LACFCD to take these and other actions (Amended Consent Decree, 11 and 17). Accordingly, the proposed TMDL must be modified to delete the LACFCD as a responsible party for the Dominguez Channel, including the Torrance Lateral and Dominguez Channel Estuary, and the Los Angeles and Long Beach Harbors. Under the Amended Consent Decree, the Regional Board has agreed that it will not compel response activities by or seek natural resource damage or response costs from the LACFCD. Naming the LACFCD as a responsible party is barred by this Decree.	
31.2		**Los Angeles County Flood Control District Should Not Be Responsible for Meeting Waste Load Allocations** The proposed TMDL inappropriately names the LACFCD as a responsible party for meeting waste load allocations (WLAs). The purpose of the proposed TMDL is to identify discharges and assign waste load and load allocations so that the receiving waters will meet water quality objectives. The water bodies addressed by the proposed TMDL are Torrance Lateral, Dominguez Channel, Dominguez Channel Estuary, Greater Los Angeles and Long Beach Harbors, and Los Angeles River Estuary. Land areas draining into LACFCD storm drains that empty into these water bodies are under the	Staff disagrees. Under the Clean Water Act, a point source is "any discernable, confined and discrete conveyance …from which pollutants are or may be discharged." (33 U.S.C. § 1362(14).) Under the Clean Water Act, therefore, the fact that a point source may merely convey pollutants, and does not generate them, does not absolve the point source operator of responsibility for discharges of pollutants from the point source. The LACFCD is listed as a permittee in the Los Angeles County MS4 permit, which is one of the regulatory mechanisms identified in the TMDL to implement waste load allocations. Furthermore, the LACFCD, as the owner and operator of many of the storm drains in the watershed, is responsible for ensuring that water discharged from its

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		jurisdiction of upstream municipalities. The WLAs, therefore, should be allocated in a manner that will further reduction of those pollutant loads to the receiving water bodies. This means that the WLAs should be assigned to those parties that have jurisdiction or control over the land uses which generate the proposed TMDL's pollutants of concern, and thus have the ability to prevent the pollutants from entering the water bodies. Because the LACFCD does not have jurisdiction over the land areas that drain to the water bodies, and thus cannot control the pollutant generation thereof, requiring the LACFCD to meet WLAs does not accomplish the proposed TMDL's goal of reducing the contribution of the pollutants to the receiving water bodies. The LACFCD functions simply as a conveyance for urban and stormwater runoff from the upstream municipalities, California Department of Transportation, and the unincorporated County of Los Angeles. Assigning WLAs to the LACFCD when the LACFCD does not have authority over the land uses generating the pollutants is also inconsistent with the Los Angeles County	facilities does not cause or contribute to exceedances of water quality standards. Unless the dischargers can demonstrate their discharges did not contribute to the exceedances coming from the outfall, MS4 dischargers are jointly and severally liable for discharges from the common storm drain system. The inter-connected nature of the storm drain system makes it difficult to determine exactly where pollutants originate within the MS4. In such an integrated system, one or more permittees may have caused or contributed to violations. Thus, permittees are jointly and severally liable either because a permittee is one of several sources that discharge pollutants or a permittee conveys and ultimately discharges pollutants that may have originated further up the MS4. In both cases, the MS4 owner and operator is responsible for pollutants discharged from its system. This joint and several liability is consistent with the law. LACFCD is appropriately named as a responsible party. The fact that LACFCD merely functions as a conveyance for urban and stormwater runoff from upstream municipalities is irrelevant and contrary to the Clean Water Act and the holdings in *S. Fl. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 102, 105 (2004) and *NRDC v. County of Los Angeles et al.* (9th Cir. Mar. 10, 2011) __F.3d ___. Pursuant to Clean Water Act section 502(14), "point source" is defined as "any discernible, confined and discrete *conveyance*, including but not limited to any . . . *channel, tunnel, conduit* . . . from which pollutants are or may be discharged." (emphasis added). The U.S. Supreme Court in *Miccosukee* Tribe held that the definition of "discharge of a pollutant" "includes within its reach point sources that do not themselves generate pollutants," and the Ninth Circuit Court of Appeals recently underscored that "the Clean Water Act does not distinguish between those who add and those who convey what is added by others – the Act is indifferent to the originator of water pollution."

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		Municipal Storm Water Permit (Permit), one of the stated means by which the proposed TMDL will be implemented (See Proposed TMDL, Table 7-40.1, page 26). The Permit provides that each Permittee "is required to comply with the requirements of this Order applicable to discharges within its boundaries . . . and *not for the implementation of the provisions applicable to . . . other Permittees* (Permit, Part 3.E., page 26)". The permit provides that the LACFCD, as principal permittee, is to "coordinate and facilitate activities necessary to comply with the requirements of this Order, but is not responsible for ensuring compliance of any individual permittee (Permit, Part 3.D, pg. 25)". Finding G.4 provides that the LACFCD will coordinate with other municipalities, but "each permittee is responsible only for a discharge for which it is the operator (Permit, page 20)". Under the permit, the LACFCD is not responsible for discharges from land areas over which it has no jurisdiction. Assigning WLAs to the LACFCD for pollutants that are generated from those land areas will result in WLAs that cannot be implemented through the Permit. Therefore, allocation of WLAs to the LACFCD is contrary to the proposed TMDL's goals. The LACFCD should be removed from the responsible parties listed in Table 7-40.1 on pages 31 and 32 of the proposed TMDL.	In addition, it is not appropriate for LACFCD to challenge compliance with the TMDL, because TMDLs do not, on their own, create any enforceable requirements. Wasteload allocations are merely components of a TMDL and they do not, by themselves, prohibit any conduct or require any actions on the part of dischargers. As the Ninth Circuit Court of Appeals held in *Pronsolino v. Nastri*, 291 F.3d 1123, 1129 (9th Cir. 2002), "TMDLs are primarily informational tools that allow the states to proceed from the identification of waters requiring additional planning to the required plans," such as WQBELs in NPDES permits, and other actions designed to achieve the required water quality standards. The only connection between WLAs and the actual effluent limitations imposed by NPDES permits is that the limits in the permit be consistent with the assumptions and requirements of any available WLA .
31.3		**The LACFCD Should Not Be Responsible for Monitoring or Clean Up In the Harbor Waters** The proposed TMDL requires the LACFCD to participate in water, sediment, and fish tissue monitoring in the Los Angeles and Long Beach Harbors. While the LACFCD agrees to facilitate monitoring in the Dominguez Channel and Dominguez Channel Estuary by granting access to its facilities where feasible, the LACFCD should not be responsible for conducting monitoring because it does not	See response to **Comment 31.2.**

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		generate any of the pollutants of concern being discharged into the receiving water bodies under the proposed TMDL. Monitoring and implementation actions should be the sole responsibility of those entities that have authority over the land uses that generate the pollutants entering the water bodies, and thus possess the means to prevent polluted runoff from entering the flood control drains and channels.	
31.4		**Dominguez Channel Contains No Sediment** The proposed TMDL requires responsible parties to develop a plan to address "contaminated sediments" in the Dominguez Channel (Draft BPA, Page 27, Table 7-40.1) even though the Dominguez Channel is a concrete-lined channel and does not contain sediments. Little sediment exists in the soft bottom Dominguez Channel Estuary, but not in Dominguez Channel. We suggest the second paragraph in Table 40.1 be revised as follows: ~~"The Los Angeles County Flood Control District (District) owns and operates Dominguez Channel; therefore, the District and the cities that discharge to Dominguez Channel shall each be responsible for conducting implementation actions to address contaminated sediments in Dominguez Channel.~~ Responsible parties in Dominguez Channel Watershed shall develop a Sediment Management Plan to Address contaminated sediment in ~~Dominguez Channel and~~ Dominguez Channel Estuary."	Sediments exist in Dominguez Estuary and therefore all upstream sources, including those within Dominguez Channel as well as direct discharges to Estuary are contributing pollutants to Estuary. Responsible parties have been clarified in the Basin Plan Amendment.
31.5		**The Proposed TMDL Should Be Consistent in Assigning Responsibilities** The proposed TMDL requires the LACFCD as owner and operator to undertake implementation actions in Dominguez Channel and Estuary. However, as the owner of the Los	The ACOE is responsible for flood control maintenance in upper portions of the Los Angeles River (outside the scope of this TMDL), but is not a permittee under an MS4 permit; the other TMDLs in the Los Angeles River have not targeted sediments.

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		Angeles River Estuary, the United States Army Corps of Engineers (USACE) is not required to undertake similar implementation actions or named as a responsible party in the proposed TMDL. The USACE was not named as a responsible party in any of the Los Angeles River TMDLs despite the fact that it owns and operates portions of the Los Angeles River. The proposed TMDL should be consistent in assigning responsibilities.	
32.	County Sanitation District of Los Angeles County		
32.1		**Clarify Assignment of Waste Load Allocations for Los Angeles River Dischargers** The Harbor TMDL includes assignment of WLAs for the Los Angeles River (LAR) Estuary portion of the TMDL. As written, WLAs for the Los Angeles River Estuary are assigned to "LAR dischargers" in general, as well as to several other specific entities. While it appears to be the intent of the Regional Board to only assign WLAs to facilities discharging directly to the LAR Estuary, the language in the Harbor TMDL could easily be misinterpreted as assigning WLAs to all dischargers in the LAR watershed. Therefore, the Sanitation Districts request that this language be clarified.	The draft Staff Report and tentative BPA are revised accordingly
32.2		**Use Multiple Lines Of Evidence to Identify Impairment** The Harbor TMDL utilizes sediment quality guidelines, including Effects Range Low (ERL) and Threshold Effects Concentrations (TECs), for the establishment of numeric targets for contaminants in sediments. The continued use of such guidelines to establish acceptable contaminant concentrations in any particular sediment is inappropriate, since ERLs and TECs do not take into account critical, site-specific factors that can alter the toxic effects of sediment associated contaminants. Instead, the Sanitation Districts	See response to **Comment 20.1.**

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		believe the MLOE approach should now be used to assess initial impairments, define numeric targets for TMDLs, and monitor for recovery after management action has been taken. This recommendation is consistent with the State Board's Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Objectives, Part 1 (SQO Policy), which became effective August 25, 2009. The SQO Policy requires assessments of sediment quality to employ an MLOE approach to appropriately interpret the narrative objective for aquatic life and pollutants in sediments. This is accomplished by integrating the following three lines of evidence to determine if a beneficial use of a particular water body is being protected: *Sediment Toxicity*- This is a measure of the response of invertebrates exposed to surficial sediments under controlled laboratory conditions, and it is used to assess pollutant-related biological effects and exposure. Sediment toxicity tests are of short duration, and as such may not exactly duplicate exposure conditions in natural systems, but it does provide a measure of exposure to all pollutants present, including non-traditional or unmeasured chemicals; *Benthic Community Condition*- This is a measure of the composition, abundance and diversity of sediment-dwelling invertebrates inhabiting surficial sediments. It is used to directly assess impacts to the actual aquatic life beneficial use targeted for protection, by measuring the biological effects of both natural and anthropogenic stressors; and *Sediment Chemistry*- This is a measurement of the concentration of chemicals of concern, and it is used to assess the potential risk to benthic organisms from toxic pollutants in surficial sediments. Sediment chemistry is intended only to evaluate overall exposure risk from chemical pollutants, as it	

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		does not establish causality associated with specific chemicals. The Harbor TMDL Implementation Schedule specifies that six years after the Harbor TMDL is adopted, the Regional Board will consider developing TMDLs for upstream Los Angeles River and San Gabriel River dischargers. The Sanitation Districts request that any such TMDLs are only developed if the MLOE approach shows on-going impairment.	
33.	Dominguez Channel Watershed Management Committee		
33.1		**Affected MS4 Permittees Should Not be Required to Fund Dredging** Federal stormwater regulations do authorize the Regional Board to require extra jurisdictional control of pollutants through MS4 permits. The MS4 permit requires the control of pollutants in stormwater, intra jurisdictionally, with the compliance point at the end-of-pipe, not in the receiving water (see comments submitted by the other cities). Therefore, should the Regional Board compel affected permittees to clean up or remove downstream contaminated soil, such a requirement would be construed as an unfunded mandate.	With respect to the claim that the requirement would constitute an unfunded state mandate, see response to **Comment 20.16.** In addition, see response to **Comment 19.8** and **30.2.**
33.2		**Federal Funds Should be Available for DDT Sediment Removal** If affected responsible parties are required to fund dredging, any federal funds set aside for the two DDT superfund sites should be accessible to agencies responsible for removing DDT contaminated sediments from the Torrance Lateral, Dominguez Channel and Dominguez Estuary.	Montrose Settlements Restoration Program (MSRP coordinated by NOAA) controls funds related to Montrose contamination. Any funds available for DDT monitoring or clean up are under purview of Federal agencies (NOAA as lead agency). Dominguez Channel freshwaters above Vermont Avenue are presumably not within the Montrose OU2 stormwater pathway, rather it likely includes Kenwood Drain, Torrance

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			Lateral, Dominguez Estuary (up to Vermont Avenue) and Consolidated Slip.
33.3		**Agencies Need Flexibility to Select Compliance Monitoring Sites** Many of the storm drain outfalls in Dominguez Channel Estuary are at or below sea level and. have flap gates to prevent flooding. Sampling during rain events at these storm drain outfalls is often impossible because they are below the water line in the channel at high tide. MS4 agencies should have the option of relocating monitoring sites to accessible points in the MS4 system, such as the nearest upstream manhole for purposes of compliance and BMP performance monitoring, as is described under federal stormwater regulations *(see Federal Register, Vol. 222, November 16, 1990, Rules and Regulations, page 48046).* The permittees also recommend that a single outfall, which best characterizes discharges released from the collective MS4s, be selected, similar to the group monitoring approach specified in General Industrial Activity Stormwater Permit.	Comment noted. This topic can be addressed when Responsible Parties submit monitoring plans as required by the TMDL.
33.4		**Allocation of Responsible Parties Requires Corrections** Carson, Gardena and Torrance should not be included in the Consolidated Slip Responsible Parties Subgroup. There is no basis for listing these three cities and none of the other upstream cities. Furthermore, Carson, Gardena and Torrance are not tributary to the Consolidated Slip. The city of Carson's most southerly boundary is north of PCH, which is well above Consolidated Slip; and, all MS4 storm water flows into Dominguez Channel at or above Sepulveda Boulevard on the east or into Machado Lake on the west. See enclosed map.	Carson, Gardena and Torrance have been removed from the Consolidated Slip Responsible Parties Subgroup. Rolling Hills and Rolling Hills Estates have been removed from the Dominguez Channel responsible parties list.

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		Rolling Hills Estates and Roiling Hills should not be included in the Dominguez Channel/Torrance Lateral/Dominguez Estuary responsible party list(s). Rolling Hills Estates and Rolling Hills are only tributary to the LA Harbor for the subject toxics TMDL.	
33.5		**Creation of Dominguez Channel Subgroups is Needed** Because the Torrance Lateral is being assigned separate final WLAs for freshwater and sediment, the proposed TMDL should be revised to create a separate list of dischargers strictly for the Torrance Lateral, the Dominguez Channel and the Dominguez Channel Estuary. Any MS4 agency which does not discharge to the Torrance Lateral, the Dominguez Channel Estuary or to the Dominguez Channel should not be included on the respective lists. Thus Dominguez Channel would have three subgroups - Dominguez Channel, Torrance Lateral and Dominguez Estuary each with its own list of dischargers. This would provide consistency with Page 21 of Attachment A to Resolution No. RI 1-XXX which states: *Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary Compliance Monitoring Program for Dominguez Channel, Dominguez Channel Estuary, and Torrance Lateral, water and total suspended solids samples shall be collected at the outlet of the storm drains discharging to the channel and the estuary. Fish tissue samples shall be collected in receiving waters of the Dominguez Channel Estuary. Sediment samples shall also be collected in the estuary.*	The responsible parties list has been modified for consistency and clarity. See response to **Comment 21.7.**
33.6		**Clarification and/or Recalculation of WLA Calculations is Necessary**	Either approach can be used depending on the type of monitoring program approved.

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		Page 31 of Attachment A to Resolution No. RII-XXX, Item 5, second paragraph states: *The compliance point for the stormwater WLAs shall be at the storm drain outfall of the permittee's drainage area. Alternatively, if stormwater dischargers select a coordinated compliance monitoring option, the compliance point for the stormwater WLA may be at a storm drain outfalls or at a point in the receiving water, which suitably represents the combined discharge of cooperating parties discharging to Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters. Depending on potential BMPs implemented, alternative stormwater compliance points maybe proposed by responsible parties subject to approval by the Regional Board Executive Officer.* Please clarify whether the individual WLA for an MS4 Permittee at the outfall of the permittee's drainage area is to be calculated as its share on an area basis of the mass-based WLA, or whether a concentration-based WLA is applied based on the TMDL targets (and which ones), or whether either approach can be used depending on the type of monitoring program to be proposed. In the mean time, based on our understanding of how the allocations were divided amongst entities, we suggest that the WLAs be recalculated.	
33.7		**Allowing Concentration Based or Mass Based Standards Would Improve Coordinated Monitoring Efforts** To allow for a cost-effective approach to monitoring, it would be helpful for MS4 agencies to have the option to comply with either a concentration based or mass based standard in order to combine and coordinate monitoring requirements for other TMDLs. For example, the Machado	See response to **Comment 24.1.** It will be possible to coordinate the monitoring requirements of the Machado Lake TMDL and the requirements of this TMDL for responsible parties assigned in both. The monitoring plan is due 9 months after the effective date of the TMDL.

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		Lake Toxics TMDL requires compliance with concentration-based WLAs based on analysis of the sediment fraction from stormwater discharges at the outfall of the MS4 agencies' discharge, hence it would be useful to allow a similar approach for compliance with this TMDL so that a single monitoring plan could be developed for both water bodies by an MS4 agency or group of agencies.	
33.8		**Outfall-based Monitoring Should be Sufficient to Demonstrate Compliance** As discussed below, a water quality based effluent limitation (WQBEL) needs to be 'developed to translate the WLA into BMPs,' performance-based BMPs or surrogate parameters such as flow or impervious cover reduction (this would necessitate a reasonable potential analysis as described in *USEPA's NPDES Permit Writers' Manual).* The compliance determinant would not be outfall monitoring data results to show compliance with the WLA but instead the implementation of the WLA translated into a WQBEL. Federal stormwater regulations require meeting the WLA in the receiving water through the WQBEL -- even if monitoring data taken from the outfall/end-of-pipe or receiving water reveals WLA exceedances. Outfall/end-of-pipe monitoring data should only be used to evaluate BMP or surrogate parameter performance.	Federal regulation requires that NPDES permits must contain requirements necessary to achieve water quality standards (40 CFR § 122.44(d)(1)). Additionally, federal regulations require that water quality based effluent limits are set consistent with the assumptions and requirements of any available WLA for the discharge (40 CFR § 122.44(d)(1)(vii)(B)). While federal regulations allow the permitting authority to specify - as conditions of a NPDES permit - the use of BMPs to control or abate the discharge of pollutants in stormwater pursuant to Clean Water Act section 402(p) (40 CFR § 122.44(k)(2)), this is only supportable under specified circumstances where the permit's administrative record supports that the BMPs are expected to be sufficient to implement the WLA in the TMDL (US EPA 2010). Furthermore, this does not substitute for the permitting authority's obligation to include other requirements such as numeric effluent limits that may be necessary to achieve water quality standards. See also response to **Comments 9.2** (regarding compliance monitoring), **14.2** (regarding reasonable potential analysis), **14.3** (regarding WQBELs).
33.9		**Fish and Bed Sediment Monitoring Should be Assigned to the Agencies Responsible for Operating the Water**	With respect to the claim that monitoring requirements would constitute an unfunded state mandate, see response to

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		Body Throughout the document it states that responsible agencies are each individually responsible for conducting water, sediment and fish tissue monitoring, but that they are encouraged to collaborate or coordinate efforts to avoid duplication. With respect to fish and bed sediment monitoring in the receiving water, this is an unwieldy and difficult requirement to share, necessitating undue inter-agency coordination and staff time. The responsibility for monitoring fish and bed sediments should be assigned to the agencies within whose jurisdiction(s) the fish and bed sediments lie since they are directly responsible for the operation of that water bodies. For example, Los Angeles County Flood Control District should be responsible for monitoring fish and bed sediments in Dominguez Channel. Such an approach has been utilized in the Machado Lake Toxics TMDL. Any monitoring costs incurred by Permittees should be reimbursed by the State using the MS4 permit fee surcharge or other State funding source. Failure to do so is likely to result in an unfunded mandate claim since this monitoring requirement exceeds federal law.	**Comment 20.16.** The responsible parties list has been modified for consistency and clarity. See response to **Comment 21.7.**
33.10		**Conduct a Special Study for Legacy Pollutants if Necessary** A special study may be helpful to assess the relative significance of background levels of bioaccumulative legacy pesticides outside the area of influence of the two superfund sites. Since these pesticides have been banned for decades, it may be that existing background	Commenter's reference to "background levels of bioaccumulative legacy pesticides" appears to suggest that such levels are beyond the scope of regulatory action. Staff disagrees since these legacy pesticides and PCBs are man-made compounds, introduced to watershed via anthropogenic activities and therefore subject to water quality regulations if present in surface waters. Staff notes that TMDLs include allocations for point and non-

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		levels/concentrations in sediment and soils present in the watershed outside the influence of the superfund sites will not result in exceedance of the TMDL objectives in receiving water bed sediments. A special study could be conducted to assess whether background levels in soils are present at levels that could exceed the WLA; and, if not, the MS4 agencies should be relieved from further compliance actions with respect to those legacy pollutants. In fact, model results in the November 29, 2010 memorandum from Tetra Tech to USEPA (included in Appendix Ill to the Draft Staff Report) indicate that even if watershed loadings of DDT are reduced to zero, concentrations of DDT in bed sediments will remain largely unchanged (reduced by at most 6.7%); these model results indicate that eliminating all watershed loads of DDT will fail to achieve compliance. Tetra Tech concluded that "DDT bed sediment is predominantly a legacy issue and upland sources appear to be contributing loads of sediment that are cleaner than what is currently in bed sediments...the model shows that the combination of clean sediment deposition and the diffusion of legacy DDT contamination are causing bed sediment concentrations to gradually decrease over time." Any monitoring costs incurred by Permittees should be reimbursed by the State using the MS4 permit fee surcharge or other State funding source. Failure to do so is likely to result in an unfunded mandate claim since this monitoring requirement exceeds federal law.	point sources (including natural background sources). Since pesticides and PCBs are not natural compounds, such as metals or sediment, then they cannot be excluded from TMDLs. See also response to **Comment 24.4**. With respect to the claim that monitoring requirements would constitute an unfunded state mandate, see response to **Comment 20.16.**
33.11		**Mirror Machado Lake Toxics TMDL WLAs for Monitoring Bioaccumulative Compounds at Construction Sites** The WLAs assigned to point source discharges other than MS4 agencies such as the General Construction Permittees	See response to **Comment 28.6.**

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		and the General Industrial Permittees and other point source dischargers are listed as water column concentrations. For construction sites in particular the bioaccumulative compounds Chlordane, DDT, Dieldrin, Total PCBs and PAHs, if present in stormwater discharge, would be associated with soils or sediments discharged from the site rather than dissolved in water. Please clarify whether the water column based WLAs for point source discharges require the collection of suspended solids and analysis in the bulk sediment fraction, in which case the WLA should be expressed as pg/kg on a dry weight basis in the sediment fraction. Please see the Machado Lake Toxics TMDL WLAs to see how this was done.	
33.12		**Limit Monitoring if Compliance is Demonstrated** If an MS4 agency demonstrates through compliance monitoring at the outfall of its drainage area that the TMDL targets for organochlorine pesticides and PCBs are already being attained, further compliance monitoring should not be required of that MS4 agency. Given the fact that these pollutants have been banned from use and/or no longer manufactured, it is very unlikely that the concentrations of these pollutants would increase, but rather they will continue to decrease over time; thus, continued monitoring would be a waste- of public funds. Any monitoring costs incurred by Permittees should be reimbursed by the State using the MS4 permit fee surcharge or other State funding source. Failure to do so is likely to result in an unfunded mandate claim since this monitoring requirement exceeds federal law.	Given spatial and seasonal variability of precipitation, erosion and transport of sediment associated pollutants, there is insufficient rationale to justify that further compliance monitoring should not be required. Historical records of hydrographs and pollutographs demonstrate that pollutant loads of one wet weather event are different from one another. Thus it will require continuous monitoring of water, sediment and fish tissue to demonstrate full confidence with compliance. With respect to the claim that monitoring requirements would constitute an unfunded state mandate, see response to **Comment 20.16.**
33.13		**Limit Toxicity Testing** Toxicity testing is cost prohibitive and overly burdensome for MS4 agencies if it must be done at the storm drain outfall of a	Water samples including toxicity are required during dry weather once and during two wet weather events each year. While MS4 permittees may conduct monitoring separately, the responsible agencies are encouraged to coordinate

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		permittee's drainage area twice per year.	monitoring which will help control costs.
33.13a		It is inappropriate to apply toxicity requirements as effluent limitations. Toxicity tests measure the responses of certain test organisms, and toxicity test results can be influenced by numerous factors other than and in addition to effluent toxicity. For this reason, failure of any single toxicity test should not automatically be considered a violation but rather should trigger further investigation to determine if the effluent is indeed toxic and/or to indentify the toxicant(s).	See response to **Comment 14.6.**
33.13b		The Draft TMDL would apply toxicity limits for chronic toxicity to stormwater discharges. This use of toxicity testing is inappropriate, as it is unsupported by appropriate studies and data collection, and because it is unclear that current chronic toxicity test methods could be applied to stormwater discharges. For example, most methods require the collection of new samples daily for eight (8) days, and most stormwater discharges persist for a much shorter time period.	See response to **Comment 19.2.**
33.13c		The Draft TMDL calculates an interim limit for toxicity using "average values" from toxicity tests conducted by the Los Angeles County Department of Public Works. It is inappropriate to use the average of available test data as a measure of current performance that can be applied to single samples.	See response to **Comment 14.6.**
33.13d		Toxicity testing should be conducted in the receiving water, but the interim and final toxicity allocations in the Draft TMDL appear to apply to individual effluent samples. This method of application is inappropriate.	Toxicity testing can be conducted in effluent or receiving water (USEPA, EPA-821-R-02-012). The Basin Plan Amendment specifies that "*Under the coordinated monitoring option, the compliance point for the stormwater WLAs shall be storm drain outfalls or a point(s) in the receiving water that suitably represents the combined*

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			discharge of cooperating parties. “
33.13e		Any monitoring costs incurred by Permittees should be reimbursed by the State using the MS4 permit fee surcharge or other State funding source. Failure to do so is likely to result in an unfunded mandate claim since this monitoring requirement exceeds federal law.	With respect to the claim that monitoring requirements would constitute an unfunded state mandate, see response to **Comment 20.16.**
33.14		**MS4 Agencies are Not Responsible for Pollutants from Extraneous Sources** This TMDL places the responsibility for control of indirect air deposition of metals solely on the MS4 agencies when they have no or limited jurisdictional authority over the sources of those pollutants. This limited jurisdiction is acknowledged by the Los Angeles Regional Water Quality Control Board in finding B.2. *Nature of Discharges and Sources of Pollutants* in the LA County MS4 Permit as follows: *Certain pollutants present. in stormwater and/or urban runoff may be derived from extraneous sources that Permittees have no or limited jurisdiction over. Examples of such pollutants and their respective sources are: PAHs which are products of internal combustion engine operation, nitrates, bis (2-ethylhexyl) phthalate and mercury from atmospheric deposition, lead from fuels, copper from brake pad wear, zinc from tire wear, dioxins as products of combustion, and natural-occurring minerals from local geology.* Because the authority for regulation of such extraneous sources rests with the State and USEPA, MS4 agencies should not be held unilaterally responsible for controlling water pollution that results from these extraneous sources.	See response to **Comment 28.8** regarding recent U.S Court of Appeals, 9th Circuit decision on responsible parties for pollutants within stormwater conveyance.

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33.15		**More Time is Needed to Prepare the Monitoring and Reporting Plan** Six months from the effective date is insufficient time to prepare a Monitoring and Reporting Plan (MRP). The monitoring being requested will most likely require that filtration of stormwater be performed in the field as it would be too cumbersome to haul to the lab the tens of gallons of water that will be necessary to obtain sufficient sediment sample to conduct the requisite analysis. Municipal budgets are severely strained and municipalities will need to budget a fiscal year in advance for what are essentially non-existent resources to prepare and implement this monitoring plan. Should this requirement be imposed, any monitoring costs incurred by Permittees should be reimbursed by, the State using the MS4 permit fee surcharge or other State funding source. Failure to do so is likely to result in an unfunded mandate claim since this monitoring requirement exceeds federal law. Any monitoring and reporting plan should be approved by the Regional Board governing body in accordance with Porter-Cologne and take into consideration §13241's balancing of factors requirement.	The Basin Plan Amendment has been modified to require the Monitoring Plan 9 months from the effective date of the TMDL. In addition, methods and analysis required for monitoring under this TMDL are standard; no new technologies or protocols are needed for the collection and filtration water samples. There are standard methods available at commercial laboratories. The SWRCB website provides resources for stakeholders to easily develop SWAMP compatible QAPPs. For example, there are QAPP templates that can be readily adapted to any monitoring program in the state. The website also provides the SWAMP QAPP advisor, which is an online tool designed to assist stakeholders in writing QAPPs. http://www.swrcb.ca.gov/water_issues/programs/swamp/tools.shtml#qa With respect to the claim that monitoring requirements would constitute an unfunded state mandate, see response to **Comment 20.16.** With respect to §13241, see response to **Comment 1.5.**
33.16		**Regional Board Should Provide Funding for Monitoring** Monitoring requirements under federal stormwater regulations are limited to the outfall or other end-of-pipe	Funding for ambient monitoring comes, in part, from the surcharge imposed pursuant to 23 Cal. Code of Regs § 2200, which is 21% of the calculated annual fee for permitted NPDES dischargers.

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		structure (see above referenced Federal Register citation). Any requirement imposed by the Regional Board beyond this must be authorized under Porter-Cologne. However, so doing raises the issue of an unfunded mandate: The Regional Board can avoid such challenge by allocating the monitoring fee surcharge that is annually assessed on MS4 permits.	Monitoring requirements are not limited to the outfall or end of pipe. For example, the mass-emissions monitoring stations in the Los Angeles County MS4 permit are not necessarily located at any specific outfalls. Two of the monitoring stations are located within the channelized portion of the MS4, and two are not. With respect to the claim that monitoring requirements would constitute an unfunded state mandate, see response to **Comment 20.16.**
33.17		**Regional Board Should Evaluate All Possible Pollutant Sources** In the Staff Report for the toxics TMDL, the Regional Board states there are two hundred-seven (207) General Permitted industrial facilities and ninety (90) construction sites subject to the state General Construction Permit. These sources of pollutants should be held to the same requirements as MS4 agencies and Caltrans.	MSGP and MSCP permittees are held to concentration-based allocations as described in TMDL.
33.18		**WLAs Should be Applied to General Stormwater Permittees** Although a WLA has been ostensibly assigned to General Construction Activity and Industrial Activity Stormwater permittees, the implementation schedule does not appear to apply to them. Implementation requirements are being imposed on the MS4 Permittees and Caftans, but not on the general construction and industrial MS4 permittees. Yet the latter are equally or more likely to be the source of potential hot spots of the toxic constituents of concern. This regulatory inequity places a disproportionate burden on municipalities. If WLAs are to be assigned to the MS4 at this time, then implementation and monitorin[g] requirements must	WLAs are assigned to General Construction Activity and Industrial Activity Stormwater permittees. Responsible agencies including general permittees are each individually responsible for conducting water, sediment, and fish tissue monitoring. The draft Staff report and tentative BPA are revised for further clarification.

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		also be required of all general permittees within the watershed. These data are essential to developing an effective and appropriate implementation plan. If indeed there is any current discharge from the MS4 conveyance system in excess of the toxics TMDL targets, it may be far more effective to identify and control hot spots of residual contamination at industrial and construction sites than to control suspended sediments in storm drain discharges from the entire watershed. Additionally, many of the Industrial Dischargers are directly connected to the Dominguez Channel/Torrance Lateral/ Dominguez Channel Estuary. It should be noted that TMDLs adopted by other jurisdictions require WLA compliance not only for general permittees but Phase II MS4 permittees as well, along with certain entities that are not subject to stormwater permits but are subject to waste discharge permits issued by the Regional Board pursuant to Porter Cologne.	
33.19		**WLAs should be applied to Industrial and Construction Permittees** Activities at industrial facilities include metals recycling, auto dismantling, rubber manufacturing, concrete production, etc. These activities are associated with toxic pollutants that may include PCBs. Furthermore, industrial permittees are currently only required to monitor for pH, total suspended solids, specific conductance, and total organic carbon as well as certain pollutants specific to the facility type. It is unlikely that many of the permittees sample for the pollutants of concern, yet it is a possibility that the permittees are sources of these pollutants. The Industrial General Permit states that: *Effluent limitations and toxic and effluent standards*	The comment will be addressed in detail through permitting process as industrial and construction permits are renewed. In addition, see response to **Comment 28.6.**

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		established In Sections 208(b), 301, 302, 303(d), 304, 306, 307, and 403 of the Federal Clean Water Act (CWA), as amended, are' applicable to storm water discharges and authorized non-storm water discharges regulated by this General Permit. It should also be noted that a recent memorandum issued by USEPA Office: of Wastewater Management Director James Hanlon, 'calls for a "disaggregation" or specific WLAs for industrial' sources, as the following excerpt reveals: *EPA recommends that WLAs for NPDES-regulated stormwater discharges should be disaggregated into specific categories (e.g., separate WLAs for MS4 and industrial stormwater discharges) to the extent feasible based on available data and/or modeling projections. In addition, these disaggregated WLAs should be defined narrowly as available, information allows (e.g., for MS4s, separate WLAs for each one; and, for industrial sources, separate WLAs for difference sources or types. of industrial sources or discharges.)* The Regional Board should require the permitted industrial facilities to monitor for the pollutants identified in the TMDL to ensure they are not contributing to the pollution problem. Construction permittees are currently only required to monitor for total suspended' solids, settleable solids, suspended sediment concentration and turbidity as well as perform a bioassessment if the site is greater than thirty (30) acres'. However, the state Construction General Permit requires that: *The discharger shall ensure that storm water discharges and' authorized nonstorm water discharges will not contain pollutants that cause or contribute to an*	

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		exceedance of any applicable water quality objectives or water quality standards (collectively, WQS) contained in a Statewide Water Quality Control Plan, the California Toxics Rule, the National Toxics Rule, or the applicable Regional Water Board's Water Quality Control Plan (Basin Plan). Therefore; the Regional Board should require the permitted construction sites to monitor for the pollutants identified in the TMDL to ensure they are not contributing to the pollution problem. For example, the U.S. EPA performed a study in the areas surrounding the Montrose Chemical Corporation Superfund Site that found background concentration levels of DDT in the soil of 1-2 part per million. Construction sites that disturb soil are potentially mobilizing residual sources of DDT.	
33.20		**Interim WLA Compliance should be deleted** The interim compliance begins as soon as the TMDLs are in effect, while the Implementation Plan will be submitted two years from the date 'the TMDL is in 'effect. If, at anytime after the effective date, TMDL limits are exceeded, then agencies are out of compliance immediately, especially since not all historical data is being used to set the limits. But, once again, strict compliance with the WLA in the receiving water is not authorized under federal stormwater regulations. As mentioned above, federal regulations require the translation of the WLA into a WQBEL. As long as the WQBEL, expressed in the form of a BMP, performance based BMP or surrogate parameter is being implemented, the MS4 permittee is deemed to be in compliance with the WLA. (See USEPA memorandum dated November 12, 2010 on *Establishing Total Maximum Daily Load (TMDL) Wasteload*	See response to **Comment 18.1.**

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		Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs). Therefore, any reference to an implementation plan that requires strict compliance with a WLA should be deleted from the TMDL.	
33.21		**Dredging Dominguez Channel Estuary is Not an Option** The Dominguez Channel Estuary was constructed by the Los Angeles County Flood Control District in phases. Plans for that portion of the Dominguez channel from Pacific Coast Highway to Wilmington Avenue, for example, required the excavation of existing native material (as much as 20 feet in depth) from the bottom of the shallow drainage channel and construction of a clay lining (approximately 6 feet thick) with a stone revetment over a filter blanket over a clay lining along the banks at a 2:1 slope. Although the plans provide for "locations of material suitable for clay lining", it is highly unlikely that this "suitable material" was ever tested for any of the constituents of concern. Dredging or disturbing the clay lining in the estuary is not appropriate even though it is a potential source of contamination. Sediment removal, if necessary, must be limited to that which has settled on top of the clay lining and any removal must be done by or at the direction of the property owner - Los Angeles County Flood Control District. However, the clay lining does not prevent contaminants from surfacing as is being observed in the channel now, just south of Carson Street, where fuel/oil from an unknown source is bubbling up to the surface. A clay lining does not prevent mixing of soil either. The clay lining can be disturbed by the rapid flow of water during rain events and extraneous sediments can mix quite readily with the lining. In a simple soil identification test, gravel and sand will settle almost immediately and silt will settle next (in about a minute) but clay will take as much as an hour or more to settle. Therefore,	Staff appreciates information describing the construction of Dominguez Estuary; however, it does not preclude the potential option of dredging this waterbody to remove contaminated sediments. Suction dredge could operate to remove pollutants settled on top of clay lining. Such detailed information is best included in the Implementation Plan as well as any forthcoming scoping documents for sediment remediation in Dominguez Estuary.

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		there is more potential for contaminants to settle in the top layer of disturbed clay	
33.22		**The Toxics TMDL Staff Report Should Reference Water Quality Based Effluent Limits and an Adaptive/Iterative BMP Approach** The staff report suggests strict compliance with the WLAs numeric limits. Affected MS4 permittees will be required to meet WLAs as strict numeric limits, through an assortment of structural and/or non-structural BMPs. Failure to meet the WLAs would expose non-compliant permittees to enforcement action and third party litigation. However, DCWMC members believe that the Regional Board is required under federal stormwater regulations to translate WLAs (once they are revised) into water quality based effluent limits (WQBELs), as the following indicates: *Federal regulations require that NPDES requirements incorporate water quality based effluent limitations (WQBELs) that must be consistent with the requirements and assumptions of any available WLAs, which may be expressed as numeric effluent limitations, when feasible, and/or as a best management practice (BMP) program of expanded or better-tailored BMPs.3* In other words, when a TMDL is incorporated into an MS4 permit, compliance is determined not be strict compliance with WLAs through the implementation of BMPs, but by BMPs that make progress towards meeting them. In effect, BMPs are a type of effluent limitation used in MS4 permits. Other Regional Boards have placed WQBELs in MS4 permits. The Santa Ana Regional Board referenced WQBELs in the Riverside and San Bernardino MS4 Permits. The San Diego Regional Board has begun referencing WQBELs in recently adopted TMDLs, including the *Total Maximum Daily Loads for Indicator Bacteria, Project 1 - Twenty Beaches and*	See response to **Comments 14.3 and 14.4.**

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		Creeks in the San Diego Region (Including Tecolote Creek). It is also *planning to insert WQBEL language into its* next MS4 permit which is due for renewal. . Hand-in-hand with WQBELs is the adaptive/iterative process. MS4 permits issued in California specify certain minimum BMPs and incorporate an iterative process that requires increasingly more effective BMPs if the Water Quality Standards are not met. This also applies to WQBELs in meeting TMDLs, as stated in the Riverside MS4 permit, which' "incorporates the WLAs as Water Quality-Based Effluent Limitations (WQBEL) and requires Permittees to achieve the WLAs for Urban Runoff through *an iterative process of* implementing BMPs."	
33.23		**Implementation Plan is Inappropriate** It is recognized that Porter-Cologne requires an implementation plan (IP) for TMDLs. However the version presented in this and other TMDLs adopted by the Regional Board are inconsistent with Porter-Cologne and federal storm water regulations. First, the IP requires only approval by the Regional Board's Executive Director. And since the IP involves best management practices (BMPs) or other actions to meet a WLA, federal stormwater regulations require a reasonable potential analysis and the development of a WQBEL. Porter-Cologne requires not only a TMDL but any component thereof to be adopted by the Regional Board's governing body. This is because they are basin plan amendments.' For example, the Santa M a Regional Board's governing body adopted Bacterial Indicator Source Evaluation Plans and Water Quality Monitoring Plans three years after the Middle Santa Ana River Bacterial TMDL was adopted. Because the IP and the MRP require an	See response to **Comment No. 14.4.**

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		expenditure of public funds to comply with the TMDL, a public hearing is necessary to, among other things, address §13241, which requires a balancing of factors, including cost. By only requiring Executive Officer approval side-steps that process which the State legislature clearly intended to be followed. It should be noted that Resolution No. 98-08 was adopted by the Regional Board in April of 1998 to approve BMPs required to implement several MS4 SQMP elements including illicit connection and discharge detection and elimination, development planning, development construction, and industrial/ commercial inspection programs. The same must be done for each of the TMDLs. IP should be discussed at the time of adopting the TMDL, since it is part of the basin plan amendment, but could be deferred after it is adopted. With respect to federal stormwater regulations, a reasonable potential analysis and a WQBEL should be discussed during the TMDL development process. Resulting from the discussion should be a determination of appropriate BMPs (quantifiable and enforceable) or surrogate parameters needed to address the WLA. The Regional Board could *also' defer such discussion after the TMDL has been* adopted. It *is* recommended, however, that the WQBEL expressed as BMPs, performance-based BMPs or surrogate parameters should be incorporated into the MS4 within the framework of its stormwater quality management program (SQMP) and not be referenced *as a' separate attachment. For* example, *LID, as a* BMP *or as flow or* impervious cover reduction surrogate parameter, should be implemented through the development planning SUSMP program. The WQBEL is to be implemented over the 5 year term of the MS4 permit. The bottom line is that the Regional Board staff cannot	With respect to the commenter's request for a reasonable potential analysis discussion, see response to **Comment 14.2.**

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		require implementing BMPs in the IP once the TMDL is placed into the next MS4 permit without performing the required analysis and discussion and obtaining Regional Board approval.	
33.24		**The Need for a Workshop** A workshop is needed discuss the several issues raised in this letter, including how to meet the WQBEL requirement and the kinds of BMPs or surrogate parameters that can be applied to address the WLA. This is a very different compliance approach from the one specified in the toxics TMDL, which essentially requires strict compliance with WLAs through BMPs. It is understood that Regional Board TMDL staff is operating under a compressed time line. However, not addressing these valid issues could result in an administrative and legal challenge from permittees, which could cause an unacceptable delay and force USEPA to adopt the TMDL to avoid being in contempt of the consent decree deadline (as it had for the Los Angeles River trash TMDL and as it has for the San Gabriel River metals TMDL). Given that USEPA has greater expertise in translating WLAs into WQBELs, Regional Board staff should give serious consideration to letting it adopt this TMDL.	During the public comment period, the Regional Water Board and EPA have had meetings and phone conferences with stakeholders to clarify and discuss many technical matters and issues associated with the TMDL including the WQBEL. Regional Board staff finds that the public has had a reasonable opportunity to participate in the review and address any concern regarding the proposed TMDL and the tentative BPA.
34.	Exxon Mobil Refining & Supply		
34.1		ExxonMobil supports the phased implementation approach that the RWQCB has proposed in the draft TMDL. This approach uses interim limits to provide assurance that existing impaired water quality and sediments do not further degrade while the municipal and industrial dischargers have time to implement and test best management practices (BMP) and other methods for reducing the existing pollutant loadings. Furthermore, the phased approach allows the responsible parties time to conduct further monitoring and	Comment noted.

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		studies to better define the extent of impairment and track improvements in sediment and water quality and, as appropriate, revise water column and sediment pollutant targets. The final TMDL waste load allocations (WLA) are very ambitious. Indeed, ExxonMobil believes that the final water quality concentration limits in the TMDL that may be applied to point source dischargers (including both MS4s and industrial sources) are currently not technologically achievable for intermittent storm water discharges.. By allowing 20 years to implement BMPs and to "fine-tune" the TMDL targets, the draft TMDL will allow an orderly process for each affected party to investigate and determine the most technically feasible and cost-effective methods to reduce their discharges to achieve the final WLAs. ExxonMobil supports the application of mass-based WLAs to the Torrance Refinery discharge, which the draft TMDL correctly describes as infrequent and limited in flow volume and pollutant loadings by the refinery's storm water storage and treatment procedures. The TMDL analysis performed by the RWQCB and the U.S. Environmental Protection Agency (EPA) correctly incorporates the refinery discharge into the Dominguez Channel watershed sources (by way of the Torrance Lateral) as an intermittent discharge that only occurs during the highest storm water runoff events; i.e., historically, one discharge in seven years (typically of several days duration).	
34.2		**Numeric Targets - Water: Total metals** Pages 43 and 44 of the TMDL Report describe the basis for the TMDL wet weather concentration targets for total metals. ExxonMobil supports the use of the acute California Toxics	Comment noted.

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		Rule (CTR) criteria for dissolved metals as the basis for the water column targets in freshwater. We also support the use of site-specific conversion factors for converting the CTR dissolved copper, lead and zinc criteria to total metals targets. Because storm water events are episodic it is appropriate to use the acute criteria for metals to account for the fact that particulates and dissolved and colloidal organic matter in storm water will react with dissolved metals and reduce the bioavailability of the metals to the extent that exposures that may cause chrome toxicity to aquatic life are substantially reduced.	
34.3		**Numeric Targets --- Water: Toxicity** The discussion of applying a numeric toxicity target based on chronic toxicity units (TUc) does not support application of this target to episodic events resulting from storm water runoff. The chronic whole effluent toxicity (WET) test, which is designed to protect against adverse effects on the reproduction and growth of aquatic life, is not an appropriate test for storm water discharges because the long-term exposures of aquatic life in the receiving water to pollutants in storm water is mitigated by the settling and natural chemical reactions (i.e., reactions with particulates and dissolved and colloidal organic matter) that reduce the bioavailability of metals and adsorptive organic pollutants. ExxonMobil recommends that the TMDL toxicity limits on point sources be based on use of the acute WET test and that the chronic WET test be used to evaluate toxicity in the receiving waters that actually contain water during both wet and dry weather (i.e., Dominguez Channel Estuary, Greater LA/LB Harbor area).	See response to **Comment 33.13b.**
34.4		**Description of Discharge Location**	TMDL has been modified to note the ExxonMobil Torrance Refinery discharges to Torrance Lateral and subsequently

<table>
<tr><th>No.</th><th>Author</th><th>Comment</th><th>Response</th></tr>
<tr><td></td><td></td><td>On page 59 of the TMDL Report the Torrance Refinery is listed as an NPDES permitted discharge to the Dominguez Channel; ExxonMobil requests that either a footnote or parenthetical be added to this page to clarify that the Torrance Refinery discharges to the Torrance Lateral and subsequently flows into the Dominguez Channel The refinery has no direct discharges to the Dominguez Channel. This distinction is important to avoid confusion later in the report where WLAs are given for the Torrance Lateral, including mass-based WLAs for the refinery.</td><td>flows into Dominguez Estuary.</td></tr>
<tr><td>34.5</td><td></td><td>Interim Allocations for the Dominguez Channel and Torrance Lateral (Amendment pp. 910; TMDL Report pp. 86)

The Amendment presents a table of freshwater metals interim allocations for wet weather (p. 10), which is taken from Table 6-5 of the TMDL Report. However, both tables and the related text do not discuss the applicability of these interim allocations to the Torrance Lateral, although for the final WLAs it is clear that the RWQCB intends to apply the same point source limits to both the Dominguez Channel (fresh water) and Torrance Lateral sources (Amendment, p. 11).

At the February 7th stakeholders meeting RWQCB staff stated that the interim metals allocation for wet weather shown on p.10 of the Amendment and in Table 6-5 of the TMDL Report will apply to the Torrance Lateral discharges during the phased implementation of the TMDL. ExxonMobil requests that the Amendment (p. 10) and TMDL Report (pp. 87 and 88) be revised to clarify that the interim concentration-based water column limits developed for the fresh water segment of the Dominguez Channel are also applicable to discharges to the Torrance Lateral.</td><td>A change sheet will be prepared for the Basin Plan Amendment to specify that the interim concentraion-based allocation will apply to Torrance Lateral discharges.

In addition, the interim allocations in the draft Staff Report and tentative BPA have been revised as follows:

Concentration-based Dominguez Channel freshwater interim metal allocations
<table>
<tr><th></th><th>Total Copper</th><th>Total Lead</th><th>Total Zinc</th></tr>
<tr><td>allocation (µg/L)</td><td><s>93.1</s>207.51</td><td><s>35.8</s>122.88</td><td><s>382.5</s>898.87</td></tr>
</table></td></tr>
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		ExxonMobil requests that the RWQCB develop interim mass-based metals limits for the Torrance Refinery discharge using these fresh water interim concentration limits and the assumptions shown for this discharge on page 12 of the Amendment and in Table 6-7 of the TMDL Report (i.e., 3.7 million gallons per day for 7 days/year, occurring on an average discharge frequency of once every 7 years).	See response to **Comment 30.5.** Interim allocations for all responsible parties are concentration-based.
34.6		**Final Waste Load Allocations for the Torrance Lateral** The final waste load allocations for the Torrance Lateral (TMDL Report pp. 87-88, Amendment, pp. 11-12) are only for three metals. Given that the Torrance Lateral is identified on the State's 2008/2010 CWA Section 303(d) list as impaired for water column copper and lead (TMDL Report, in 39), these WLAs are consistent with the identified impairments. Because the Torrance Lateral flows into the Dominguez Channel and its flows and WLAs are incorporated into the Dominguez Channel Estuary model, it is ExxonMobil's interpretation that the concentration-based WLAs for the estuary and inner harbor (Amendment p. 12, TMDL Report pp. 90-92) do not apply to the Torrance Lateral and the Torrance Refinery. We believe that both the TMDL Report and Amendment are clear in this respect (i.e., it would make no sense to have final massbased WLAs for the Torrance Refinery and then also apply the concentration-based WLAs for the Dominguez Channel Estuary), but it would be appropriate to clarify in both the Amendment and TMDL Report that the WLAs for Torrance Lateral apply to all discharges to the Lateral and that these WLAs satisfy the TMDL requirements for discharges from this source to the Dominguez Channel Estuary. ExxonMobil also believes it is appropriate to clarify that the final concentration-based sediment WLAs (Appendix, page	Concentration-based WLAs for Torrance Lateral and mass-based WLAs for ExxonMobil Torrance Refinery have been revised in the BPA and TMDL Staff Report. Language has been added to clarify that no explicit PAH allocations for ExxonMobil Torrance Refinery are provided in the TMDL; however refinery discharges are expected to meet water quality criteria and PAHs will continue to be monitored.

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		12) are not applicable to the Torrance Refinery discharge and that the mass-based WLAs shown in the following table of that page are the only applicable WLAs for the refinery. It is ExxonMobil's interpretation that because the final mass-based WLAs are based on unfiltered (e.g., total recoverable) metals these WLAs are considered to also meet the sediment WLAs for these metals. Because the Torrance Refinery stores wastewater before discharge, most settleable solids are removed and very small amounts of "sediment" would be in any discharge and these amounts will be measured by the total metals analysis. Also, because as stated elsewhere in the TMDL Report, reduction of metals loadings by reducing storm water flows and applying BMPs to remove settleable solids will also reduce PAH loadings sufficiently to achieve the WLAs for the latter pollutants, it is ExxonMobil's interpretation that the RWQCB's intent is that separate PAH mass limits are not required.	
34.7		**Monitoring Plan** The TMDL monitoring plan for the Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary is presented on pages 20-22 of the Amendment and pages 117-119 of the TMDL Report. In the description of water column monitoring (Amendment, page 21) it is stated that sampling shall be designed to collect sufficient amounts of suspended solids to allow for analysis of pollutants in the bulk sediment. This requirement may be impractical for discharges that have a low suspended solids concentration as a result of the BMPs applied to control solids in the discharges. For example, the Torrance Refinery's discharge, when it occurs, consists of storm water that has been collected in large holding basins where most sediment settles out. At an average effluent total suspended solids concentration of approximately 200 mg/L (based on monitoring data submitted to EPA and the	Staff disagrees. Monitoring is required to measure the progress of pollutant load reductions and improvements in water and sediment quality and fish tissue. Most important, the goal of the required monitoring is to determine compliance with the assigned waste load allocations. Detail on the amount of sample collected and appropriate QAPPs shall be submitted to the Regional Board for approval after the TMDL become effective. The SWRCB website provides resources for stakeholders to easily develop SWAMP compatible QAPPs and select appropriate sampling method for your discharge. The website also provides the SWAMP QAPP advisor, which is an online tool designed to assist stakeholders in writing QAPPs.

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		RWQCB) it would require 1,000 liters of sample to obtain 200 grams[4] of solids, assuming that all of the solids in the sample are settle able. Collecting and managing this much sample is clearly impractical. ExxonMobil recommends that the RWQCB insert qualifying language in both the Amendment and TMDL Report that states that analysis of sediments included in water column samples is only required if sufficient amounts of sediment can be obtained, from the volume of sample required for all of the aqueous phase analyses. The feasibility of analyzing a separate sediment sample will be determined on a case-by-case basis by the entity performing the sampling and documented in the sampling report.	
34.8		**Special Studies and Reconsiderations** ExxonMobil supports the inclusion of optional special studies as components of the TMDL and reconsideration of the TMDL targets as more information and data are collected during the phased TMDL; This is an appropriate recognition of the complexity of this TMDL and the fact that further studies during the course of the TMDL can add significant value in terms of meeting the ultimate goal of achieving the designated uses for all of the affected water bodies. All of the optional studies listed on pages 114-116 (Appendix, page 30) have potential value for providing a better understanding of the extent and nature of the water and sediment pollutant concentrations and their relationships to the aquatic ecosystems of the estuary and Greater Harbor. ExxonMobil suggests that an additional optional study that should be listed in the TMDL Report is the development of water-body specific aquatic life numeric water quality criteria for metals using one or more of the approaches described in EPA's *Water Quality Standards Handbook; Second*	Comment noted.

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		Edition (EPA-823-B-94-005a). Many states have found that the EPA National Water Quality Criteria for copper, which are the copper criteria in the California Toxics Rule (CTR), are overly restrictive for marine waters in their jurisdiction because their site-specific chemistry is different from that of the Narragansett Bay water that EPA used to develop the criteria. For example, site-specific copper criteria (acute and chronic) that are greater than the CTR criteria have been developed for the New York-New Jersey Harbor, the Houston Ship Channel and San Jacinto River Estuary in Texas, and the Mississippi Sound, Thus, an optional study to evaluate possible site specific metals criteria for aquatic life protection that could change the TMDL targets should be included in the TMDL Report. The RWQCB should emphasize that such studies are the water column equivalent of the optional stressor identification and sediment-fish tissue linkage studies described in the TMDL Report.	
34.9		**Implementation Schedule** The Implementation Schedule (Appendix, Table 7-40.2; TMDL Report, Table 7-2) is reasonable with one exception. ExxonMobil does not believe that six months is sufficient time to complete Task 2, submittal of the required Monitoring Plan to the RWQCB. Because the monitoring plans are intended to be group efforts among multiple responsible parties (which makes the most sense for a cost-effective, comprehensive, monitoring program), six months is not sufficient time for the responsible parties to organize into working groups, make any necessary contractual agreements, and prepare and submit the comprehensive plan required by the TMDL. ExxonMobil recommends that the TMDL allow twelve months for development and submittal of the Monitoring Plan.	See response to **Comment 23.1c.**

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35.	Heal the Bay		
35.1		**I. Compliance** **Narrative SQOs should not be used to determine TMDL compliance** We are concerned with the proposed approach incorporating SQOs into this TMDL. In particular we believe that the SQO approach should not be used to determine compliance with numeric targets and waste load allocations. There are many non-conservative assumptions and uncertainties associated with the SQOs. As this is the first time SQOs have been incorporated into a TMDL, this action is precedent-setting and must be done in a cautious, protective manner. One of the many flaws of the SQOs is that they do not include clear numeric objectives. SQOs use narrative objectives coupled with the multiple lines of evidence (MLOE) assessment, which together provide an unclear and ineffective way to determine if sediments are contaminated and impaired. Instead, we support the inclusion of ERLs and TECs as numeric targets. within the TMDL because these are easily measured numeric values that can function as effective indicators of healthy sediments. Further, sediment toxicity and benthic community health should also be evaluated independently. Of note, the recently adopted 2008/2010 303(d) List includes numerous listings based on sediment toxicity and benthic communities as independent factors. The Draft TMDL gives the option of meeting final sediment allocations or demonstrating the desired qualitative condition via multiple lines of evidence in the SQOs. Unfortunately, we believe that most dischargers would opt out of compliance with numeric targets. Also, the TMDL gives added incentive for dischargers to choose numeric targets, as it allows less	*The Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality* (SQO Plan Part 1) is the policy of the State of California. This Direct Effects TMDL provides two means of compliance, either: -meeting narrative SQOs OR -meeting sediment quality values (currently these sediment chemistry values are defined as ERLs). The narrative SQOs <u>are</u> the applicable water quality objectives for estuarine or marine waterbodies defined in these TMDLs. Since these objectives have been adopted by State and approved by EPA then the TMDL is designed to attain those water quality objectives. The commenter may disagree with the concept of integrating multiple lines of evidence in the SQOs-Part 1 Direct Effects; however they do provide a means of interpreting sediment triad results and provide a definition of attaining the standard. Per commenter's suggestion, staff do not find that compliance with both the ERLs <u>and</u> narrative SQOs is necessary. The restorative condition applies to improved sediment conditions, supporting benthic organisms; which is sufficient to show attainment with the standard. Sediment chemistry levels may be higher than ERL values and biological conditions may not adversely affected. Thus, there is no need to require compliance with both. Commenter states that individual legs of sediment triad must be evaluated independently to determine whether sediment

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		frequent monitoring-- five years for sampling for the sediment triad versus two years for chemical testing. The TMDL must require compliance with ERLs and TECs in addition to meeting the SQOs. As currently proposed there are instances where the SQOs can be met, but ERLs, TECs, and even ERMs are grossly exceeded. For instance, the score for the chemistry leg of the triad is based on weighted average CSI score, which has four disturbance categories: reference, low, moderate, and high. These categories do not coincide with ERLs and TECs. In fact, copper, lead, mercury and zinc could all exceed ERLs and still fall into the low disturbance category. When weighted with the other legs of the triad, the SQO target of "likely unimpacted" could result even if sediment chemistry exposure is moderate as long as benthic community condition is at least "low" or if sediment toxicity is at least "moderate." Copper, zinc and mercury could all exceed ERMs and still fall under the "moderate" disturbance category. The individual legs of the triad should be evaluated independently to determine whether sediment quality is impacted. Sediment that does not meet one leg of the triad impairs beneficial uses, thus each line of evidence evaluated separately in the SQO should be sufficient to demonstrate that sediment quality targets are not being met. For instance if sediment is found to have high chemical concentrations, it is enough to infer that the sediment is contaminated. If sediment is found to be toxic, the sediment is impaired for toxicity. Perhaps most critically, **at no time should a station assessment showing either moderate toxicity, moderate benthic community impact, or moderate sediment chemistry exposure be considered in compliance, regardless of the station assessed being designated as**	quality is impacted. Most critically, "**at no time should a station assessment showing either moderate toxicity, moderate benthic community impact, or moderate sediment chemistry exposure be considered in compliance, regardless of the station assessed being designated as "unimpacted" or "likely impacted".** Staff wish to emphasize the nuances of evidence of a single moderate effect at the station assessment level (i.e., one sediment triad leg at one sampling site) which are already defined within the narrative SQOs. That is, moderate toxicity may result in station assessment of 'likely impacted', as would moderate benthos impact. Only the conditions of Unimpacted or Likely Unimpacted comply with the TMDL. Staff concur with the comment that "inconclusive" assessment does NOT comply with TMDL. If it is not possible to resolve the LOEs to determine a station assessment, then ERLs provide a method of compliance. Staff acknowledge that a station assessed to have *moderate* sediment chemistry exposure, *moderate* sediment toxicity but *reference* benthic community conditions, would be found to be in compliance with the Sediment Quality Objectives (Likely Unimpacted) and this TMDL. In fact, this is not a flaw in the SQOs but reflects the premise of the SQO; none of the individual LOEs is sufficiently reliable when used alone and each LOE produces specific information, that when integrated with the other LOEs provides a more confident assessment of the sediment quality. In addition, the Basin Plan Amendment has been modified to include additional monitoring in the case of moderate sediment toxicity. "*If moderate toxicity as defined in the SQO Part 1 is observed, results shall be highlighted in*

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		"unimpacted" or "likely impacted". In addition, the TMDL should provide more clarity on how compliance will be determined using SQOs. The TMDL should explicitly state that an "inconclusive" station result will not comply with TMDL WLAs. The SQOs state that an inconclusive station level assessment indicates "[d]isagreement among the LOE suggests that either the data are suspect or that additional information is needed before a classification can be made." In addition, a result of "likely unimpacted" should warrant further investigation prior to compliance determination. As noted in the SQOs, a station assessed as "likely unimpacted" indicates that "[s]ediment contamination at the site is not expected to cause adverse impacts to aquatic life, but some disagreement among the LOE reduces certainty in classifying the site as unimpacted." This disagreement between LOE should be investigated and resolved before a station is considered in compliance. Otherwise, a station assessed to have moderate sediment chemistry exposure, moderate sediment toxicity but reference benthic community conditions, for instance, would be considered in compliance. Anytime an individual LOE result shows a "moderate" effect, the station should not be considered in compliance. Such assessment would help provide a necessary margin of safety that is currently lacking in this TMDL, as we explain in more detail below. Finally, the TMDL should clarify how the SQOs will be used to determine the condition of an entire water body. SQOs assess sediment quality on a station-by-station basis. Any one station that fails to meet SQOs is in violation of TMDL requirements. Clearly, averaging station results over an entire water body would not be a protective approach and should not be used. How will the TMDL translate results from	*annual reports and further analysis and evaluation to determine causes and remedies shall be required in accordance with the EO approved monitoring plan."* Also, when monitoring plans are developed, it may be determined that sediment triad results from several sampling sites per waterbody are necessary to provide a reasonable evaluation of sediment quality conditions throughout the whole waterbody or appropriate section of the waterbody. Therefore, presence of moderate toxicity or moderate benthic impact at one station/site may not be adequate indication of 'likely impacted' or 'clearly impacted' within the whole waterbody. Heal the Bay will have the opportunity to comment; the Basin Plan Amendment has been modified to include "*Monitoring Plans shall be submitted ~~6~~ nine (9) months after the effective date of the TMDL for public review and, subsequently, Executive Officer approval."*

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		individual stations to an entire waterbody? This methodology should be clearly explained in the TMDL.	
35.2		**II. Numeric Targets/ Waste Load Allocations** **The Regional Board and USEPA should incorporate an explicit margin of safety into the waste load allocations of this TMDL and into the individual lines of evidence in the SQOs.** We support the Regional Board and USEPA including an explicit margin of safety to the Dominguez Channel freshwater allocations. However, the TMDL has an inadequate margin of safety applied to the final sediment and water column allocations for Dominguez Channel Estuary and Greater Harbor Waters. Pursuant to Section 303(d), TMDLs must include a margin of safety to reflect uncertainties regarding discharges, water quality, and capturing critical conditions. 33 U.S.C. § 1313(d); 40 C.F.R. § 130.7(c)(1) ("TMDLs shall be established at levels necessary to attain and maintain the applicable narrative and numerical WQS with seasonal variations *and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.")* (emphasis added); *see also Minnesota Center for Environmental Advocacy v. U. S. Environmental Prot'n Agency, 2005* U.S. Dist. LEXIS 12652 (D.Minn.2005) (holding that regulatory agencies "...must comply with the statutory and regulatory mandate to establish a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality."). *Id.* Thus, the Regional Board is required to include a margin of safety and it must be sufficiently protective to ensure that standards are attained and	TMDLs must include a margin of safety, however it can be incorporated via either implicit or explicit means. As acknowledged and supported by commenter, this TMDL applies an explicit margin of safety to Dominguez Channel freshwaters. Commenter asserts an explicit margin of safety is needed for uncertainties associated with SQO approach. As described in the TMDL and in response above, we have made numerous conservative assumptions for addressing sediment quality, including selecting the protective ERL values for calculations of TMDLs and allocations or choosing the more protective of direct effects or bioaccumulative sediment targets. In addition, the SQO direct effects assessment also has incorporated a conservative approach, whereby, whenever averaging occurs then 'rounding down' value is performed before going onto next assessment step.

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		maintained by the TMDLs. A 10% explicit margin of safety should be applied to all of water column allocations for all the waterbodies included in this TMDL. Also, since uncertainty of environmental impacts is even greater in contaminated sediments than receiving waters, a margin of safety is even more critical. The TMDL states that an implicit margin of safety exists in the final allocations to Dominguez Channel Estuary and the Greater Harbor waters based on the selection of multiple numeric targets, including targets for water, fish tissue, and sediment. However, selection of multiple targets does not constitute an implicit margin of safety; this simply represents the need to address multiple impairments. The TMDL goes on to state "there may be uncertainty associated with revised sediment quality values, which may warrant including additional explicit margin of safety" (Draft TMDL page 20). In this TMDL, an explicit margin of safety is needed to account for uncertainties associated with application of the SQO approach. This is especially necessary as the SQO Policy is new and has not been implemented to date. The SQOs do not contain any margin of safety. A margin of safety would provide a "safety net" for the incorrect assumptions made or unknowns that existed in the SQO development process. There are non$^{=}$ conservative assumptions made throughout the SQO plan which carry over into this TMDL, such as the use of the average value to integrate data points for the sediment assessment and the use of the non-conservative MLOE approach. The USEPA and Regional Board should either discard the SQOs as a means of compliance, or at a minimum, apply the SQOs in a way that provides a protective explicit margin of safety. The use of a single line of evidence as previously suggested, rather than multiple lines of evidence would be a margin of safety protective of marine life. By the very nature of the MLOE	In fact, the selection of multiple numeric targets, including targets for water, fish tissue and sediment does represent additional protections in that biota are exposed to multiple media, if sediment exposure is more than conservative, but water exposure is less, then overall exposure may support the biota. In addition, actions taken by responsible parties to meet a contaminant's target in one environmental media, may also help lower the contaminant in another environmental media Further, under the SQO Plan Part 1, 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" includes sites that are actually unimpacted.

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		SQOs, this approach is not nearly as protective of marine life as the use of any single LOE.	
35.2(a)		**The Draft TMDL must include dry-weather and wet-weather numeric targets for each waterbody-pollutant combination included on the 303(d) List.** The Draft TMDL includes freshwater wet-weather numeric targets and load allocations for copper, lead, and zinc in the Dominguez Channel. There are no dry-weather numeric targets proposed for these metals. This approach is inappropriate and illegal because the California Clean Water Act Section 303(d) List of Water Quality Limited Segments ("303(d) List") does not distinguish between impairments occurring in dry-weather and wet-weather. By creating dry-weather TMDLs for certain constituents and not others, the EPA will initiate "pocket de-listings" of the omitted constituents, which will cause the impaired waterways to be vulnerable during dry weather to the very pollutants that cause the impairments. Adding to this concern is the fact that the Draft TMDL specifies that Dominguez Channel must reach a flow of 62.7 cfs (the 90th percentile flow rate) before wet-weather load allocations apply. The use of the 90th percentile flow as a compliance threshold allows the Dominguez Channel to violate water quality standards for metals nearly all of the time-in dry weather, small rain events, and even moderate rain events. How is this approach protective of aquatic life? What is the justification for this approach, given that the SUSMP design storm (85th percentile storm) would not even be included in the definition of wet weather? The targets must apply 365 days a year. Marine life can't avoid contaminated water based on rainfall conditions. The Draft TMDL must include both dry-weather and wet-weather numeric targets for each waterbody-pollutant combination listed as impaired on the	Differentiation between dry and wet weather TMDLs is standard procedure for evaluating the critical condition affecting the beneficial uses. Monitoring results within Dominguez Channel show no impairments during dry weather therefore TMDLs are not currently required. This is in no way a "pocket de-listing" but an appropriate TMDL. Staff disagree that the selection of 90th percentile flow value (62.7 cfs) to define when wet weather TMDLs will allow "violation of water quality standards nearly all the time." Applicable (chronic) WQOs still apply to these freshwaters in dry weather conditions (any flows below 62.7 cfs). The San Gabriel River and Los Cerritos Channel metals TMDLs similarly apply for wet weather conditions only. The Ballona Creek and Los Angeles River metals TMDLs apply for both dry and wet weather based on monitoring results that support impairment conclusions during both dry and wet weather for those specific pollutants. Regarding diazinon, concentrations in Dominguez freshwaters, Staff followed the State's Impaired Waters Policy which requires evaluation of available data prior to determining if a TMDL is needed. As stated in TMDL, staff have reviewed recent and historical data of diazinon in freshwaters and concluded non-impairment conditions exist, therefore no TMDL is required for this pollutant at this time. Diazinon is not delisted by this TMDL. If further data demonstrates the continued presence of diazinon, then a TMDL can be developed at a later date. Or, if conditions

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		303(d) List. This is consistent with the Ballona Creek and LA River metals TMDLs, which include both wetand dry-weather allocations. Also, the TMDL should contain allocations for diazinon. According to the staff report, load allocations for diazinon were excluded from this TMDL because the pesticide was banned in 2005 and because the chemical has not been detected since the ban. The Dominguez Channel in still listed as impaired by this constituent, which could be present in the sediment and resurface during dredging activities. Thus, USEPA and Regional Board should not perform a "pocket-delisting" of this constituent by excluding it from the TMDL. The TMDL should contain both a numeric target and load allocation for diazinon. If monitoring efforts show that a responsible party already meets the numeric targets and allocations, they will be in early compliance with the TMDL.	warrant , diazinon can be removed from the 303(d) list per the State Listing Policy.
35.2(b)		**The TMDL should apply concentration-based allocations to all dischargers.** The Draft TMDL proposes mass-based allocations for Caltrans and MS4 Permittees that discharge into Dominguez Channel, and to the Exxon Mobile refinery that discharges into Torrance Lateral., These responsible parties should be given concentration-based allocations, instead, for ease of compliance determination and protection of aquatic life. Concentration-based allocations are more protective of aquatic life. Under a mass pollutant loading scheme, a source can discharge effluent at contaminant concentrations toxic to aquatic life, yet remain in compliance with mass-based WLAs. This approach is not protective. Also mass-based allocations for MS4 discharges are not as protective as concentration-based allocations because they make it more	The intention of wet weather mass-based allocations in the Dominguez Channel and Torrance lateral is two fold: a. permittee may have technical challenges with treating (and reducing pollutants) large volumes of discharged storm water; b. wet weather flows are most likely to carry pollutants downstream thereby depositing into estuaries or greater Harbor waters. Staff understands that refineries aim to not discharge stormwater at all, although this is contingent on antecedent conditions as well as site capacity for holding storm water. While, when relying on concentration-based WLAs, when a single sample is taken, it may be easier to determine

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		difficult to determine compliance and have more uncertainty. With concentration-based allocations if a sample exceeds a target concentration, then it is clearly out of, compliance. In addition, mass-based allocations require more steps in order to convert concentrations to annual mass loadings based on a limited set of flow data that may not accurately represent flow conditions over the course of the year. Even though the ExxonMobile refinery only discharges occasionally, the discharger should not be allowed to discharge in toxic concentrations during those periods. We are aware that there are other similar refineries that have means to treat their discharge to concentrations that meet water quality standards. All refineries should be able to install similar treatment capabilities to reach acute aquatic CTR concentrations and thus meet concentration-based allocations. Also we are concerned that the estimated discharge frequencies contained in the TMDL are greater than those that the refinery currently discharges and will allow for the refinery to increase the frequency of current discharge. The TMDL **should define buried** sediments as deep as 1 meter or more as the "active layer" of sediment. Loading capacities and allocations for Dominguez Channel Estuary and Greater Harbor waters were developed based on existing sediment concentrations in the "active sediment layer," which is defined in the Draft TMDL as the top 5-centimeter layer of sediment. The TMDL reasons that this layer was selected because it provides habitat for 95% of benthic organisms. The active layer should be defined to include a larger depth that aims to protect 100% of the organisms, especially the most sensitive organisms. Examining just the top not give sufficient insight on the	compliance with that single sample, concentration-based WLA are not necessarily more protective. Since a single sample only reveals compliance on that day, at that time, with an appropriate monitoring plan which includes sufficient monitoring, mass-based WLA are protective. The use of a 5 cm sampling depth for chemistry and toxicity analyses is consistent with the SQO Plan Part 1 and most other sediment quality assessment programs, which analyze the top 2- 5 cm of sediment. Use of this depth to represent the surficial sediment conditions means the data is relevant and will indicate the effect of present day sediment loadings and provide comparability with other monitoring programs. Sediment from deeper depths are characterized in dredging programs, but those problems have different objectives than the SQOs and do not replicate the benthic community line of

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		ecological health of the water body. Species such as ghost shrimp and spoon worms go down a meter or more into the sediments. Burrows of Thassaladian mud-shrimps have been reported to reach down to 2.5-meter sediment depths.[3] According to the Monterey Bay Aquarium ghost shrimp tunnel almost constantly, reworking the sediment to a depth of as much as 30 inches (76 cm), and these burrows provide shelter for other invertebrates.[4] Thus, buried sediments can impact the benthic community and beneficial uses. Even EPA's own work on the DDT and PCB contaminated sediments off of Palos Verdes supports a thicker active layer. The final remediation plan includes a cap of 45 centimeters to prevent significant bioturbation for benthic infauna. A 5 centimeter active layer is completely inconsistent with EPA's own work on contaminated sediment management. EPA and the Regional Board have been involved with contaminated sediments issues in the Port of Los Angeles and Long Beach area where sediment caps for contaminated sediments of 1 meter or greater have been required. Also sediments can be dynamic and can move and be buried due to a single storm event and legacy contaminated sediment may be buried. Clearly, the USEPA and Regional Board should consider deeper sediments in order to understand the health of the water body and ensure that beneficial uses are protected for all species. Further the SOO Policy does not restrict implementation and monitoring to 5 cm, so there is absolutely no reason to do so in the Draft TMDL. We believe The TMDL should define the active layer of sediment to encompass at least 1 meter of sediment, and that compliance monitoring of sediments should be performed to at least this depth.	evidence. In addition, benthic community condition is assessed in SQO monitoring by analyzing sediment from the entire grab, which usually penetrates to a depth of 10-15 cm. The majority of benthic species live in the upper 5-10 cm of sediment and the exclusion of the few species living below the grab penetration depth does not significantly affect the ability to characterize benthic community condition as the benthic indices were calibrated for those sampling depths. The SQO Part 1 does not restrict the Regional Board from requiring additional monitoring of any kind including monitoring of deeper depths, however, the SQO and the assessments of “unimpacted” or “likely unimpacted” are defined based on an evaluation of the top 5 cm of depth for chemistry and toxicity so it makes sense that compliance monitoring is via the established SQOs. Commenter cites EPA Superfund work on contaminated sediments off Palos Verdes Shelf with a proposed cap of 45 cm (18 in.). Staff note that this is an interim remediation decision contingent upon numerous site-specific conditions that determine cap area and depth. This TMDL does not dictate the depth of sediment cap or other remediation options to improve water quality within these greater Los Angeles and Long Beach Harbor waters since those decisions will be reviewed, publically considered and determined under additional regulatory programs. Staff agree that sediments can be dynamic and staff note that to achieve the targets long-term within the active 5cm, responsible parties will have to consider erosion and

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			deposition in addition to bioturbation.
35.2(c)		**The Draft TMDL should include dry-weather and wet-weather numeric targets based on *chronic* aquatic life criteria.** In the Draft TMDL acute criteria are used for the calculation of freshwater wet-weather numeric targets and WLAs for Dominguez Channel and Torrance Lateral. The EPA's justification for this choice is that chronic exposures occur over a 4-day interval, and most storms in California have duration less than four days (Page 13). This method is not protective of the most critical conditions of the waterway. During certain wet weather events, it is possible to encounter storms lasting more than four days. We've seen inputs of a stormy week last for well over a month of measured base flows in some watersheds. For storms of a shorter duration but high intensity or for multiple storms that occur over a longer duration, water may remain in a waterway for more than four days. Such events can pose a. major threat to aquatic life if chronic pollution criteria are not used for the calculation of wet weather numeric targets. During these storms, more volume enters the Channel, sediments containing metals are suspended and hardness concentrations drop, resulting in potentially higher toxicity of metals that enter the waterway at this time. Furthermore, the CTR criteria apply at all times during wet and dry weather. There are no exceptions for very large storm events. Hence, chronic criteria should be used instead of acute to provide adequate protection to aquatic life during these critical storm events.	Staff find the freshwater flow rates to be unique to Dominguez Channel. Based on our modeling of stream flow rates at S28 gage, we find there are low flow rates (with minimal variation) occurring during dry weather conditions. During wet weather, there is a dramatic change at 62.7 cfs resulting in significantly increased stream flow rates. By analyzing the observed flows at S28, we find the 90th percentile of observed flows is very similar at 61.5 cfs. See Figure III.2-1, which is the graph illustrating the DC flows & 90th percentile We have followed protocol used in previously adopted freshwater metals TMDLs, namely acute criteria apply during wet weather conditions and, where appropriate, chronic criteria apply during dry weather conditions. We have followed CTR SIP policy regarding selecting the median hardness value to set the acute criteria for copper, lead and zinc in freshwaters.
35.3		**III. Implementation** **The Regional Board should tighten the maximum**	This TMDL establishes a schedule to achieve water quality standards which moves with deliberate speed and allows sufficient time for flexibility in compliance methods, to deal

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		timeframe to implement sediment remediation actions. As proposed in the Draft TMDL, final LAs and WLAs are to be achieved 20 years after the effective date of this TMDL. This timeframe is far too long. In particular, the remediation of contaminated sediment must be expedited in order to meet fish tissue targets by the end of the implementation of this TMDL. Instead, we support a schedule of no more than 15 years to implement this TMDL, with all hotspots to be remediated within 10 years. We agree that the first five years (Phase I) would be well spent by, addressing watershed inputs to the Harbor. However, this does not mean that progress in remediating the Harbor sediments is not feasible during this time. Existing sediment quality data could be used to expedite the drafting of the Contaminated Sediment Plan, which is to be submitted two years into the implementation of this TMDL. Of note, drafting of this plan should already be in progress for the Ports as a part of the Ports joint Water Resource Action Plan. This plan must identify all hotspots and contain a schedule for remediation in the short-term and long-term. Also, the Regional 'Board should use its authority to ensure that these hotspots are addressed in a timely manner. In the Marina Del Rey Toxics TMDL, for example, the Regional Board used an approach involving the issuance of Clean Up and Abatement Orders to address sediment contamination hotspots. Similar methods could be used in this TMDL.	with uncertainties and to allow for prioritization of actions. The implementation likely will require cooperation and agreements between responsible parties and will require careful planning to keep costs as low as possible and the implementation schedule provides time for that. In addition, Staff recognize that responsible parties are implementing TMDLs in other watersheds which will require similar types of stormwater measures and the actual experiences of responsible parties now implementing TMDLs in other watersheds advises the length of the schedule. In addition, because it is anticipated that some dredging of hotspots will be necessary to comply with the TMDL; experience with dredging projects, including design, environmental documentation, permitting and execution, have advised the length of the schedule. This schedule has a likelihood of success.
35.3(a)		**The Regional Board should set concrete implementation milestones to ensure existing impairments are addressed in a timely manner.** In addition, The Regional Board should set concrete milestones to set responsible parties on the path to compliance during implementation of the TMDL. We suggest	Staff agree that concrete milestones are of value in a TMDL compliance schedule. At this time, a specific requirement of one third of the hotspots identified in the Contaminated Sediment Plan remediated within Phase I and two thirds remediated within ten years, is premature as the Sediment Management Plans have not yet been developed by the

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		that one third of the hotspots identified in the Contaminated Sediment Plan should be cleaned up within Phase I of the Implementation period, and the remaining two thirds should be remediated ten years into TMDL implementation. This will put responsible parties on the path to meet sediment targets within 15 years.	responsible parties. The Sediment Management Plan will need to have concrete milestones for Executive Officer approval. In addition, the Basin Plan Amendment specifically includes the possibility of developing interim targets for the end of Phase II during the scheduled re-consideration of the TMDL when the Sediment Management Plans will be complete.
35.4		**IV. Monitoring** **The Regional Board should clarify and strengthen guidelines for the monitoring program in the Draft TMDL.** We support the general monitoring components in the Draft TMDL, including ambient monitoring and compliance assessment monitoring. While we support the designation of sampling sites for compliance monitoring at the locations in the' Greater Harbor Area listed on the table on page 23 of the Basin Plan Amendment, we also feel the Board should provide clear guidance for how many sampling stations are necessary for each site, and criteria for selecting these stations during each sampling event. Compliance points should be located to ensure water quality and sediment targets are attained throughout the Dominguez Channel, Greater Harbor waters, and Dominguez Channel Estuary. The TMDL states, "Chemistry data without accompanying sediment triad data shall be used to assess sediment chemistry trends and shall not be used to determine compliance." While we disagree and believe that any leg of the triad should be viewed independently as a measure of compliance for the reasons mentioned earlier, we also recommend that in addition to sediment chemistry, toxicity and benthic impacts should be tested throughout the Harbor	The number of sampling stations necessary for the characterization of each site or waterbody, and criteria for selecting these stations during each sampling event will be identified in the monitoring plans developed by the responsible parties. The monitoring plans require approval of the Executive Officer after stakeholder input. For the independent use of any leg of the triad, see response to Comment 35.1.

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		every two years instead of the five-year frequency proposed. Storm variability is extremely high and any given year can have much higher contaminant loads. Also, more data can allow regulators and dischargers' to better assess temporal trends and progress during the implementation phases of the TMDL. Also as mentioned earlier, because the proposed monitoring frequency for the sediment triad is less frequent than for sediment' quality guidelines, SQOs are favored as the choice for sediment quality compliance over ERLs and TECs.	
35.4(a)		**The Regional Board should establish clear guidelines for fish tissue monitoring and compliance in the Draft TMDL.** Several aspects of the fish tissue monitoring proposal have improved from other adopted TMDLs in the Region. For instance, we support the Regional Board's guidance on the number of fish species to be sampled in Dominguez Channel and Greater Harbor waters. However, more clarification is needed in the Fish Tissue Monitoring section of the TMDL. The TMDL should require that fish tissue sampling locations should coincide with known angler access points, known contamination hotspots, and other areas of concern. Also, the TMDL should require that the entire fish is tested. Currently, the Draft TMDL states "Tissue analyzed shall be based on the most common preparation for the selected fish species." However, different ethnic groups have different methods of preparation for the same species. Hence basing testing on the most "common" preparation method may not be the most protective approach. We urge the Board to require testing on whole fish instead of selecting certain tissues. In addition, the TMDL should clarify that fish tissue targets	Commenter has requested more clarification regarding fish tissue monitoring at sampling locations of known angler access points, known contamination hotspots, and analysis of whole fish tissue samples. We believe such specifics can be worked out in monitoring plans forthcoming once the TMDL is adopted. For example, known angler access points could refer to diversity of specific fishing piers and sport fishing outfitters. The primary hotspot of concern in the subject waters is Consolidated Slip, where the maximum numbers of pollutants exist at highest concentrations. It remains to be determined if this indeed corresponds to an area of significant fishing pressure by humans or wildlife. Also, TMDL language currently states 'analysis shall be based on the most common preparation for the selected species', thus acknowledging that some humans may be consuming the whole fish, including skin which contains lipids and therefore contributing contaminant levels. The TMDL has calculated sediment allocations to support

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		must be met to achieve TMDL compliance. Currently, the TMDL contains no waste load allocations for fish tissue. However as you know, the 303(d) list includes separate listings for fish tissue. We realize that the TMDL aims to address these listings by addressing sediment contamination. 'However, beneficial uses cannot be restored if fish tissue remains impaired after the implementation of the TMDL is complete. Thus, the Regional Board and USEPA should clarify that meeting fish tissue targets within 15 years is a mandatory element of compliance with the TMDL.	the fish tissue targets. The fish tissue targets must be met by the end of the 20 year implementation schedule.
36	Latham & Watkins for 10 organizations (Comments from cover letter and multiple contributors included.)		
36.1		**Inconsistencies with State-Wide Policies and Relevant TMDL Precedent** The draft TMDL is contrary to state-wide policy regarding regulation of contaminated sediment, as well as numerous TMDLs elsewhere in California and the nation, yet does not explain these material departures. - *State-Wide Policy.* The TMDL contradicts the, "California Water Quality Control Plan for Enclosed Bays and Estuaries Plan - Part 1 Sediment Quality," the state-wide policy set in August 2009 by the California State Water Resources Control Board for the regulation of contaminated sediment, including the bottom sediments that are a principal focus of the draft TMDL. The TMDL sets sediment targets based on screening values from the literature - an approach rejected by state-wide policy. The TMDL uses parts of the state-wide policy in isolation from the balance, when the state policy requires an integrated approach using all three of its major components. These significant inconsistencies drive the unprecedented scope and cost of the draft TMDL's proposed massive dredging	The proposed TMDL is entirely consistent with other adopted and effective Los Angles Region TMDLs and appropriately incorporates the State's 2009 "California Water Quality Control Plan for Enclosed Bays and Estuaries Plan - Part 1 Sediment Quality" (SQO Part 1). The use of ERLs as the numeric targets is consistent with previously adopted TMDLs in the Los Angeles Region, including the recently adopted Colorado Lagoon toxics TMDL; and also the Calleguas Creek OC pesticides, PCBs, and Siltation TMDL and the Marina del Rey Harbor Toxic Pollutants TMDL. The Calleguas Creek OC pesticides TMDL and Marina del Rey Harbor Toxics TMDL have been approved by EPA and are in effect. This TMDL necessarily calculates the numeric targets, loading capacity and allocations from the numeric ERLs, but incorporates the triad approach of the 2009 SQO Part 1

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		program, which never would have been recommended had the TMDL followed the State Board's August 2009 sediment management strategy. - *Regional Board Precedent.* The draft TMDL is significantly more stringent than the TMDL for Upper Newport Bay, an ecological reserve of special value, set by the Santa Ana Regional Board in September 2007. The TMDL also is inconsistent with the TMDL for PCBs in San Francisco Bay set by the San Francisco Regional Board in February 2008. While the draft toxics TMDL proposes a sediment target for PCBs, the TMDL for San Francisco Bay considered, but rejected, that approach. The proposed sediment targets, which are not required by law, and which we believe violate state and federal law, are fundamental to the TMDL's dredging proposal. - *National Precedent.* The contaminated sediments approach taken by the draft TMDL significantly departs from TMDLs in jurisdictions outside of California, including Delaware, Mississippi, Alabama, Washington and Oregon, which take a watercolumn approach to the establishment of TMDLs for the subject compounds, and do not develop numeric TMDL targets and allocations for bottom sediments. This lawful approach, available to the agencies, avoids the specter of massive, irrational sediment remediation proposals.	as a method for the determination of compliance. Numeric targets and allocations must be included and SQO Part 1 does not provide a single number that can be used for a target and to calculate an allocation. Staff note that the San Francisco Bay PCBs TMDL (San Francisco Board) recorded impairments of fish tissue and noted exceedances of water criteria, but did not address impairments of sediment directly. The Staff note that the Upper Newport Bay (Santa Anna Board) and San Francisco Bay TMDL (San Francisco Board) were completed before the State's 2009 SQO Part 1 and no triad approach is included in those TMDLs. Commenter does not include whether referenced TMDLs addressed impairment to sediments, directly. This TMDL does address sediments which are directly impaired.
36.2		**Impermissible Stringency** The TMDL proposes cleanup targets for the bottom sediments of the harbors that correspond to virtually no risk, while imposing excessive cost. The proposed standards are based on extremely low screening values from a 1995 paper, intended simply to rule out non-impacted sediments from further study. These screening levels are to be contrasted with	The proposed targets include ERLs and fish tissue-associated sediment targets. For ERLs as appropriate and predictive targets, see response to **Comment 38.7a.**

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		dose-response studies upon which rational water quality standards can be set under the federal Clean Water Act. For a number of the compounds included in this TMDL, the authors of the 1995 paper caution that the statistics supporting the screening levels are "relatively weak."	
36.3		**Unintended Adverse Environmental Impact** A problem with requiring unnecessary stringency is that the methods to achieve those levels can sometimes themselves result in adverse environmental impact; The draft TMDL is a classic case of that. Remedial dredging on this scale can re-introduce sequestered contaminants buried at the bottom of the harbor, increase water column concentrations, kill the existing benthic community, cause significant air pollution, impact local neighborhoods through which the dredged spoils may be trucked, and use valuable landfill space. Post-dredging studies in other places where dredging of these compounds has been attempted (e.g., the United Heckathorn site in the Richmond, California area, and the Hudson River in upstate New York) have shown that recontamination of the bottom is a material risk, further placing a cloud over the prudence of this invasive approach.	Commenter seems to take logical consequences (i.e. dredging) to an illogical extreme. Responsible parties may demonstrate compliance by achieving the ERLs or by demonstrating the protected condition of the sediment (Unimpacted or Likely Unimpacted) using the sediment triad of the SQO Part 1. Responsible parties may achieve the ERLs or the protective condition by a combination of many methods including by dredging. It is likely that the responsible parties will work to contain costs and dredge where dredging will be of genuine value, for instance where ERLs are exceeded and the protective condition of the sediment is not met and will be less likely to dredge where ERLs are exceeded but the protective condition of the sediment is met, since those areas would comply with the TMDL. Staff notes that the Port of Los Angeles and the Port of Long Beach routinely dredge in the Harbors safely and without unintended consequences to the environment. The Ports dredge for maintenance on a regular basis. In recent years, the Port of Los Angeles has undertaken a large dredging project, the Port of Los Angeles Channel Deepening Project. Since the Channel Deepening Project was authorized in 2000, as of 2009 approx 12.7 mcy (plus an additional 3 mcy authorized) of sediment material had been dredged and disposed of in an appropriate manner.
36.4		**Lack of Proven Benefits to Human Health**	

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		The TMDL is addressing theoretical risks, and is intended to protect a segment of the fishing population that probably does not even exist (e.g., hypothetical extreme anglers who eat large quantities of bottom fish loaded with DDT every week over a lifetime). For example, even if the TMDL would result in attainment of the 21 parts per billion ("ppb") DDT fish-tissue target, and even if such hypothetical anglers existed, such anglers would be able to legally buy and consume fish from markets and at restaurants that meet the federal Food and Drug Administration's national tolerance level of 5,000 ppb DDT, a value more than 200 times greater than the proposed fish-tissue target. The TMDL does not take into account the health benefits of eating fish, or the fact that this large industrial port complex is not the locus of significant commercial fishing or recreational activity.	The fish tissue targets were taken from the Fish Contaminant Goals (FCGs) of the *"Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene",* which were developed recently, in June 2008, by the State of California's Office of Environmental Health and Hazard Assessment (OEHHA) to assist other agencies in developing fish tissue-based criteria with a goal toward pollution mitigation or elimination and to protect people from consumption of contaminated fish. Use of these fish tissue targets appropriately accounts for uncertainty in the relationship between pollutant loadings and beneficial use effects and directly addresses potential human health impacts from consumption of contaminated fish. Use of FCGs provides an effective method for accurately quantifying achievement of the water quality objectives/standards. See also, response to **Comment 20.3**.
36.5		**Lack of Material Benefits to the Ecosystem** The TMDL is not likely to result in material benefit to the ecosystem as current levels of the subject compounds are not placing fish or wildlife at great risk, and the TMDL implementation plan likely would make matters worse. According to peer-reviewed literature, the screening levels used in the TMDL "never should be taken, by themselves, to mean that sediment is exerting a toxic effect . . . or that there would be any benefit to decreasing its chemical content." 2 There are no designated areas of biological significance or ecological reserves in the harbors - not because of any toxic effects from the compounds that are the subject of the draft TMDL - but, rather, because other beneficial uses to which	The Dominguez Channel and its estuary, the Los Angeles River estuary and the waters of the Harbors and San Pedro Bay have beneficial uses which must be supported; a designation as an "ecological reserves" is not required. Navigation and industrial service supply are beneficial uses in the Harbors as are recreational uses and wildlife and habitat uses. The Cities of Los Angeles and Long Beach and their ports have made enormous strides in recent years to improving water quality in the ports. The ports do, now, have

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		the harbors are legally designated, including navigation and industrial, are of such an intensity that they crowd out the opportunity for ecological services. Thus, the great expense of this draft TMDL may not provide material ecological benefit. Underscoring the absence of a rational connection between the draft TMDL and ecological services is the fact that this TMDL is much more stringent than the TMDL for Upper Newport Bay, where there are such ecological services and there is a designated ecological reserve	recreational use beaches and the area is rich with fish and wildlife including eelgrass and kelp and an endangered least tern colony. The water quality goals and sediment goals of this TMDL are in keeping with the Ports' own Water Resources Action Plan. The ports' plans are "to attain full beneficial use, non-impairment and non-degradation of the harbor waters." (http://www.portoflosangeles.org/environment/water.asp) The ecological beneficial uses are in no sense "crowded out."
36.6		**Adverse Economic Consequences** Despite costs that may exceed $2 billion, the draft TMDL makes no serious effort to examine the adverse economic consequences of the proposed implementation plan, including interfering with the substantial commerce in the ports, and potential ripple effects through the domestic and global economy. Nor does the TMDL establish a case that the massive investments which it requires are proportional to any environmental or ecological benefit. While we are not calling for a formal cost/benefit litmus test, the TMDL must produce significant, if not dramatic, benefit to justify these substantial investments, and pass legal muster. The TMDL, however, is virtually silent on the benefit side of the equation, with no effort to estimate the value of any such benefit. The TMDL calls for millions of dollars to be spent on removal of toxics in stormwater, down to levels in the parts per quadrillion range. The economic and technological feasibility of these proposed requirements is without any demonstration in the TMDL. Additional huge sums would be necessary to physically remove the subject compounds through dredging, without regard to any risk reduction benefit that might accrue.	It is unclear the origin of the $2 billion figure. In addition, see response to **Comment 23.9.**

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36.7		**Adverse Consequences to Harbor Management** The TMDL will make it more difficult and expensive to manage sediment in the harbors, whether that entails removing it from places where it impedes navigation and commerce, handling it as part of waterfront redevelopment, or utilizing it as a resource for habitat restoration or the construction of wetlands. The TMDL will adversely affect maintenance dredging, the ability to keep the ports open for business and the costs of, and options for, disposal of dredged material. The TMDL may also adversely affect waterfront development and redevelopment since such economic activity will encounter sediment with levels greater than the proposed targets. The TMDL may affect adversely, and increase the cost of, projects to restore or reclaim habitat, or construct wetlands, given that such projects typically rely on the availability of sediment that can be used as a resource.	The Harbors routinely manage sediment in the harbors, for navigation and commerce, as part of waterfront redevelopment, or utilizing it as a resource for habitat restoration or the construction of wetlands. The harbors are able to conduct maintenance dredging, and keep the ports open for business. In fact, it will likely be possible, given the 20 year implementation schedule, for the Ports to dovetail maintenance or other navigation-related dredging with dredging to remove contaminated hotspots. In addition, see response to **Comment 23.9.**
36.8		**Lack of Reasonable Cost-Benefit Balance** Given the potentially huge costs of the TMDL, and the very minimal benefits associated with it, the TMDL does not reflect a reasonable balance between costs and benefits, as called for by the Board's governing statute, the Porter-Cologne Act. Adoption of the TMDL would frustrate a stated priority of the Administration to avoid excessive regulation, while also impeding economic recovery in Southern California, and violating the reasonable balance requirement.	See response to **Comments 1.5.**
36.9		**Absence of Proper Technical Conditions** The TMDL has serious errors in its data, modeling, and analysis that leave the agencies without an accurate understanding of the subject compounds in the harbors. These problems are not just sources of uncertainty that can be	See response to **Comment 36.40** regarding biodegradation. In addition, studies of the rate of recovery can be used in implementation and compliance with the TMDL. Certainly

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		addressed by using "conservative" assumptions. Rather, they are inherent mistakes in the TMDL's data, modeling, and analysis that obscure a true understanding of the processes controlling the levels of the subject compounds in the harbors, yielding results that are contrary to observed, empirical data. For example, there is no uncertainty that measured DDT and PCB concentrations in mussels, the water column, and sediment have been declining, and that natural recovery at meaningful levels is occurring; but the TMDL does not account for these facts. Both U.S. EPA and the United States Geological Survey accept science proving that DDT in local bottom sediments is biodegrading, yet the TMDL assumes that biodegradation is not happening. The TMDL relies on the leghorn chicken to set a bird egg target, and terns in Texas and seals in Europe to set other targets. None of these animals are known to be relevant to the harbors; the TMDL's biological targets lack foundation.	the any natural recovery in the Harbor sediment over the 20 year implementation of the TMDL will assist with compliance with the TMDL. Natural recovery may be considered in the sediment management plans. The Staff Report includes a discussion of DDT and PCBs in tissue residues of birds and seals because the beneficial uses to be protected include wildlife habitat uses and rare and endangered species. Reducing pollutant loads to attain human health targets will yield progress toward restoring these beneficial uses, also. Forster's Terns have replaced leghorn chicken in the establishment of the bird egg target. See Table 3-9 in the Staff Report and response to **Comment 36.63b.**
36.10		**Inadequate Analysis of Alternatives** Feasible alternatives might avoid the environmental and economic costs of the proposed TMDL. Monitored natural recovery coupled with institutional controls would protect any persons consuming harbor-caught fish from any theoretical risk to which they might be exposed, without causing the significant environmental impacts that an unprecedented dredging and stormwater treatment program would entail. The agencies must identify the feasible alternatives to the proposed plan and analyze these alternatives fully, so as to properly identify the superior environmental alternative. We request the agencies to seriously consider less costly, more environmentally sensitive alternatives to the proposed TMDL, such as monitored natural recovery with an education and outreach program for any subsistence fisherman.	The CEQA Guidelines require the Regional Board to consider a "range of reasonable alternatives" which would "feasibly attain most of the objectives of the project" using a "rule of reason." See Tit. 14 Cal. Code Regs. §15126.6(a). In this case, as described in the staff report, the Regional Board is obligated to prepare the TMDL to address the impairments. The feasible alternatives are those that would meet this objective. The Regional Board reasonably chose the proposed TMDL and a TMDL prepared by USEPA as the feasible alternatives because those are the only legal alternatives. The Regional Board also evaluated various alternatives to implementing the water quality objectives that it could use in the TMDL. The TMDL also has a very detailed description of the purpose of the project and the Regional Board's legal responsibility to prepare the TMDL, including the consequences if it does not. The CEQA

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			Guidelines also require consideration of a "no project" alternative. For projects that are a revision of an existing policy, the project would be the continuation of the existing policy. Tit. 14 Cal.Code Regs. §15126.6(c). Consistent with this regulation, the TMDL discussed the existing conditions and what would be expected to happen if the TMDL was not implemented. In a case implementing the National Environmental Policy Act (NEPA), the Ninth Circuit Court of Appeals noted that the "NEPA alternatives requirement must be interpreted less stringently when the proposed agency action had a primary and central purpose to conserve and protect the natural environment, rather than to harm it." *Kootenai Tribe of Idaho v. Veneman* (9th Cir. 2002) 313 F.3d 1094, 1120. A narrow range of alternatives was also supported by the California Supreme Court in *Mountain Lion Foundation v. Fish & Game Commission* (1997) 16 Cal. 4th 105, 135-136, where the agency is legally constrained. In addition, it is acceptable to have less detail for plan-level CEQA documents. See e.g., *Al Larson Boat Shop, Inc. v. Board of Harbor Commissioners* (1993) 18 Cal.App.4th 729. The TMDL's range of alternatives is consistent with the CEQA Guidelines and case law. The TMDL did not confuse the concept of project alternatives and alternative methods of compliance. The TMDL clearly sets forth alternatives to the project and provides detailed evaluation of reasonably foreseeable methods of compliance. The SED, page 5, explains that CEQA requires the Board to perform a program-level of analysis, not a project- level analysis. The Regional Board is not required to evaluate the alternatives proposed by the commenter. Staff note that "natural recovery" is essentially equivalent to the No Project Alternative. A program to inform fishers of the risk of eating

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			fish from the harbors already exists. The Fish Contamination Education Collaborative (FCEC) is a public outreach and education program of the USEPA to protect the most vulnerable populations from the health effects of consuming contaminated fish: http://pvfish.org. Also, see the Health Advisory and Safe Eating Guidelines for Fish from Coastal Areas of Southern California: Ventura harbor to San Mateo Point, June 2009.
36.11	Montrose/ Singarella	TMDL does not comply with federal law. A. EPA's promulgation of the draft TMDL is *ultra vires* because the Federal Clean Water Act does not provide any general authority to regulate the quality of bottom sediments. 1. EPA's authority to promulgate numeric limits for bottom sediment is limited to Great Lakes, and does not include the Harbor Waters that are subject of the draft TMDL. 2. CWA provisions authorizing water quality standards and TMDLs cannot be properly extended to include sediment quality standards, targets and allocations. 3. Draft TMDL is inconsistent with Congress' careful design, distinguishing waterbodies and water column on the one hand, from the underlying sediments, on the other. 4. Failed attempts to expand the CWA to authorize sediment quality standards demonstrate that the CWA does not include such authority.	Staff disagrees. The conditions under which a TMDL must be established, and the conditions under which a TMDL may be established, are addressed in CWA, sec. 303, and 40 CFR 130.7. A ban on establishing TMDLs for waters impaired due to contaminated sediment is not evident in the CWA or regulations. EPA and the Regional Board have authority under the CWA to address contaminated sediments (see, EPA's Contaminated Sediment Management Strategy, EPA-823-R-98-001 (1998); potential uses of the sediment are a subset of the designated uses for a waterbody determined by each State pursuant to CWA, sec. 303; waters may be determined to be impaired due to contaminated sediments; States can use sediment quality criteria or EPA's sediment bioassays to interpret their narrative water quality standards (id., at 52); States may use EPA's National Sediment Inventory and National Sediment Contaminant Point Source Inventory to assist in developing their impaired waters lists and TMDLs (id., at 28 and 32); States may develop water quality-based NPDES permit limits to protect sediment, and if sediment criteria are not available, a permit writer may develop pollutant-specific NPDES limits based on a State's narrative standard in order to protect against sediment toxicity and bioaccumulation (id., at 33 and

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			47); and, if a link is established between an unlawful discharge and contaminated sediment, judicial or administrative orders can require that illegally discharged pollutants be removed as remediation (id., at 63). EPA has also previously addressed its authority to establish sediment criteria: "EPA has authority to pursue the development of sediment criteria in streams, lakes and other waters of the United States under sections 104 and 304(a)(1) and (2) of the CWA as follows: ● section 104(n)(1) authorizes the Administrator to establish national programs that study the effects of pollution, including sedimentation, in estuaries on aquatic life; ● section 304(a)(1) directs the Administrator to develop and publish criteria for water quality, including information on the factors affecting rates of organic and inorganic sedimentation for varying types of receiving waters; ● section 304(a)(2) directs the Administrator to develop and publish information on, among other issues, 'the factors necessary for the protection and propagation of shellfish, fish, and wildlife for classes and categories of receiving waters….'" EPA, Water Quality Handbook, sec. 3.5.4, Sediment Criteria (updated July 2007). The risk of use impairment due to sediment contamination is also acknowledged in EPA's Water Quality Handbook: "The presence of certain toxicants in excessive concentrations within bottom sediments of the water column may prevent the attainment of water uses (particularly fisheries propagation/harvesting and sea grass habitat uses) in estuary segments that satisfy water quality

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			criteria for DO, chlorophyll-a/nutrient enrichment, and fecal coliform." Sec. 2.9.6, Estuarine Systems. "Also, the presence of toxics such as pesticides, herbicides, and heavy metals in sediments or the water column should by considered in evaluating uses. These pollutants may prevent the attainment of uses (particularly those related to fish propagation and maintenance in water bodies) that would otherwise be supported by the water quality criteria for DO and other parameters." (Sec. 2.9.7 Lake Systems) At least one court has concluded that the CWA authorized it to require the cleanup of sediments contaminated due to NPDES permit violations. U.S. v. Alcoa Inc., 98 F. Supp. 2d 1031, 1039 (N.D. Ind. 2000) ("… the Court concludes that the court's authority to grant an injunction 'to require compliance' in Section 309(b) is broad enough to include the mandated clean up of contaminated sediments where the sediments are contaminated as a direct result of NPDES Permit violations.") See also, U.S. v. Outboard Marine Corp., 549 F.Supp. 1036, 1043-44 (D.C. Ill.1982). The applicability, appropriateness, and enforcement of the 'background levels' standard for contaminated sediment cleanup under California State Water Resources Control Board Resolution 92-49, San Diego Law Review 40:749 (2003) ("… [EPA's] interpretation of the Federal Water Pollution Control Act (commonly known as the Clean Water Act) and State Water Resources Board policy further indicates that beneficial uses are to be extensively protected from impacts from contaminated sediments." (Footnotes omitted.)); and Marcus WA, Managing contaminated sediments in aquatic environments: identification, regulation, and remediation, Environmental Law Reporter 21:10020 (1991) (referencing sec. 304's direction that EPA develop

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			"criteria for water quality" for "pollutants in any body of water", and stating that "EPA has interpreted these phrases to include 'river bed, lake bed and wetland substrate'" and that "The authority to inventory contamination or to develop a set of sediment criteria or evaluative methods is also directly mandated or implied by the FWPCA in § 104". EPA's conclusion that the CWA protects benthic organisms is not newly reached. See, EPA, Notice of Proposed Rule, 63 FR 36742, 36788 (July 7, 1998) ("Mixing zone guidance produced by EPA since 1972 has consistently emphasized the need to protect both nonmotile benthic and sessile organisms in the mixing zone as well as swimming and drifting organisms (Water Quality Criteria 1972)."). Establishing TMDLs to address impairments due, in part, to sediment contamination is also not novel. See, Bibler GA, Contaminated sediments: are there alternatives to Superfund?, Natural Resources and Environment 18:56 (Fall 2003) ("EPA also estimates that 24 percent of the Total Maximum Daily Loads (TMDLs) for the approximately 20,000 impaired waters listed in 1998 were for pollutants potentially originating, in part, from contaminated sediments."). See also, Wenig MM, How "Total" are "Total Maximum Daily Loads"?, Tulane Environmental Law Journal 12:87 (1998) (noting, at 165, circumstance where it may be appropriate to establish TMDLs for sediment after TMDLs for metals have been completed). The scientific literature also acknowledges that sediment toxicity may trigger the duty to list a water as impaired and to establish a TMDL to address the impairment. See, e.g.: Weston DP, Zhang M, Lydy MJ, Identifying the cause and source of sediment toxicity in an agriculture-influenced creek, Environmental toxicology and chemistry, 27(4):953-

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			962 (2008).
36.12		B. Draft TMDL is inconsistent with the State's governing water quality control plan for contaminated sediments.	See response to Comment 36.1
36.13		C. Draft TMDL is Arbitrary and Capricious and entirely lacking in evidentiary support. 1. Costs and economic consequences of the draft TMDL are wholly out of proportion to the tenuous benefits (if any) of the proposed action, rendering the draft TMDL arbitrary and capricious. 2. Draft TMDL proposes excessively low regulatory targets that risk a great misallocation of social and economic resources. 3. Draft TMDL focuses on dredging as a remedy, which has the potential to make matters worse, and the efficacy of which is understood to be questionable. 4. Draft TMDL does not explain why it is much more stringent than the TMDL for Upper Newport Bay, the location of an ecological reserve, and which possesses high habitat and ecological value.	1. See response to **Comment 23.9** regarding *cost* analysis. 2. See response to **Comment 36.1** regarding *targets*. 3. See response to **Comment 36.3** regarding *dredging*. 4. Commenter's statement of comparing DDT and PCBs TMDLs for Upper Newport Bay vs. nine waterbodies in Dominguez Channel Estuary and greater LA/LB Harbor waters is a mis-characterization. Several factors determine the mass-based TMDL amount per pollutant per waterbody, including but not limited to: size of waterbody, amount of sediment, depth of active sediment layer, relevant scientific studies completed to date, media-specific goals, etc. Therefore the commenter has essentially produced an 'apples to oranges' comparison that is convenient for argumentative purposes but not based on normalized comparison. For example, using just one feature mentioned immediately above, Dominguez Channel Estuary is ~150 acres, whereas Upper Newport Bay is ~370 acres. The amount of sediment within each waterbody is different and therefore the mass-based TMDL will be different…and appropriately so. See also response to **Comment 36.5.**
36.14		The draft TMDL departs from the Bays and Estuaries Plan for establishing sediment cleanup levels – without explanation or rational basis.	TMDL has been modified and now clearly states that the sediment targets are not necessarily 'clean-up standards' for dredging or capping activities; rather they are long-term sediment concentrations that should be attained after reduction of external loads, targeted actions addressing internal reservoirs of contaminants, and environmental decay of contaminants in sediment. TMDLs set forth a plan to attain

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			applicable WQSs and include a California Implementation Plan to provide some means of addressing pollutant load reductions.
36.15		The draft TMDL erroneously assumes that residual compounds are bioavailable and will not degrade.	Residual compounds may be bioavailable and we do not have clear toxicological information for these compounds. Thus we have made another conservative assumption that residual compounds have equivalent potential to harm aquatic and sediment organism, as well as bioaccumulate.
36.16		The draft TMDL relies on inaccurate assumptions regarding contaminant inputs to the Harbor Waters.	See response to **Comment 22.1 re**garding recent contaminant inputs.
36.17		The draft TMDL relies on studies that are biologically irrelevant to the Harbor Waters.	See response to **Comment 36.9**.
36.18		There are no known or available human means to implement and achieve the draft TMDL, rendering it a paper exercise that is not rationally connected to the real world.	Staff disagrees. The scientific approach in these TMDLs relies on reducing pollutant loadings from watershed sources and remediating contaminated sediments to minimize levels of pollutants in exposure pathways to aquatic or benthic organisms as well as human health and higher marine life forms (e.g., piscivorous birds and pinnepeds). The Implementation Plan provides reasonable means/measures to consider, without dictating means of compliance, to reduce pollutant loadings to each waterbody and address existing internal sources (i.e. contaminated bed sediments).
36.19		Technical Conditions to support the draft TMDL are not present. See items immediately below: -unreliable modeling -atmospheric sources are unknown, poorly characterized, erroneously assumed constant -bioavailability is not considered -no rationale that implementation will lead to attainment	See the detailed responses to comments, below.

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36.20		The Draft TMDLs contain proposed annual loads that are inconsistent with the Federal CWA, which requires loads be specified on daily basis.	EPA guidance on the issue of 'daily loads' explains that while daily loads are preferred, States may choose to present loads in other timeframes based on sufficient rationale and/or pollutant specific considerations.
36.21		Neither Governing statutes, nor underlying WQS provide notice that they might be applied in the TMDL, violating Due Process.	Staff disagrees. The commenter states that, "persons of common intelligence could not read the federal [Clean Water Act], the Porter-Cologne Act, or RWQCB's narrative toxicity standard, and anticipate that they would be implemented as is being proposed in this case." First, this is not the forum to challenge the Clean Water Act or the Porter-Cologne Act. The text of such statutes is determined by Congress and the Legislature, respectively. Second, these statutes provide adequate notice to the public. Clean Water Act section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. Those waters are placed on the state's "303(d) List" or "Impaired Waters List." Before a waterbody is even listed on the 303(d) list, the public is provided an opportunity to comment on this list. Here, the waters of the Dominguez Channel and the Greater Los Angeles and Long Beach Harbor area are listed on the 303(d) list as impaired for one or more of the following pollutants: cadmium, chromium, copper, mercury, lead, zinc, chlordane, dieldrin, toxaphene, DDT, PCBs, certain PAH compounds, benthic community effects and toxicity. These impairments exist in one or more environmental media – water, sediment, or tissue. For each listed water, the state is required to establish the TMDL of each pollutant impairing the water quality standards in that waterbody. Consequently, the commenter had sufficient notice that a TMDL would be adopted for such waters and impairing constituents. The public has had a full and fair opportunity to participate in the review of the amendment to the Basin Plan. A draft of the

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			TMDL was released for public comment on December 17, 2010, along with a Notice of Hearing and Notice of Filing that were published and circulated at least 45 days preceding Board action. The draft of the TMDL was made available on both the Regional Board and EPA Region 9 websites. Regional Board staff responded to written comments received from the public, the Regional Board will hold a public hearing on May 5, 2011 to consider adoption of the TMDL, and the public has an opportunity to address the Regional Board and make oral comments. Therefore, the Regional Board has provided due process.
36.22		Narrative toxicity standard is void for vagueness and violates due process, as applied in the TMDL.	The tentative BPA does not include a narrative toxicity water quality standard. It includes a specific numeric freshwater toxicity target of 1.0 TUc, and an interim allocation of 2 TUc applicable to each source. The draft Staff Report (Section 2.4.4) also discusses the analysis of fish and shellfish tissue for chemical contaminants. Staff Report Section 3.3 explains that, "Use of fish tissue targets is appropriate to account for uncertainty in the relationship between pollutant loadings and beneficial use effects and directly addresses potential human health impacts from consumption of contaminated fish or other aquatic organisms. Use of fish tissue targets also allows the TMDL analysis to more completely use site-specific data where limited water column data are available, consistent with the provisions of 40 CFR 130.7(c)(1)(i)." As such, the target and interim TUc allocations are not vague and do not violate due process; the Board has complied with applicable public participation requirements. See Response to Comment No. 36.21
36.23		Draft TMDL includes invalid water quality objectives.	This TMDL does not establish any new water quality objectives. TMDLs and wasteload allocations are a means of implementing or achieving water quality standards, including water quality objectives that have *previously* been

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			established. (See *City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal.App.4th 156, 175-79.) See also Response to Comment No. 1.5.
36.24		Draft TMDL should make clear that it does not contain ARARs.	The TMDL implements adopted water quality standards, including the Regional Board's narrative toxicity objective. The TMDL sets as a goal, numeric levels to implement narrative objectives with respect to DDT. While not directly applicable, those numeric levels may be relevant and appropriate to the cleanup of the Montrose Superfund sites. The water quality objectives in the Basin Plan and the federal California Toxic Rule criteria are also potential ARARs for the Superfund sites. Whether the water quality standards, or the goal set forth in the TMDL, are ARARs for the Superfund sites will be determined when USEPA approves records of decisions for those sites in accordance with CERCLA. Staff has added clarification to the TMDL with respect to ARARs as follows: "Whether provisions within the TMDL are ARARs will be determined in accordance with CERCLA when USEPA develops Records of Decision for the Superfund sites."
36.25		The TMDL is impossible to meet, therefore it is unlawful.	Staff disagrees. The TMDL is not impossible to meet. It includes appropriate targets, flexible compliance methods, and a 20-year implementation plan. The commenter has not provided any evidence indicating that it will not be able to meet the requirements of the TMDL. Moreover, if the U.S. EPA were to adopt the TMDL, it is very likely that the implementation plan would be much shorter than 20 years. This TMDL provides for a 20-year implementation plan, which gives responsible parties more than enough time to comply with the TMDL's requirements.
36.26		LA RWQCB must reform the TMDL, as contained in Chapter	Staff disagrees. The adoption of the TMDL is an action that

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		5.5 of Porter-Cologne.	amends the Water Quality Control Plan for the Los Angeles Region, which is authorized pursuant to Water Code sections 13240 and 13242.
36.27		Admin. Record should not be closed until LA RWQCB complies with Public Record requests.	Staff disagrees. A Public Records Act request made pursuant to Government Code section 6253 is a completely separate and distinct action from the Board's adoption of the tentative Basin Plan amendment. There is no statute or regulation that precludes the Board's adoption of the TMDL pending resolution of any PRA requests. The TMDL's staff report and substitute environmental documentation contain the necessary rationale for adoption of the tentative BPA. In addition, the commenter is always welcome to come to the Regional Board's office and review the public files prior to May 5, 2011.
36.28		Recognizing that the CWA does not authorize the development of numeric TMDL targets for the bottom sediments, numerous TMDLs in other states, including Delaware, Mississippi, Alabama, Washington and Oregon, distinguish between surface water quality goals, on the one hand, and sediment contamination, on the other, properly confining their targets and allocations to the water column, and not extending these regulatory tools to the bottom sediment.	The commenters assumption that the CWA does not authorize TMDL targets for bottom sediments is inaccurate. TMDLs address pollutant sources and given that sediment often contain pollutant levels several magnitudes higher than the water column and that flux studies demonstrate the pollutant gradient is dominantly from sediments into water, then it is appropriate to set both targets and allocations to contaminated sediments. In addition, see response to **Comment 36.1**.
36.29		CEQA: SED does not comply with CEQA; instead, the draft SED is a product of the technical and legal defects of the draft TMDL described above, as it provides an incomplete baseline environmental analysis, an inadequate and legally unsound impacts analysis, and an impermissibly limited evaluation of alternatives. RB cannot limit its CEQA review because it propose to adopt the TMDL under a certified regulatory program.	The Regional Board has not limited its CEQA review but fully complied with CEQA as a certified regulatory program developing a program level CEQA review.

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36.30		A. Draft SED provides and incomplete baseline analysis. RB must analyze the following environmental resources, which draft TMDL is likely to significantly impact: ▪ Quantify current air quality conditions, including an assessment of criteria pollutant for which the Los Angeles air basin is in non-attainment. ▪ Quantify current greenhouse gas emission to the Harbor waters area from the Los Angeles region and the globe, including an assessment of the environmental impact that global climate change is currently having on Harbor Waters, the Los Angeles region and California. ▪ Describe the biological resources in the Harbor Waters and in the vicinity of the Harbor Waters that could be impacted by dredging and other implementation activities. Wetlands, eelgrass bed, benthic communities, and other important habitats should be identified and characterized. In order to enable the public to assess the merits of project alternatives, any observable, toxic effects on wildlife and habitat caused by current contamination levels must be described. ▪ Identify the likely disposal sites for dredged materials and their capacity to accommodate the dredge volumes contemplated by draft TMDL.	State and Federal regulations for TMDL development do not require air quality conditions with respect to assessment of criteria pollutants for air basin non-attainment. Rather an evaluation of available air monitoring data as a source of contributing pollutants to ambient water is appropriate for inclusion within a TMDL. In addition, the CEQA checklist now includes Air.c. (Will the proposal result in alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?) as a potentially significant impact. Biological resources are described Section 2-1 and in numerous data sets identified in Table 2-8 of the TMDL staff report including: PORTs biological baseline studies (2000 and 2008); benthic community studies within Bight 98, 03; WEMAP 99, 05; as well as fish studies by LA Harbor 04, 06, 08 and OEHHA 99, 07 to present ambient and past conditions. Thus current habitat conditions are already described and fulfill SED obligations. The identification of sediment disposal sites is best included with other Regional Board regulatory programs and associated documents; e.g., EO issued Cleanup and Abatement Orders or CWA Section 401 certification actions for dredge removal actions. Such concepts may also be included in the Ports' WRAP and Army Corps and/or CSTF reports. Such documents, other than TMDLs, are most appropriate procedures.
36.31		B. Draft SED inadequately describes and analyzes the major impacts associated with the TMDL's remediation requirements. Draft SED spots several impacts [associated with the] preferred remedy of dredging to remediate Harbor Waters sediments….Negative impacts	The draft SED adequately describes and analyzes, for a programmatic-level CEQA analysis, the potential impacts, without speculation. See also responses to **Comments 20.8-20.14.**

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		from dredging are either not discussed or summarily dismissed…but not limited to: ▪ Destruction of benthic community. ▪ Resuspension of contaminants now safely bound to bottom sediments. ▪ Exposure of contaminated sediment, if any, below those dredged. ▪ Creation of preferential depositional area in those areas which are dredged. ▪ Significant greenhouse gas emission associated with dredge equipment and high volume of truck traffic needed to haul dredge spoils to permanent disposal site. ▪ Noise associated with dredging pumps and vessels. ▪ Risk of injury or death to workers conducting dredging. ▪ Significant barriers to ship navigation at the nation's busiest port in areas that are dredged due to dredging vessels and barges. ▪ Environmental justice and socioeconomic factors associated with the dredging project, including increased truck trips to and from the Ports and increased heavy equipment use near residential areas. ▪ Creation of more surface water capacity, which in turn will lead to more surface water which is available to accumulate pollutants from aerial deposition. ▪ Cumulative impacts of remedial dredging and the ports dredging efforts to deepen the ports to accommodate larger ships.	
36.32		C. Alternatives Analysis in draft SED ignores obvious and important options…At a minimum, RB must analyze the alternatives described below, which is meant only as illustrative: o Monitored natural recovery….should receive detailed	See response to **Comment 36.10**.

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		consideration where the site conditions are present (as described in EPA Superfund document (2005): Contaminated Sediment Remediation Guidance for Hazardous Waste Sites see Highlight 4-2); e.g., contaminants that will biodegrade or transform into lower toxicity forms, a low risk of human exposure ore a risk that can be controlled for, and anticipated land uses that are compatible with natural recovery. o Maintenance dredging, followed by limited remedial dredging, if necessary. ▪ Water column-based TMDL – as was done in Delaware, Mississippi, Alabama, Washington and Oregon.	
36.33 B	Montrose/ List/ EDS	**Basis for TMDL is flawed**: --The results obtained from the modeling are highly questionable because several of the major underlying assumptions are flawed, available data used in the modeling are too limited, and the model performance was not sufficiently evaluated. Consequently, load estimates based on these flawed modeling results do not appear in agreement with observations and they are not supported by science. Since the manufacture and use of DDT have been banned since 1972, and there are no known current point sources into the Harbor, the underlying cause of this problem is that the methodologies used to calculate the sediment target and sediment load allocations lack a credible scientific basis. --The sediment contaminant concentrations were then used to derive putative existing watershed loadings to the Harbor area (see Table 5-1 at p. 70 of the Staff Report), despite the fact that measurements of flows into the Harbor consistently fail to detect DDT. Indeed, it is likely that the current watershed loadings of certain contaminants are negligible. For example, measurements by Los Angeles County in the Dominguez Channel showed non-detect levels for organo-chlorine compounds in water (see Table 2-18 at p. 42 of the Staff	The TMDL modeling incorporated the best available data and information at the time the modeling was conducted, which is consistent with TMDL requirements. The watershed modeling utilized a regional modeling approach that has been developed as a cost-effective strategy to complete TMDLs in similar geographical areas with limited data. Based on the available data, the existing calibration and validation are sufficient for TMDL calculations. In addition, the simulated values used for TMDL or existing loading rate calculations were annual averages. Given that the model is in the range of observed values and averages are likely similar, the model is being appropriately used to determine loading estimates. DDT loading is incorporated in the model based on its association with sediment. New loading of DDT may not be occurring in the watershed; however, the sediment does contain historic loads of DDT that are being washed into the MS4, rivers, and receiving waters during rain events. DDT loads associated with these events are quantified in the TMDL. While certain pollutants may be non-detectable in water, detectable concentrations are observed in sediment. The TMDL incorporates the sediment-associated loads of the

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		Report). Available data show few DDT levels above detection levels. --It also presumes that there is no transport of legacy pollutants up from below and into the top five centimeters of the Harbor sediments. Research work on the Palos Verdes Shelf (Paulsen et al. 1999; SAIC 2005; Van Cappellen and Santschi 1999; Wheatcroft and Martin 1996) has shown the possibility for transport of deeper buried contaminants to contribute to the sediment concentration in the top 5 cm through pore water diffusion, consolidation driven pore water extrusion and bioturbation by organisms living deep in the sediments. However, such contributions from any deeply buried DDT are likely to be very small because of the natural attenuation of the DDT by biodegradation processes (see discussion below).	DDT and PCBs based on the best available data. --The possibility of upward transport of contaminants is acknowledged in the discussion of the active sediment layer. Commenter cites research that describes deeper buried sediments as source of contaminants; this is consistent with our assumption that contaminants are diffusively fluxing out of sediments, thus it is critical to give load allocations to bed sediments.
36.34		…the watershed model results based on the sediment concentration assumption show the Dominguez Channel as the source of 9.2% of wet weather DDT loads, and 7.7% of dry weather DDT loads, from the watershed to the Harbor (see, e.g., summary of LSPC model output in Table 23 of Appendix I to the Staff Report). Furthermore, simulation results appear to show that the Los Angeles River is the source of 89.5% of wet weather DDT loads (83.0% of dry weather loads) (ibid.), despite the fact that there are no known point sources of DDT in the Los Angeles River watershed. The presumption that sediment transported from the Los Angeles River to the Harbor contains DDT at the same average concentration of the top 5 cm in the Harbor has no basis in fact. Given that it is well known that DDT has a strong affinity for organic carbon (e.g., De Bruijn et al.1989) and most of the organic carbon in the sediments is associated with the extremely small-sized organic carbon particles (e.g., humic and fulvic acids) (e.g., Bradford and Horowitz 1982), it is unlikely deposition of these particles occurs within the Harbor area.	There is scientific evidence that DDT contaminated sediment associated with watershed sources is depositing within Harbor waters. In 2002, EPA Superfund and POLA collaborated on sediment core studies within Torrance Lateral, Dominguez Channel Estuary and Consolidated Slip (upstream of LA Inner Harbor) and results demonstrate significant levels of DDT within sediment strata. Consolidated Slip was designed as sediment retention basin to capture sediments from upstream sources prior to entering the LA Harbor. These sediment core results show DDT levels ranging from 33-1922 ug/kg dw in the top 0 to 6 ft depths; whereas DDT levels decline at lower depths. The commenter makes an inaccurate statement of ‘no known point sources of DDT in the Los Angeles River watershed’ since the LA County MS4 permit is considered a point source within the regulatory framework. The commenter refers to DDT affinity for organic carbon and acknowledges these are associated with small-sized organic

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			particles (e.g., humic and fulvic acids); however the commenter neglects to include factual information that scientific studies show these fulvic and humic acids (from freshwater sources), when mixed with saline waters, will precipitate and solidify in marine systems and therefore deposit within waters such as greater Harbor waters.
36.35		This assumption also presumes that there are no other sources of DDT to the Harbor sediments, which is inconsistent with the postulated atmospheric fallout of 676 gm/yr. As shown below, this fallout, if it really occurs, would add on average 14 ppb to the sediment DDT concentration.	The TMDL allocations include atmospheric DDT deposition. See also, response to **Comment 2.38** regarding atmospheric deposition of DDT.
36.36		There are several more concerns regarding the modeling exercise. In the watershed modeling, representative receiving waterbodies were identified for the watershed areas draining to the Harbor, and a single representative value of bed sediment concentration was calculated for each waterbody by averaging the available Bight '03 sampling data within the receiving waterbody. These average values are not representative at all of bed sediments, let alone sediments carried by watershed runoff, when the observed bed sediment concentrations of DDT vary by several orders of magnitude within individual zones of the Harbor (see Figure 20 at p. 41 of Appendix II of the Staff Report).	The watershed pollutant loading estimates were based on the best available data. These values could be refined in the future if new data become available to better characterize watershed loadings. As the commenter notes, the representative value for a receiving water was based on an average of available Bight '03 data. While these average values may not be representative of all bed sediments, they are the best available representation of the overall conditions in the receiving water as a whole.
36.37		The Harbor modeling assumed incorrectly that DDT concentrations are uniform with depth within the sediment column. As noted previously, this assumption is not supported by science and available data and has serious negative implications; for instance, the impact of higher DDT concentrations within the sediment bed cannot be modeled accurately if those higher concentrations are not included within the model. Perhaps more importantly, any future	The best available data were used during the modeling efforts. Detailed data throughout the harbors were not available to incorporate depth-varying *initial* DDT concentrations. The modeled sediment concentrations do vary with depth over the course of the simulation period as new watershed loadings are incorporated along with the influences of other hydrodynamic processes. Before dredging activities are conducted, monitoring should be performed to confirm

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		remedial activity such as dredging could expose higher sediment pollutant concentrations and result in the redistribution and enhanced bioavailability of pollutants that were buried long ago.	the depth of dredging required as well as the specific area (existing loads in the TMDL are average conditions throughout the receiving water and specific areas with the highest concentrations should be identified [that may be extremely influential on the average receiving water concentration]).
36.38		Specifically, the Draft TMDL ignored the outcome of the modeling results, which was the fact that the majority of the DDT postulated to enter the Harbor would not in fact deposit in the Harbor. Consequently, the load allocations, even if the DDT fluxes in watershed inflows were correct and there is no reason to believe they are, were incorrectly calculated and are far too low. Estimated DDT loads entering the Harbor in the modeling are as high as 22,549 g/year in 1995, as low as 2,210 g/year in 1999 and other years in between (see Tables B-1 through B-8 of Appendix B to Appendix II of the Staff Report). Using average daily loads for DDT, presented at p.7 of Attachment A to Resolution, with the assumption of 10% of wet-weather days per year, an estimated average DDT load entering the Harbor is 3,770 g/year. And yet the model estimated DDT load deposited in the Harbor is 595 g/year, which was calculated using the averaged current sediment load (48 million kg/year) multiplied by the averaged DDT concentration in sediment (mg/kg), (p. III-4 of Appendix III of the Staff Report). This implies that a majority of DDT loading (i.e., 3,175 g/year; 84%) passes through the Harbor without depositing to the Harbor sediment.	The Draft TMDL does not ignore the outcome of the modeling results. The commenter is referring to watershed model loads to the receiving waters. The receiving water model considers these watershed loadings along with other processes (tidal influences, currents, wind, etc.). Some of the watershed load does pass through without depositing in the Harbor waters. The existing load estimates from the model take these processes into account.
36.39		**These erroneously low allocations for DDT are due to several incorrect assumptions**: 1) a load allocation is assigned to bed sediment, which is already present in the Harbor and cannot be regarded as a load to the Harbor; 2) it is assumed that 100% of the atmospheric load will be	1) Sediment is a source of DDT exposure to benthic organisms as well as a diffusive source of aqueous DDT to aquatic life in the water column. Allocations are assigned to pollutant sources, therefore, it is appropriate to assign allocation to bed sediments. 2) Staff has made the conservative assumption that 100% of

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		deposited to the bed sediments of the Harbor, which is unlikely, given the very fine particle sizes of most atmospheric deposition; and 3) allocation calculations failed to consider the transport of sediment and associated DDT out of the Harbor and the DDT flux out of the Harbor is required to be reduced to zero.	atmospheric load will deposit to the attributable waterbody. Optional studies, mentioned in the Implementation Plan, will improve characterization of air deposition loading and perhaps evaluate air load deposition rates and residence time in the waterbody. 3) The existing load and TMDL calculations did consider transport of sediment and DDT out of the Harbor. This has been clarified in the TMDL Staff Report.
36.40		**DDT (and DDE) Biodegradation and natural attenuation**: ▪ Sediment data collected by the Los Angeles County Sanitation District (LACSD) on the Palos Verdes clearly showed the [reductive dechlorination of DDT] process at work on the Palos Verdes Shelf, and an analysis of the rate processes showed an estimate that the half life of the process is approximately 22.5 years (List and Paulsen 1998). ▪ USGS scientists (Eganhouse and Pontolillo , 2008) has confirmed that reductive dechlorination of DDT is occurring in the Palos Verdes Shelf sediments and these more recent analyses of the data have shown: ▪ "[T]he inventory of p,p'-DDE decreased by 43%, whereas that of p,p'-DDMU, the putative reductive dechlorination product, increased by 34% The first-order transformation rate for p,p'DDE at the study site is 0.051±0.006 yr^{-1} [equivalent to a half-life of 13.6 years]. A multistep reaction model suggests that inventories of p,p'-DDE and p,p'-DDMU will continue to decline, whereas that of p,p'-DDNU will reach a maximum around 2014." ▪ EPA has now adopted biodegradation and natural attenuation of the in-place DDT, coupled with limited capping to enhance the attenuation, as the foundation for the remediation of the Palos Verdes Shelf (U.S. EPA 2009a; b; c).	--EPA Superfund program has produced an INTERIM action for Palo Verdes Shelf (Sept. 2009). This interim ROD describes the selected remedy that allows an iterative approach to remediation. "After assessing the implementability and effectiveness of the interim remedy, additional actions may be planned in a final Record of Decision." The selected remedy for this interim action includes: -Placement of an in situ isolation cap over the erosive edge of the deposit that also contains the most highly contaminated sediments; -Continuing and strengthening the existing Institutional Controls program and; -Monitoring natural recovery to achieve specific Remedial Action Objectives. The chemical degradation of parent compound into residual products does not necessarily translate there will be less harm caused in presence of residual compounds. The toxicological activity and effects pertaining to residual products such as DDNU has not been thoroughly researched, nor have corresponding regulatory decisions been completed.

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36.41		**Harm will be caused by invasive remedies such as dredging and capping.** ▪ In fact the idea of dredging is contrary to the SWRCB's own Consolidated Toxic Hot Spot Cleanup Plan (2003), which states (p.211): "While sediment removal (i.e., dredging) is technically feasible, it could possibly result in the dispersal of contaminated sediment, thereby increasing short-term risks. Once dredged, the sediment would require disposal, possibly preceded by treatment, which could be both expensive and very difficult to implement. Upland disposal facilities are very limited, and disposal options along the coastline or in the open ocean would likely violate Federal and State environmental laws. For these reasons, EPA has decided not to consider dredging and treatment or disposal options further in the EE/CA [Engineering Evaluation/Cost Analysis]." ▪ Capping the sediments is subject to the exact same problem-the atmospheric fallout will continue and, if it indeed reaches the sediments of the Greater Harbor area, the target sediment concentrations of DDT will not be maintained.	Commenter's statement that 'harm will be caused by invasive remedies' is speculation. Nor does commenter provide definitive evidence that harm will result from dredging and capping. The State's Toxic Hot Spot Clean up Plan <u>does not rule out</u> the option of sediment removal, rather it appropriately describes the numerous, often site-specific conditions to be considered during dredging of toxic sediments. Capping without dredging may be problematic to navigation uses and therefore may be only feasible in certain portions of specific waterbodies within the greater Harbor waters.
36.42		**Use of [DDT] ERL is inappropriate and directly contradicts SQO Policy.** --Under the SQO Policy, information from three lines of evidence (i.e., sediment chemistry, sediment toxicity, and benthic community) is required to be integrated and used to evaluate sediment quality (i.e., to assess whether sediment quality exceeds the sediment quality objective). --The use of the ERL in the Draft TMDL has resulted in an artificially low DDT target, which is highly unlikely to be correlated with either the impairment of the sediment or aquatic organisms that may be impacted by the sediment. --Figure 3 [of this letter], which summarizes the results of	--See response to **Comment 38.7a** regarding ERLs as predictive sediment targets. --Staff notes that Figure 3 of commenter's letter presents SOQ assessment based on Bight 03 study only, therefore, it is

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		SCCWRP's SQO assessment, shows that only 13 stations (17% of all stations) are classified as "likely impacted" (orange) or "clearly impacted" (red). This discrepancy indicates that the adoption of the proposed DDT target will lead to dredging of unimpaired sediment from the Harbor.	an incomplete evaluation of available sediment quality data. See response to **Comment 20.1** for more complete SQO-Part I assessment. This SQO direct effects assessment information is compiled in Appendix III and summarized in the revised Staff Report. California's 303(d) Listing Policy requires only 2 exceedances of 28 samples/stations to conclude a waterbody is impaired. This appropriate DDT target is unlikely to lead to unnecessary dredging; see response to **Comment 36.3**.
36.43		Draft TMDL allows an option of demonstrating compliance by applying the SQO Policy using the three lines of evidence. However, **the SQO Policy only applies to enclosed bays and harbors, NOT to estuaries (see excerpt below)**. p. 7 of the SQO Policy: "1. The tools described in the Sections V.D. through V.1. are applicable to Euhaline* Bays and Coastal Lagoons* south of Point Conception and Polyhaline* San Francisco Bay that includes the Central and South Bay Areas defined in general by waters south and west of the San Rafael Bridge and north of the Dumbarton Bridge. 2. For all other bays and estuaries where LOE measurement tools are unavailable, station assessment will follow the procedure described in Section V.J." Thus, permittees who discharge into Dominguez Channel Estuary or into the Los Angeles River Estuary have no option to implement the SQO Policy to conduct the sediment assessment or derive alternative TMDL targets.	Staff disagrees. The SQO Policy does clearly apply to estuaries, including (but not limited to) Dominguez Estuary and Los Angeles River Estuary. Permittees who discharge into estuaries, do, in fact, have the option of implementing the SQO Policy and demonstrating compliance, thereby. Should the parties find that the salinity at a sampling site is below 25 ppt (and, therefore, the site is not "Euhaline" and the specific LOE measurement tools of Sections V.D. through V.I may not be applicable) then, instead, the parties can assess the site using Section V.J. of the SQO Policy to determine if the site is "Unimpacted" or "Impacted." An assessment of "Unimpacted" using Section V.J. demonstrates compliance just as an assessment of "Unimpacted" (or "Likely Unimpacted") using Sections V.D.-V.I. demonstrates compliance.
36.44		**Economic impact of Draft TMDL is grossly**	

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		underestimated. -The total cost is estimated $680 million dollars in order to dredge roughly 11 million cubic yards of material from seven areas within the Harbor complex (p. 125 of the Staff Report). This estimate of 11 million cubic yard was based on a study conducted by SCCWRP using the SQO Policy rather than the proposed TMDL target of 1.58 J.lg/kg for DDT (ibid.). As presented in Figure 2 and Table 1 of this letter, if the TMDL target is applied even with the zero input from the upland source, almost all areas in the Harbors will exceed this target and will require dredging. Thus the total cost for dredging will increase by several factors. -In addition, the cost of the dredging would increase greatly if the intent of the TMDL is not only that Harbor sediments would be dredged, but also that dredged areas would subsequently be capped with significant quantities of clean sediment. Post-dredge capping does not seem to have been accounted for in the TMDL cost estimate.	While the target and allocations for DDT are based on the numeric ERL, responsible parties have the option of demonstrating compliance with the TMDL by demonstrating the sediment protective condition of Unimpacted or Likely Unimpacted per the SQO Policy, hence the estimate of 11 mcy based on the SCCWRP study is appropriate to use to estimate cost. Staff anticipates that responsible parties will appropriately contain costs. See response to **Comment 23.9** regarding *cost* analysis.
36.45 C	Montrose/ Hansen Associates	TMDL contains several major errors in approach and interpretation which lead to unsupportable TMDLs and consequently unrealistic allocations for DDT in nine designated waterbodies: -no scientifically defensible sediment standards exist -ERL is used as *de facto* numeric sediment quality standard -DDT ERL is inappropriately used since it does not address the bioaccumulation pathway to protect human health via fish consumption -based on applying more appropriate DDT sediment quality standards, TMDLs for DDT are not needed for five waterbodies and it is too low for four other waterbodies, -bioavailability of DDT in sediments is not addressed -designating dredging of bed sediments as principal means of compliance with TMDLs does not make sense, because the biologically active portion of the bed sediment is from air	See response to **Comment 38.7a** regarding use of numeric sediment quality values as interpretation of narrative water quality objective and **Comment 20.1** on ERLs. See response to **Comment 20.3 and 20.4 f**or TMDL consideration of both bioaccumulation pathway and direct effects on benthic organisms. See response to **Comment 36.65** for bioavailability of DDT in sediments. See response to **Comment 23.8** for air deposition and continuous dredging issues.

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		deposition and point source discharges; e.g., the DDT allocation to POTW in Outer Harbor is more than 3 times the proposed DDT TMDL -TMDL implies continuous dredging to comply with DDT sediment quality standard.	
36.46 D	Montrose/ Hansen Associates	-DDT TMDL assumes the bioavailable concentration of DDT is conservative and does not change over time. -Existing fish tissue data (18 yr. record) of white croaker and mussel results indicate these levels have been decreasing and this trend is likely to continue. Author analyzed fish tissue data collected by City of Los Angeles at LA Harbor HT7 site (in Outer Harbor near Terminal Island POTW discharge outfall) and Palos Verde Shelf Zone 1, 2, 3 [corresponding to MSRP segments 9, 11, 13]. -Use of lipid-normalized data for lipophilic compounds such as DDT is accepted scientific approach; using this approach temporal trends at four sampling locations/segments show declining DDT concentrations in white croaker. -Author states it is 'likely that similar trends are occurring in all of the waterbodies considered in the TMDLs.' -Exposure to DDT is over-estimated, resulting in TMDLs that are too low.	Staff acknowledges that fish tissue concentrations are generally declining over time; this appears to be true for white croaker. However, staff finds two relevant factors that contribute to continued exposure to elevated DDT (and PCB) levels via fish consumption. A. DDT levels in white croaker collected by City at LA Harbor site HT7 range from 22 to 6514 ug/kg wet wt. while the OEHHA fish consumption goal value (FCG) is 21 ug/kg. Thus 100% of fish caught are above the OEHHA goal value. B. OEHHA fish advisory states Do Not Eat the following fish species within areas, including greater LA/LB Harbor waters: Pacific barracuda, black croaker, white croaker, barred sandbass and topsmelt. Fish angler surveys show that humans are indeed catching these fish and presumably consuming them. See additional information in response to **Comment 36.51** below. Commenter's use of lipid-normalized data is appropriate for trend analyses. However, we find it inappropriate to perform such data manipulation when considering what DDT or PCB concentrations are in fish caught and consumed by anglers.
36.47 E	Montrose/ D. Sunding, UC Berkeley	TMDLs have not met burden under Porter-Cologne Act and EPA Guidance to consider economics; i.e., "the TMDL does not consider or even calculate the benefits of the action relative to current water quality levels." ▪ Implementation plan proposes does not include enough detail to permit an adequate calculation of costs.	The statutes do not require a "cost benefit analysis." Staff has set forth the problem and evidence supporting the necessity for the TMDL and thus has shown a reasonable relationship between the burden and the benefits to be obtained from compliance with the TMDL.

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		TMDL "makes no mention of who will bear the costs of complying with the regulation, or of the regional economic implications of the action." ▪ TMDL does not mention: ▪ # of people participating in recreational fishing activities in these waterbodies; ▪ # of people doing any other type of recreational use (sailing, hiking, birdwatching); ▪ How any of these uses would be improved by the proposed action, if they would be affected at all; ▪ Value to residents of LA County, or any other area of California or the wildlife benefits.	Commenter may also want to see response to **Comment 23.9.**
36.48		TMDL report fails to demonstrate that Regional Board considered alternatives to proposed TMDLs that would be less burdensome, or that it considered the relative cost effectiveness of alternative standards. CEQA requires Regional Boards to consider economic impacts when establishing a performance standard. CEQA also requires Regional Board should detail the likely methods and costs of compliance with proposed TMDL.	The Substitute Environmental Document (SED) includes the alternatives considered and environmental analysis. The Regional Board also considered likely methods of compliance and associated costs, as required. The TMDL is not a performance standard, see response to **Comment 1.5**.
36.49		Lack of economic alternatives analysis is inconsistent with federal guidelines promulgated by US EPA and US Office of Management and Budget. Executive Order 12,291 "established a set of principles for agencies to follow to the extent permissible by law, including a commitment to cost-benefit analysis. Executive Order 12,866, reaffirmed the basic commitments to economic analysis…..introduced some reforms…including procedures for conflict resolution and inclusion of equity considerations.	EPA will address the comment in the event EPA determines to establish the TMDLs pursuant to CWA sec. 303(d)(2).
36.50		Regional Board staff estimate of dredging costs ($60.84 per cubic yd) is far lower than the actual cost of similar remediation projects. Author surveyed several similar soil removal sites in	Based on a feasibility study conducted in 1998 for sediment contamination mitigation at the mouth of Ballona Creek and Marina del Rey, the dredging cost ranges from $10.95 per

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		California to demonstrate the cost of dredging ranges from $120-1,320 per cubic yd. Commenter included an itemized cost estimate for San Diego Shipyard. The total estimate is $58M, with approximately $325 per cubic yard *dredged*.	cubic yard (yd^3) to $74.4 per cubic yard (Moffatt & Nichol Engineers, 1998). See, also, response to **Comment 23.9.**
36.51		Commenter cited study by Pacific Recreational Fishers Information Network (2011) of observed fish species caught in LA Harbor site, as well as LA County as a whole. For the LA Harbor site, commenter stated, "only a handful of species of fish are caught in any significant numbers from the LA Harbor… including: **barred sandbass**, **California scorpionfish**, halfmoon, **kelp bass**, ocean whitefish, Pacific bonito, Pacific sanddab, and vermillion **rockfish**. Of the fish species most commonly mentioned in the [TMDL] Staff Report's survey of the limited fish tissue data available, there were only four reported instances of white croaker being caught in the Los Angeles Harbor in 2008, none for queenfish, none for spotted turbot, and none for halibut. Based on the best available survey data for recreational anglers, it is highly unlikely that there will be significant human health benefits relating to fish consumption as a result of implementing the TMDL."	Staff have reviewed information at the website link (http://data.recfin.org/wiki/index.php/California_Recreational_Fisheries_Survey) provided by commenter as well as fish species contained within OEHHA Southern California fish advisory (2009). The OEHHA advisory has grouped information pertaining to three geographical areas and the "red zone" is defined as coastal fishing, either off piers or boats, between Ventura Harbor and San Mateo Point. Los Angeles and Long Beach Harbors are contained in the red zone, the most restrictive fish consumption applies in these areas; e.g., Do Not Eat applies to 3-5 fish species within this zone. Commenter cites data that only a handful of species are caught in any significant numbers (apparently based on greater than 100 caught fish). Staff has carefully examined the fish species cited by commenter and cross-referenced with the OEHHA fish advisory; we found **four of eight** fish species are categorized in the advisory as either Do Not Eat or limited consumption of 1 serving per week. Therefore the commenter's cited data shows that anglers are indeed catching and presumably eating the very fish that OEHHA has deemed heavily contaminated and inappropriate for human consumption. Furthermore we examined the RecFIN website more closely to review angler results for several fishing locations in the greater Los Angeles and Long Beach Harbor waters. Here are four sites, by name and ID number and the (top) percent fish species caught at each site (per 2009 records):

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			Cabrillo Beach (#110)-Launch Ramp Chub mackerel = 18% fish caught **Kelp Bass** = 9% **White Croaker** = 8% **Barred Sandbass** = 5.6% Pier J (#210) – near Port of Long Beach Sanddab = 21% fish caught **Barred Sandbass** = 13% yellowfin Croaker = 11% **Barracuda** = 6% Shoreline Village (#216) – East Jetty, near City LB **White Croaker** = 29 % fish caught Jacksmelt = 21% Seaperch = 14% **Barred Sandbass** = 7% (**BOLD** refers to fish species contained within OEHHA fish consumption advisory, and specifically within the red zone categorized as either Do Not Eat or limited consumption of 1 serving per week for all human consumers.)
36.52 F	Montrose/ Menzie/ Exponent	Measurements of DDT from atmospheric deposition is greater than DDT TMDL per waterbody. (this relies on a single measurement of DDT air deposition.) This implies bed sediments will always need remediation.	Atmospheric deposition measurements of DDT were performed by SCCWRP as part of multi-media flux study examining movement of organic compounds across water/air and water/sediment interfaces. Three separate air deposition measurements were collected between Sept. 19 – Oct. 26, 2006. While these results are preliminary, sampling site location was within the Los Angeles and Long Beach Harbors watershed, close to Dominguez Channel Estuary; therefore these results are most appropriate for characterizing local conditions. (Site location was based on several criteria, including location that obtained ancillary parameters; e.g. mean wind speed and direction.)

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			Staff acknowledges the DDT TMDL is smaller than the air deposition load for certain waterbodies; however, staff does not find that this will require constant remediation of bed sediments. Rather a more extensive DDT flux study within these waters will help clarify these results and perhaps provide more accurate characterization. The Implementation Plan includes recommendation for such a study within first five years of implementation.
36.53 G	Montrose/ Shrestha/ Menzie Exponent	References are made LSPC models developed for LA River, San Gabriel River and Dominguez Channel watersheds however model simulation specific information was not provided in the report nor appendices. Sensitivity and/or uncertainty analyses of inflow and solids loading were not performed; sensitivity analysis of the DDT loading data was performed using the lower and upper range of DDT concentration to the sediment. Given the inadequacy of the LSPC model calibration, sediment and contaminant loadings derived from this model and input to the EFDC model are unreliable.	Model-specific information for the Los Angeles River, San Gabriel River, and Dominguez Channel are available in the references to which the commenter refers. These documents, which include calibration and validation results, are available through the Regional Board website and SCCWRP. Sensitivity analyses for sediment parameters were performed during the San Gabriel River modeling. These analyses are applicable to this watershed modeling effort as the methods and parameterization are all consistent with the regional modeling approach. Model calibration and validation requires a balance and in the case of the nearshore watersheds, very limited data were available to achieve this balance. Overall, there were not enough data to justify refinement of the calibrated and validated parameter values associated with the regional modeling approach. TMDLs are required to be based on the best available data and these modeling efforts (and resulting load estimates) met this requirement. If additional data become available in the future, they could be incorporated into the analyses during a reconsideration of the TMDL.
36.54		Mass balance computations for sediment and contaminants were not performed as part of model assessment, and hence there can be no reasonable confidence that contaminant concentrations derived from model predicted deposition are	Limited data were available for model calibration and validation; however, the best available information was used. While a mass-balance computation was not performed, model results were provided in graphical and/or tabular format to

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		correct.	demonstrate model fit. The simulated values used for TMDL or existing loading rate calculations were annual averages. Overall, given that the model is in the range of observed values and averages are likely similar, the model is being appropriately used to determine loading estimates.
36.55		Modeling report does not present specifics on areas of erosion and deposition, but incorporates the two mechanisms into cumulative deposition values over 11 TMDL zones. Thus some areas maybe included for dredging that are in fact erosional. As a result, the allocation scenario shows remediation of bed sediments for each zone, which may not reflect actual conditions where there may be areas of erosion or deposition. This is another instance in which the modeling does not correspond with known conditions on the ground. It is particularly contrary to real-world conditions to model an area as depositional when it is in fact erosional, or vice versa.	The conditions presented in the TMDL and associated modeling reports are averages and are not intended to explicitly characterize site-specific conditions. Before dredging or capping activities are performed, additional study and data collection are recommended to identify appropriate remediation activities for specific areas.
36.56 H	Montrose/ Bodishbaugh & Menzie/Exponent	These TMDLs inappropriately use Effects Range Low sediment quality screening levels; instead of the SQO-Direct Effects.	See response to **Comment 36.1**.
		The State's SQOs include Possibly Impacted as meeting the protective condition if the studies demonstrate that the combination of effects and exposure measures are not responding to toxic pollutants in sediments and that other factors are causing the responses within a specific segment or waterbody. This indicates there is uncertainty regarding the classification of contaminant-related effects on sediment dwelling organisms.	The SQO – Part I policy does include "Possibly Impacted" as perhaps meeting the protective condition, albeit contingent on additional studies and results described therein. Staff note the commenter did not provide existing evidence of such required studies for these impaired waters, nor do staff know of any such studies, therefore we conclude that Possibly Impacted is not appropriate protective condition for these waters at this time.
36.57		The TMDL's proposed use of SQO MLOE station scores as a need for dredging fails to incorporate any of the required implementation considerations, and is inconsistent with the	TMDL does NOT include a 'need for dredging', rather it provides this as one alternative to decrease pollutant loads and therefore reduce adverse impacts on fauna within the

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		intended use of the SQOs as promulgated by SWRCB.	subject waters.
36.58		There are two factors of uncertainty associated with indirect effects TMDLs: a. Causation of DDT fish tissue levels as proportional to DDT sediment levels. A draft scientific report (SFEI 2007) implies there is not a one-to-one relationship between sediment and fish tissue concentrations b. The TMDLs have selected a single [sediment] values to represent protective levels for human health.	The SFEI draft report states: "Although it is likely that a large portion of the water column concentrations were linked to direct sediment resuspension, direct loading from the watershed and upstream rivers should also be considered..." In addition, see response to **Comment 20.2 and 30.7.**
36.59		Uncertainties in deriving target levels and TMDLs have not been considered.	TMDL includes discussion of sediment quality value uncertainty. See TMDL Staff Report pg. 50 for discussion of why TEC and ERL values were selected instead of ERM and PEL values.
36.60		"Risk Zones" for sediment provide a means of incorporating uncertainty.	Commenter's suggestion of evaluating 'risk zones' for sediment is noted. In the Implementation Plan, staff has acknowledged the potential sediment remediation activities the Ports may pursue in the future. These are also described within the Ports' Water Resources Action Plan, which has proposed a decision process to follow and incorporates a prioritized system for sediment actions; this is similar to Risk Zones.
36.61 I	Montrose/Johns/ Exponent	Implementation Plan of TMDL does not consider appropriate guidance on sediment remedies. Maintenance dredging is not discussed in the TMDL. TMDL may adversely affect maintenance dredging and the ability to keep the region's ports open for business. TMDL does not include discussion regarding potential disposal options or capacities for handling contaminated sediments. Estimated cost of dredging are out of date and do not reflect current costs.	Maintenance dredging may reduce pollutant loads within bed sediments as well as significantly decrease pollutant fluxes out of sediment. Removal of contaminated sediment is discussed in the TMDL in the Implementation and Costs Sections. Dredging and capping are also discussed in the CEQA Checklist and Substitute Environmental Document. See, also, response to **Comment 36.3 and 36.7.** In addition, for costs, see response to **Comment 23.9.**

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		TMDL does not cite any alternatives to dredging; e.g., replacement, capping, or restoration following dredging.	
36.62		Uncertainties and potential misuse of tissue target levels for birds and mammals included in the TMDLs. No explanation is included in the presentation of these target levels for birds and harbor seals. Animal species can differ greatly in their sensitivity to contaminants and these differences can be important when selecting studies to represent groups of animals. For example, TMDL relies on data for leghorn chickens to represent the sensitivity of [marine] bird species to PCBs. Water-dependent species such as terns and cormorants are less sensitive [than chickens].	TMDL has cited relevant and available information of harbor seals using the best available information to protect these marine mammals in the subject waters. See response to **Comment 36.9.** Staff finds it also noteworthy that DDT tissue levels in marine mammals feeding on fish in southern California may continue to be contributing to California Condors reproductive difficulties associated with egg-shell thinning. See N.Y. Times article, *New Hurdle for California Condors May be DDT from Years Ago,* Nov. 15 2010. See response to **Comment 36.63b** for birds.
36.63a J	Deardorff/ Menzie/Exponent	TMDL should consider use of EPA guidance (2003) for developing ecological soil screening values associated with wildlife TRVs.	Commenter cites guidance developed for EPA's Office of Solid Waste and Emergency Response; this program has different priorities and decision limits than those utilized by EPA's Office of Water program. The wildlife tissue residue values (TRV) are not developed for benthic community organisms and therefore they do not take into account the direct effects of pollutants on aquatic and sediment dwelling organisms. Furthermore, these TMDLs are based on the more protective sediment quality values between benthic organisms (ERLs) or human health (bioaccumulation pathway) and therefore the sediment target values are considered adequately protective of wildlife.
36.63b		Commenters question TMDL targets included for 'birds and harbor seals'….noting the TMDL targets are from studies in Texas and Europe. More specifically, commenters write to clarify that some TMDL tissue levels 'do not accurately reflect	Staff agree the targets for birds and harbor seals are NOT used for TMDL development of DDT or PCBs. Staff included these tissue targets for Forster's terns and harbor seals based on review of relevant scientific studies via

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		some of the statements from the cited papers.' Commenter also state "the TMDL document does not use this information [for birds and harbor seals] to develop TMDLs, but presumably it could be used in the future manner similar to the TMDL sediment targets."	literature search. Staff have carefully reviewed provided information specific to Least/Forster's Tern and have modified the PCBs level for bird eggs (2.2. µg/g wet wt.) and corrected the PCBs level for harbor seals (5.2 µg/g lipid). Also, staff have removed DDT target for Forster's terns.
36.64 K	Montrose/ Murphy/ Menzie/ Exponent	▪ TMDL presents air deposition loading estimates that do not make sense relative to current total loadings. ▪ TMDL presumes air deposition remains constant over time. ▪ TMDL process does not consider uncertainties with estimating air dep loads. ▪ DDT air dep loading are overestimated since they neglect resuspension and vapor transport from sea back to atmosphere. ▪ DDT air dep loadings are uncertain, based on a single land-based location, downwind of land and dust whereas the prevailing winds are offshore.	Air deposition study was performed by SCCWRP, in cooperation with Ports of Los Angeles and Long Beach, as part of a multi-media flux study to determine the rate of exchange between air and water as well as water and sediment. The flux study results show sediments diffusive flux to water is dominant mode of DDT into water column. The air deposition portion of this DDT flux study concluded there is more absorption (from air to water) than volatilization (from air to water). Resuspension would make DDT bioavailability greater than if it remained buried deep in sediments. DDT air deposition loadings are based on dry deposition measurements at one site over several weeks in Fall 2006. Given the DDT air dep loading is based on dry deposition only, it does not include wet deposition which is 100% from air into water, then it is conservative estimate. Air deposition monitoring site IS relevant since it is inland where contaminated dry soils could be picked up and carried via prevailing off-shore winds into estuarine and marine waters. Commenter does not provide any alternative air deposition monitoring results collected within the greater Los Angeles and Long Beach Harbor watershed; thus it is reasonable for Regional Board and EPA to rely on these recent and most site-specific air deposition results and multi-media flux for these waters.
36.65 L	Montrose/ Driscoll/ Exponent	TMDL does not consider bioavailability of contaminants for understanding exposures and risks. Proposed numeric target [for DDT] is typically used for screening and is three orders of	Commenter is focusing on DDT sediment quality value for direct effects which uses the ERL target value to protect benthic organisms. However, the comment is inaccurate

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		magnitude lower than two Southern California Bight studies (Chapman 1996; Fuchsman, et al. 2010)	since the TMDL states that DDT targets for both direct effects as well as bioaccumulative pathway were considered (not just the direct effects target), and staff recommend the lower value thus equally protective of both exposure pathways. The direct effects target (total DDT = 1.58 ug/kg. dw) is slightly lower than the bioaccumulative target (total DDT = 1.9 ug/kg dw). The implementation schedule clearly states the numeric targets included in these TMDLs will be revisited as appropriate data is developed, within 6 years of effective date. See Staff Report pg. 122; Table 7-2.
36.66 M	Montrose/ Menzie; Shrestha/ Exponent	Assumptions for these TMDLs are different from those made for other TMDLs in California and in other states. Selected values [targets] lead to very low TMDLs that give false sense of precision.	Staff disagrees for several reasons: a. TMDL targets selected for these toxic pollutants are similar to other TMDLs in Los Angeles Region, including but not limited to: -Colorado Lagoon toxics TMDLs (adopted, not yet effective) -Ballona Estuary toxics TMDLs -Calleguas Creek organochlorine and metals TMDLs b. These TMDLs make assumption that contaminated sediments are one source of DDT to be considered amongst all DDT sources. This approach is consistent with Newport Bay DDT TMDLs in Orange County. c. Sediment quality targets selected for these TMDLs are very similar to those used for other California TMDLs. Here the selected DDT sediment quality target (1.59 ug/kg dry wt.) is comparable to marine sediment quality DDT target (3.89 ug/kg dw) for Newport Bay Toxics TMDLs. And the PCBs sediment target selected here (3.2 ug/kg dw) is comparable to the sediment goal (1 ug/kg dw) in the San Francisco Bay PCBs TMDLs. Finally staff does not find these TMDLs give a false sense of precision, rather staff have opted to make conservative

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			determinations for several technical decisions and this has resulted in low and protective TMDLs.
36.67		The overall TMDL process is highly uncertain; it makes sense to consider uncertainty explicitly, including selecting a range of possible values to inform risk managers. In fact, CA SQOs – Part I document presents a range of sediment values for three different levels of potential effects.	Uncertainty is considered explicitly since staff has included interim allocation values (very close to current levels), several optional studies to potentially influence future revisions to these TMDLs and 20 yr. implementation schedule. The CA SQOs presents a range of sediment values for three different levels of potential effects which are then combined with information from other LOEs to make a station assessment.
36.68 N	Montrose/ Menzie/ Exponent	Monitored Natural Recovery (MNR) is an alternative for managing water quality in Dominguez Channel and greater LA/LB Harbor waters. The National Research Council (2007) has concluded that "*dredging ….should be considered,* but only *with other options, to manage the risks that the contaminated sediments pose*." (italics are quotes from NRC 2007 committee on dredging) *Site assessments also indicate that contaminants can be released into the water during dredging and can have short-term adverse effect on the aquatic biota.* *Some site conditions and dredging practices can limit the amount of residual contamination remaining after dredging and can limit contaminants released into the water column. Those site conditions should be given major consideration when evaluating the potential effectiveness of dredging.*	The TMDL does not address monitored natural recovery in isolation from other implementation methods; nor does it state that dredging must be the only remediation to address contaminated sediments and the corresponding adverse effects. While there may be some advantages to monitored natural recovery, and there are site-specific conditions for dredging considerations; staff want to remind stakeholders that EPA's Superfund program has determined that it can no longer wait for MNR to occur on PV shelf. This suggests that more than 15 years after the discovery of DDT loading offshore to PV Shelf, that there is not sufficient natural recovery to resolve the problem of elevated fish tissue levels and continued threat to human health and wildlife via fish consumption. In addition, Staff Report refers to the potential for inclusion of some areas of monitored natural recovery during implementation. See Figure 7-1 ("attenuation will result in necessary improvement").

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			For dredging see response to **Comment 36.3**.
36.69		DDT contaminant concentrations will decline over time, making MNR a viable alternative. NOAA Mussel watch data at three stations [within greater LA/LB Harbor waters] reveal that exposures to DDT have been declining for the period of record.	See response to **Comment 36.68.**
36.70 O	Montrose/ Tormey	There are insufficient data to calibrate and validate the EFDC model. Without these two essential elements, the model is untrustworthy.	Limited (but not insufficient) data were available for model calibration; however, the best available information was used, which is a requirement of TMDL development. Due to data limitations, model validation using an independent set of data could not be performed in addition to calibration. The simulated values used for TMDL or existing loading rate calculations were annual averages. Overall, given that the model is in the range of observed values and averages are likely similar, the model is being appropriately used to determine loading estimates.
36.71		Comparisons between EFDC model predictions and observations do not agree.	Limited data were available for model calibration. As indicated in Appendix I, the model predicted levels are generally within the range of observations. In addition, the simulated values used for TMDL or existing loading rate calculations were annual averages. Given that the model is in the range of observed values and averages are likely similar, the model is being appropriately used to determine loading estimates.
36.72		TMDL acknowledges that fresh water loading to saline waters is poorly known, and recommends later study of this topic.	Comment noted. The TMDL models are currently based on the best available data and if additional data become available in the future, model revisions may be possible during TMDL reconsiderations.
36.73		TMDL acknowledges that atmospheric deposition is significant source of contaminants but does not address control [of DDT].	See response to **Comment 20.4.**

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36.74		TMDL uses a poorly known and tested model linking fish tissue concentrations and sediment concentrations. A different TMDL, S.F. Bay PCBs, uses only fish tissue target.	The EFDC model is well known and has a high reputation for integrating hydrology and water/sediment quality conditions. EFDC model is public domain, which makes it transferable to any interested party. EFDC model does not make linkage between sediment and fish tissue concentrations. Rather staff used a food web model and results used in SF PCBs TMDL to link fish to sediment, then staff used that sediment target to define sediment concentrations in these greater Los Angeles and Long Beach Harbor TMDLs.
36.75 P	Montrose/ Slocomb/ Merhle/ Cardno Extrix	Use of ERLs to set sediment targets for these TMDL is inappropriate because data used to develop the ERLs was not made available by the ERL authors, so it is presumed that the Regional Board does not possess those data and has reviewed them. The ERLs are not intended or designed for use which the TMDL intends. An independent statistical evaluation of other sediment screening values prepared by McDonald, one of the authors of ERLs, has demonstrated a very weak, and almost random, relationship between DDT on the one hand, and impacts to the benthic ecosystem, on the other. What is known about the ERLs is that they ascribe toxicity to DDT and other compound based on pulling data from published studies where the authors of those underlying studies do not ascribe the reported toxicity to DDT or these other compounds. Even exceeding the high ERM value, which the Regional Board does not use, does not meet this accuracy criteria. Sediments in these two areas likely contain a mixture of toxic constituents that are not listed in the SQG tables and therefore, cannot be understood toxicologically.	For a discussion of ERLs see response to **Comment 20.1.** In addition, one reason why staff selected ERLs over ERMs is these waters contain sediments that are contaminated with numerous pollutants, including (3 or more) heavy metals, (4 or more) polycyclic aromatic hydrocarbons and organochlorine compounds. Staff find this mixture of numerous toxic pollutants to be multiple threats to aquatic organisms, instead of just one pollutant and one line of evidence for sediment toxicity or adverse effects. Thus, staff chose the more protective sediment quality values (ERLs) to acknowledge the implicit synergistic effects of multiple pollutants within water and sediment.
37.	California Department of Transportation		
37.1		**Impaired Region Covered by the TMDL** Exact boundaries of the watersheds that are addressed by this	Jurisdictional maps are included in the Appendix II to the

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		TMDL are not clearly delineated. Figure 2-1 (page 12) highlights the impaired waterbodies included in the TMDL, and Figure 4-1 (page 67) shows subwatersheds and portions of watersheds. However, the TMDL does not show the full extent of the watershed as well as sub watersheds draining to the watershed that are impaired and included in this TMDL. Section 7.3.2 of the draft Staff Report on page 109 states that "Phase I should include actions to be implemented throughout the nearshore watershed and specific implementation at the Ports" for the Greater Los Angeles and Long Beach Harbor waters. However, the TMDL does not define the "nearshore watershed". It is not clear if the requirements for Phase I apply to only the regions labeled as "nearshore areas" in Figure 4-1 (page 67). To clarify which pollutant types are included in each subwatershed, please include a table clearly listing all of the subwatersheds that are covered specifically for different requirements in the TMDL.	Staff Report. See Figure III.4-1 and III.4-2. Phase 1 for the Greater Harbor Waters is included on page 109 and refers to the implementation in the Greater Harbor Waters and the nearshore watersheds of the Harbor Waters.
37.2		**Caltrans area estimate and waste load allocation** The draft Staff Report includes an estimate of Caltrans' point source area in the Great Harbors and Dominguez Channel watershed of 618 acres and states that this comprises about 2.4% of the watershed area (page 57). However, it is not clear how this area was estimated. The area estimates should describes what parts of the watershed were taken into account. In addition, it is our understanding that the waste load allocations (WLAs) assigned to individual storm water permittees (including Caltrans) were estimated based on each permittee's area in the watershed that drains to the impaired waterbody. Thus, Caltrans received a WLA for each pollutant equal to its percentage of the watershed and the over	The estimated area represents Caltrans' right-of-way that drains to Dominguez Channel and Greater LA/LB Harbor waters including Inner and Outer Harbor, Consolidated Slip, Fish Harbor, Cabrillo Marina, Inner Cabrillo Beach, Los Angeles River estuary, and San Pedro Bay. It is correct that the WLAs assigned to Caltrans were calculated based on the percentage of the areas that drain to impaired waterbodies covered under Caltrans jurisdiction.

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		all load that each waterbody can handle. Please very if this assumption is correct.	
37.3		**Numeric Targets** Numeric targets used in the TMDL are estimated using a hardness of 49 mg per liter measured by the Los Angeles County Department of Public Works (LACDPW) at a single location, Dominguez Channel at Artesia Boulevard (Site S28). This hardness value is significant lower than much of the current data report by LACDPW for locations though out the TMDL area (Los Angeles County 2010.) In addition, hardness value for dry weather monitoring at Site S28 for the 2009-2010 monitoring period range from 290 to 390 mg per liter. A presentation for this TMDL given on June 28, 2006 by the LARWQCB and EPA showed hardness values that ranged from 197 to 400mg per liter for flow conditions ranging from base flows to large flow (no reference source was noted for the data). Hardness data has a huge impact on the bio-availability of metals in the environment, and it is critical that the correct value is used. Please review all available harness data for each impaired water body and ensure that the most accurate estimates are made. Please also provide the specific data sets that are used to estimate hardness in the TMDL staff report.	The freshwater targets in total recoverable metals have been recalculated with additional data including a higher hardness value. See response to **Comment 30.4.** In addition see response to **Comment 21.1.**
37.4		**Monitoring Plan** The TMDL required an extensive monitoring program, including sediment chemistry monitoring data at more than 22 sites, fish tissue monitoring, and water column monitoring. Two toxicity test and four benthic indices are required in compliance with the Sediment Quality Objectives (SQO) Part I. The TMDL compliance schedule requires that the monitoring plan be submitted six months after the effective	The submittal of the monitoring plans has been extended and is now required 9 months after the effective date of the TMDL. On-going monitoring for other TMDLs and should be coordinated with these new monitoring requirements. Duplicate sampling is not required.

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		date of the TMDL. In addition, the staff report recommended that this program be coordinated with the biological baseline and Bight regional monitoring program. This is a complex TMDL that will require lengthy coordination and preparation. We requested that the short timeline be extended to allow stakeholders sufficient time to develop an effective monitoring plan that can be coordinated with different stakeholders in each region. Monitoring is on going to comply with the TMDL for Metals in the Los Angeles River and tributaries. Please clarify if the ongoing monitoring can be used to comply with the Dominguez, Greater LA and LB Harbor TMDL for toxicity.	
37.5		**Assessment findings for Waterbodies in the TMDL** The staff report discusses monitoring results and data that were used to develop TMDLs, load allocation (LAs), and WLAs for the impaired waterbodies. In several of the waterbodies, monitoring showed that some pollutant levels are already meeting numeric targets. The TMDL retains the compliance requirements for many of these pollutants. Additional data should be obtain prior to requiring stakeholders to conduct monitoring and implementing BMPs for these pollutants to insure the best solution of these impairments. The staff report states that although sediment toxicity has been observed in the Outer Harbor, "no individual contaminants were above sediment guidelines in more recent studies" and that "to date no reliable measurements of metals or PAHs in water exists" (page 40). However, WLAs are included in the TMDL for both metals and PAHs. At this time, the data sets do not support a correlation between metals or PAHs and the sediment toxicity.	Staff has performed an assessment review using SQO Part 1 methodology to evaluate sediment quality conditions. Using station assessment results of Clearly Impacted, Likely Impacted and Possibly Impacted as not meeting the protective condition, there are sufficient exceedances within each of these waterbody to confirm impairment based on SQO Part 1 and make clear the need for a full set of allocations to those waterbodies. This SQO direct effects assessment information is compiled in Appendix III. For further discussion, see response to **Comment 20.1** for information regarding SQO assessment and corresponding TMDLs and allocations. Comment regarding copper in Inner Cabrillo Beach may be pursued via next 303d listing cycle revisions.

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		The staff report states that in Cabrillo Marina, "sediment results did not show elevated levels of metals or other organic compounds" and "very few reliable measurements of aqueous metals or organics exist in this waterbody; no exceedances have been recorded" (page 40). As with Outer Harbor, WLAs are included in the TMDL for both metals and organics and the data do not currently support a correlation between metals or organics and the sediment toxicity. The Los Angeles River Estuary "is not impaired for lead and zinc according to the 2008 303 (d) list, although it was on the 2006 303(d) list" and sediment toxicity has been observed (page 41 of the TMDL staff report). In addition, the staff report states that "very few reliable measurements of aqueous metals or organics exist in this waterbody [and] no exceedances have been recorded" (page 41). Therefore, the requirements for the Los Angeles River Estuary should not include WLAs and monitoring for organics, lead, zinc, and other aqueous metals. In San Pedro Bay, "sediment results do not show exceedances for metals nor PCBs, nor other organics", although sediment toxicity has been observed in several samples. In addition, the staff report states that "the waterbody is not impaired for chromium, copper, zinc, and total PAHs and these listings have been removed from the 2008/2010 303(d) list" (page 41). However, the TMDL includes WLAs for copper, zinc, and PAHs even though these are not included on the new 303(d) listings. Furthermore, the TMDL includes requirements for lead, PCBs and DDT for San Pedro Bay even though sediment results do not show exceedances for these constituents. Finally, the staff report states the Inner Cabrillo Beach "is not	

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		impaired for copper." Therefore, the Regional Board should pursue de-listing of the water body for copper.	
37.6		**Whole Effluent Toxicity** The TMDL staff report does not discuss the proposed Whole Effluent Toxicity (WET) policy under review by the State Water Resources Control Board. This TMDL should be either compatible with the WET policy or pre-empt the policy. As with the proposed WET policy, the TMDL should initially require only monitoring for toxicity. If toxicity is not found in a water body, then it should be a lower priority to do monitoring for the individual pollutants: If toxicity is found, a toxicity identification evaluation (TIE) or additional monitoring could be required consistent with the WET policy to identify the pollutant(s) causing the toxicity:	The Staff Report and the Basin Plan Amendment do address the Toxicity Policy now under development. The Staff Report address the Toxicity Policy in Section 3.1.3. The Basin Plan Amendment specifies that *"Targets based on new toxicity criteria that achieve the narrative Toxicity objective of Chapter 3 of this Basin Plan may substitute for the TU_c of 1, when those new criteria are adopted and in effect.."* In addition, The Staff Report and BPA have been revised to clarify that the interim toxicity WLA shall be implemented as a trigger requiring additional evaluation (e.g., Toxicity Identification Evaluations).
37.8		**Funding:** Due to limited competing resources, and having to address 70 active TMDLs statewide (with many in the pipeline), Caltrans is facing a challenge to address the TMDLs outside of the funding allocated to applicable highway projects. Caltrans does not have the authority to impose user or utility fees to pay for the TMDL implementation. Caltrans requests that the difficulty in funding be acknowledged and that language be added to the TMDL to allow for flexibility in implementation during times of funding challenges.	The Staff Basin Plan Amendment has been modified to include several new methods of determining compliance; see response to **Comments 21.1, 21.3 and 21.5**. The implementation schedule is 20 years long, giving responsible parties sufficient flexibility in addressing TMDL requirements.
38.	Western States Petroleum Association		
38.1		In evaluating the Draft TMDL and developing these comments, WSPA used Figure 2-1 (p. 12) of the Draft Staff Report to identify the various freshwater and salt water bodies	Comment noted and detailed response to comments are immediately below.

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		discussed in the Draft TMDL. Consistent with Figure 2-1 of the Draft Staff Report, WSPA assumes that the water body called "Dominguez Channel (Freshwater)" is that part of the Dominguez Channel upstream of Vermont Avenue (where Vermont Avenue intersects the 91 Freeway, also approximately near the intersection of the 91 and 110 Freeways). In addition, consistent with Figure 2-1 of the Draft Staff Report, the remaining portion of the Dominguez Channel was assumed to comprise the Dominguez Channel Estuary. Thus, WSPA facilities may, from time to time, discharge either to the Dominguez Channel Estuary or to the Torrance Lateral (which, in turn, discharges to the Dominguez Channel Estuary) and not to the freshwater portion of the Dominguez Channel.	
38.2		**Freshwater Toxicity** The Draft TMDL assigns interim and final freshwater toxicity allocations to all point and nonpoint sources discharging into the water body segment "Dominguez Channel Freshwater" during wet weather conditions. *Because WSPA member facilities do not discharge to regions that would be regulated by the Dominguez Channel Freshwater allocations, it seems clear that these toxicity allocations <u>do not apply</u> to the WSPA member facilities.*	Commenter does not specify which WSPA facilities are being referred to. So we provide the following clarification: Facilities that discharge into freshwaters of Dominguez Channel are subject to regulations consistent with the freshwater allocations identified in these TMDLs. Those that discharge into Torrance Lateral are subject to regulations consistent with those freshwater allocations identified in these TMDLs. At a minimum this applies to ExxonMobil. Facilities that discharge into estuarine waters of Dominguez Estuary are subject to regulations consistent with the direct effects and bioaccumulative allocations identified in these TMDLs. At minimum this applies to Valero/Ultramar, BP-Carson, ConocoPhillips.

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38.2a		Further, WSPA believes that the application of toxicity targets as numeric effluent limits in NPDES permits is inappropriate for the following reasons: As noted in recent comments to the State Water Board (attached), we believe that it is inappropriate to apply toxicity requirements as effluent limitations. Toxicity tests measure the responses of certain test organisms, and toxicity test results can be influenced by numerous factors other than and in addition to effluent toxicity. For this reason, failure of any single toxicity test should not automatically be considered a violation but rather should trigger further investigation to determine if the effluent is indeed toxic and/or to identify the toxicant(s).	TMDL toxicity targets are applicable to discharges into freshwaters. For the toxicity exceedance as trigger see response to comment 21.6.
38.2b		The Draft TMDL would apply toxicity limits for chronic toxicity to stormwater discharges. As detailed in the attached comment letter, this use of toxicity testing is inappropriate, as it is unsupported by appropriate studies and data collection, and because it is unclear that current chronic toxicity test methods could be applied to stormwater discharges. For example, most methods require the collection of new samples daily for eight (8) days, and most stormwater discharges persist for a much shorter time period.	See response to **Comment 19.2.** In addition, Staff notes that most methods require the collection of water samples at a single water sampling event, followed by a test which takes 8 days and do not require *collections* for 8 days.
38.2c		The Draft TMDL calculates an interim limit for toxicity using "average values" from toxicity tests conducted by the Los Angeles County Department of Public Works. It is inappropriate to use the average of available test data as a measure of current performance that can be applied to a single sample.	This interim limit is effective at the time the TMDL becomes effective to ensure that water quality is not further degraded during the long implementation period of this TMDL. In fact, recent toxicity data for the Dominguez Channel are below 2 TUc.
38.3d		Toxicity testing should be conducted in the receiving water, but the interim and final toxicity allocations in the Draft TMDL appear to apply to individual effluent samples. This	Interim and final WLA will be implemented through NPDES permits (and/or other Board Orders) in accordance with state and federal regulations and guidance. However, the exact

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		method of application is inappropriate.	manner in which allocations are incorporated into permits is not established at the time of TMDL development, since the means of incorporating the allocations depends in part on the supporting evidence in the permit's administrative record.
38.4		**Concentration-Based Water Column Allocations for Metals** The Draft TMDL assigns concentration-based wet-weather-only interim and final metals allocations to non-MS4 point sources that discharge to the Dominguez Channel Freshwater. *Because WSPA member facilities do not discharge to the Dominguez Channel Freshwater, it should be clear that these concentration-based allocations do not apply to the WSPA member facilities.*	See response to comment 38.2.
38.5		**Torrance Lateral Freshwater and Sediment Allocations** The Draft TMDL assigns concentration-based allocations for metals in freshwater and sediments (discharges to the Torrance Lateral (see **Table 1**)**),** which, in turn, discharge to the Dominguez Channel Estuary. The impact of the proposed Draft TMDL can depend upon the unique requirements of each facility and the extent to which companies store the runoff from their facilities and discharge it to the sanitary sewer system. In general, only excess quantities, such as would occur from very large storm events, and are discharged to local receiving waters. Thus, discharges from these facilities occur very rarely, and only under extremely large storm flow conditions.	Comment noted.
38.5a		WSPA understands that the final freshwater allocations, including both mass-based and concentration-based	Any WSPA facility that discharges into Torrance Lateral will have to comply with both interim and final freshwater and

<table>
<tr><th>No.</th><th>Author</th><th>Comment</th><th>Response</th></tr>
<tr><td></td><td></td><td>allocations (summarized in Tables 1 and 2), would be applied only after year 20 of the implementation period. This implementation period is necessary to allow WSPA member facilities to evaluate and implement additional treatment options to meet the allocations of the Draft TMDL.

Table 1: Concentration-Based Freshwater and Sediment Allocations for Discharges to Torrance Lateral
<table><tr><td>Media</td><td>Copper</td><td>Lead</td><td>Zinc</td></tr><tr><td>Water, unfiltered</td><td>9.2</td><td>39.3</td><td>67.6</td></tr><tr><td>Sediment (mg/kg</td><td>31.6</td><td>35.8</td><td>121</td></tr></table>
Taken from p. 12 of Attachment A to Resolution No. Rl l-XXX.

Table 2: Mass-Based Freshwater Allocations for ExxonMobil Torrance Refinery Discharges to Torrance Lateral

Taken from p. 12 of Attachment A to Resolution No. Rl l-XXX.
<table><tr><td>Media</td><td>Copper</td><td>Lead</td><td>Zinc</td></tr><tr><td>Water, unfiltered (kg/yr)</td><td>0.9</td><td>3.8</td><td>6.6</td></tr></table>
WSPA requests that facilities that discharge to the Dominguez Channel Estuary and Greater Los Angeles/Long Beach Harbor have the option of using mass-based limits, similar to those applied to ExxonMobil,</td><td>sediment allocations identified in the TMDL for this waterbody.

For those WSPA facilities that discharge to Dominguez Channel Estuary, other interim or final allocations apply. As the draft TMDL was developed, staff explicitly requested such discharge flow data be provided by the refineries to accommodate our analysis and determination of appropriate mass-based allocations. Only ExxonMobil provided discharge flow data. Commenter has not provided any additional flow data to support consideration and calculation of mass-based allocations for these other facilities. Therefore, staff cannot accommodate commenter's request for flexibility without facility specific discharge information.

To accommodate the commenters request, the Basin Plan Amendment has been modified to include the possibility of including mass-based WLA for other refineries based on appropriate data, at the time of the TMDL reopener (six years after the effective date of the TMDL).</td></tr>
</table>

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		assigned in the Draft TMDL. For example, in the instance with ExxonMobil, the mass-based sediment allocation were developed using an average discharge frequency of once every seven (7) years. Using this approach, WSPA requests that the Draft TMDL state that facility-specific information may be used at the request of a point source discharger to derive alternative mass-based allocations, consistent with procedures and methods used by others in the region. *WSPA assumes that the Cities of Los Angeles and Long Beach (and the Ports of Los Angeles and Long Beach) and the State Lands Commission will be responsible for developing and implementing the Sediment Management Plans, and that WSPA 's member facilities will not be responsible for these activities.* This seems appropriate because discharges from WSPA member facilities occur only infrequently, and the operation of these facilities has not contributed in any substantive way to pollutants present in the sediments of the water bodies regulated by this Draft TMDL.	The Cities of Los Angeles and Long Beach (and the Ports of Los Angeles and Long Beach) and the State Lands Commission are responsible for the Sediment management Plan for the Greater Harbor Waters.
38.6		**Dominguez Channel Estuary Allocations** ***Interim Sediment Allocations.*** Interim concentration-based sediment allocations were based on the 95th percentile of sediment concentration data collected from 1998-2006 (see **Table** 3) and appear to apply to bedded sediments. Although the Draft TMDL and Staff Report are unclear regarding how these allocations may be implemented in NPDES permits, the Draft TMDL states (Attachment A to Resolution No. R11-XXX at p. 10), "Regardless of the allocation, permitted dischargers shall ensure that effluent concentrations and mass	The data set has been made available to WSPA.

<table>
<tr><th>No.</th><th>Author</th><th>Comment</th><th>Response</th></tr>
<tr><td></td><td></td><td>discharges do not exceed levels that can be attained by performance of the facility's treatment technologies existing at the time of permit issuance, reissuance or modification."

WSPA understands that interim sediment allocations would be implemented in members' NPDES permits as performance-based requirements through year 20 of the implementation period.

Table 3: Interim Concentration-Based Sediment Allocations for the Dominguez Channel Estuary.

Taken from p. 10 of Attachment A to Resolution No. Rl 1-XXX.

<table>
<tr><th>Constituent</th><th>units</th><th>Allocation</th></tr>
<tr><td>Copper</td><td rowspan="8">mg/kg sediment</td><td>220</td></tr>
<tr><td>Lead</td><td>510</td></tr>
<tr><td>Zinc</td><td>789</td></tr>
<tr><td>DDT</td><td>1.27</td></tr>
<tr><td>PAH</td><td>31.60</td></tr>
<tr><td>PCB</td><td>1.490</td></tr>
<tr><td></td><td></td></tr>
</table>
WSPA has been unable to reproduce the values shown in Table 3 and requests that the Regional Board provide additional information on the interim sediment concentration estimates presented in the Draft TMDL, including the dataset upon which the calculation was based and the methods used to derive the values shown.</td><td></td></tr>
<tr><td>38.6a</td><td></td><td>Final Salt Water Column Allocations.</td><td>The TMDL includes saltwater water column allocations for</td></tr>
</table>

<table>
<tr><th>No.</th><th>Author</th><th>Comment</th><th>Response</th></tr>
<tr><td></td><td></td><td>Final water column allocations are included in the Draft TMDL for discharges to Dominguez Channel Estuary. Concentration-based final waste load allocations (WLAs) were assigned to non-MS4 point sources in the Dominguez Channel Estuary and Inner Harbor, including refineries. These allocations were set equal to the saltwater targets for metals and human health targets for organic compounds (see Table 4), which were derived from the California Toxics Rule (CTR). Many of these concentrations are very low (many below current analytical capabilities) and thus may be exceeded in the Dominguez Channel Estuary under current conditions. Further, the Staff Report offers no evidence that the use of CTR targets would result in concentrations of these pollutants in sediments that are below the targets of the Draft TMDL. As noted below, the Draft TMDL does not appear to be based upon best available science, and the procedures of the SQO Policy should be used to establish the pollutants of concern for the Draft TMDL, and then to establish allocations.

In any case, as these are final WLAs, WSPA understands that they would be applied in NPDES permits only after year 20 of the Implementation Period.

Table 4: Receiving (Salt) Water Column Concentration-Based Final WLAs for the Dominguez Channel Estuary (applicable 20 years after TMDL adoption).

Taken from p. 12 of Attachment A to Resolution No. Rl l-XXX.

<table><tr><th>Constituent</th><th>Units</th><th>Allocation</th></tr></table></td><td>Dominguez Estuary. These are equivalent to CTR chronic criteria for total metals to protect aquatic organisms as well as recognize that total metals will contribute some portion to sediment metal levels via precipitation and settling. With appropriate sample preparation (removal of salt matrix), these concentrations are achievable via standard analytical methods; e.g., ICP-MS.

For total PAHs and bioaccumulative organics, these allocations are set equal to CTR human health criteria for consumption of organisms only. We acknowledge that bioaccumulative pollutant concentrations are very low, although not ‘below current analytical capabilities’. Several modified monitoring methods are viable for detecting these compounds in unfiltered samples, including passive samplers or high volume extraction techniques. The refineries have in the past provided non-detect results simply because they have not contracted with laboratories with sufficiently low detection limits. The sensitivity of measuring devices has improved over past 20 years; the refineries should accordingly improve their analytical results using current technologies for aqueous saline solutions, especially for PAH compounds.</td></tr>
</table>

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		Copper* 3.73 ug/L Lead* 8.52 Zinc* 85.6 Total PAHs 0.049** Chlordane 0.00059 4,4'-DDT 0.00059 Dieldrin 0.00014 Total PCBs 0.00017 * The Draft TMDL indicates that the concentration-based WLAs for metals were converted from the saltwater dissolved CTR criteria using default saltwater translators. ** The Draft TMDL indicates that since CTR human health criteria were not established for total PAHs, the lowest CTR criteria for an individual PAH compound (0.049 ug/L) was applied to the sum of benzo (a) anthracene, benzo (a) pyrene, chrysene, phenanthrene, pyrene, and 2methylnaphthalene. ***WSPA objects to the WLA for PAH compounds, as it results in a limit for PAHs that is far more stringent than intended by the CTR.*** The CTR criteria for these compounds for protection of human health from consumption of organisms at a level of 10^{-6} are as follows: benzo(a)anthracene 0.049 ug/L, benzo(a)pyrene 0.049 ug/L, chrysene 0.049 ug/L, phenanthrene (no CTR limit), pyrene 11,000 ug/L, and 2-methylnaphthalene (no CTR limit). Clearly, applying a limitation of 0.049 ug/L to the sum of these six PAH compounds is far more stringent than indicated by the CTR. *WSPA requests that the limits shown in Table 4 above be modified to be made consistent with the CTR.*	See response to **Comment 30.13** for changes to PAH targets.

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38.6b		**Final Mass-based Allocations** The Draft TMDL assigns mass-based allocations for metals and/or organic pollutants from MS4s discharging to the Dominguez Channel Freshwater, Dominguez Channel Estuary, and Greater Harbor Waters. *WSPA understands that these mass-based allocations do not apply to the WSPA member facilities.*	Concentration-based water and sediment allocations apply to WSPA facilities discharging into Dominguez Estuary and greater Harbor waters. See response to comment 38.5a, above.
38.7		**Scientific Basis of the Draft TMDL** The State's SQO Policy, which was approved by USEPA in August 2009, provides a quantitative process for determining whether or not sediment quality objectives are exceeded in enclosed bays and harbors. If sediment quality objectives are exceeded (which has not been established for these waterbodies or as part of the Draft TMDL), the SQO Policy then requires stressor identification to identify whether or not pollutant(s) are responsible for the observed sediment quality objective exceedances, and, if so, to identify which pollutant(s) are responsible for the exceedances.	Using SQO-Part 1 assessment procedures, staff reviewed sediment triad monitoring results in Dominguez Estuary and found exceedances of sediment quality objectives. More specifically, 5 of 7 sample results (WEMAP 99 & Bight 03) were determined to be either clearly impacted or likely impacted. These results provide additional unequivocal evidence that impaired conditions exist within this waterbody. Regardless of the State's intention to implement SQOs, the status of SQO data or stressor identification, the finding of impairment under the State's 303(d) list is not negated. Waterbodies which are impaired must have TMDLs developed.
38.7a		By contrast, the SQG thresholds used in the Draft TMDL (i.e., ERLs and TECs) were developed for use only as screening tools and were never intended for use as standards or regulatory endpoints, and the use of SQGs has been supplanted by the SQO Policy in California. SQGs are frequently unrelated to actual toxicity or impact within the sediments. In fact, the use of SQGs has resulted in Draft TMDL targets that are likely to be unnecessarily and artificially low. A comparison of available sediment concentration data to the targets established for sediment by	ERL, Effects Range Low, is the 10th percentile value indicative of the concentration below which adverse effects rarely occur. The ERLs are a protective predictor of toxic effects in sediment. The toxicity predictive ability of ERLs has been tested in the field and when several ERLs are exceeded, the predictive ability is greater. The ERLs provide a readily measurable numeric target that

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		the Draft TMDL indicates that virtually the entire Harbor would be considered impaired. However, analyses performed by SCCWRP pursuant to the SQO Policy (and relied upon by Regional Board staff in developing the cost estimates of the Draft TMDL) indicates that a far smaller portion of the Harbor would exceed the objectives of the SQO Policy. As noted in the SQO Policy (at p. 7): *"None of the individual LOE [line of evidence] is sufficiently reliable when used alone to assess sediment quality impacts due to toxic pollutants. Within a given site, the LOEs applied to assess exposure ... may underestimate or overestimate the risk to benthic communities and do not indicate causality of specific chemicals. The LOEs applied to assess biological effects can respond to stresses associated with natural or physical factors, such as sediment grain size, physical disturbance, or organic enrichment.* *Each LOE produces specific information that, when integrated with the other LOEs, provides a more confident assessment of sediment quality relative to the narrative objective. When the exposure and effects tools are integrated, the approach can quantify protection through effects measures and provide predictive capability through the exposure assessment.* [SQO Policy at p. 7]" Thus, it is wholly inappropriate to use SQGs (a single line of evidence) to develop TMDL targets or sediment cleanup requirements. In addition, the failure of the RWQCB or USEPA to perform	can be used to calculate the TMDL. While multiple lines of evidence will prove useful for assessing sediment, such an approach is not be applicable to the calculation of TMDLs and allocations. The use of ERLs as the numeric targets is consistent with previously adopted TMDLs in the Los Angeles Region, including the Colorado Lagoon toxics TMDL, Calleguas Creek OC pesticides, PCBs, and Siltation TMDL and the Marina del Rey Harbor Toxic Pollutants TMDL. In fact, compliance with the TMDL can be demonstrated by achieving the ERLs in the sediment or by demonstrating the protective condition of "Unimpacted" or "Likely Unimpacted" using the full triad. Certainly staff do anticipate that the responsible parties will comply by the cost-effective which may mean demonstrating compliance by the SQO triad. ERLs are not sediment clean-up requirements. The SQO Policy is applicable to the Dominguez Channel Estuary. Permittees who discharge into estuaries, do, in fact, have the option of implementing the SQO Policy and demonstrating compliance, thereby. Should the parties find that the salinity at a sampling site is below 25 ppt (and, therefore, the site is not "Euhaline" and the specific LOE measurement tools of Sections V.D. through V.I may not be applicable) then, instead, the parties can assess the site using Section V.J. of the SQO Policy to determine if the site is "Unimpacted" or "Impacted." An assessment of "Unimpacted" using Section V.J. demonstrates compliance just as an assessment of "Unimpacted" (or "Likely

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		stressor identification means that there is no certainty that the pollutants regulated by the Draft TMDL are causing any supposed impairment. This means that any additional pollutant(s) that may be responsible for any supposed impairment have not been identified within and will not be addressed by the Draft TMDL. Further, WSPA notes that although the SQO Policy provides tools (thresholds for three lines of evidence) that apply within enclosed Bays and Harbors, those tools are not applicable to estuaries such as the Dominguez Channel Estuary (see SQO Policy at p. 7). Thus, it does not appear that the targets and allocations of the Draft TMDL can be readily "replaced" or "supplanted" by an analysis performed pursuant to the State's SQO Policy. . *WSPA requests that the Draft TMDL be amended to eliminate the use of SQGs and to require the application of the State's SQO Policy.*	Unimpacted") using Sections V.D.-V.I. demonstrates compliance.
38.8		**Additional Comments on TMDL Implementation** ***Monitoring Plan.*** The Draft TMDL indicates that "responsible parties" shall develop a Monitoring Plan, an Implementation Plan, and a Sediment Management Plan. WSPA member facilities would be among those entities that fall within the category of "Individual and General Stormwater Permit Enrollees". Requiring the Monitoring Plan to be completed within six (6) months of the effective date of the TMDL is unreasonable. *WSPA suggests that the Draft TMDL be revised to require submittal of the Monitoring Plan at least twelve (12) months after TMDL adoption, and implementation of the Monitoring Plan at least twelve (12) months after that*	Due to the ongoing need to understand the water and sediment quality and how it may or may not be improving due to actions by responsible parties, developing and implementing a coordinated Monitoring Plan is a high priority. Six months is a typical schedule for monitoring plan development. Commenter does not identify any obstacles or how 6 months is unreasonable.

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		date. ***ARARs.*** The Draft TMDL indicates that site-specific cleanup actions could be required at the two Superfund sites within the Dominguez Channel Watershed - the Montrose and the Del Amo Superfund Sites. The Draft TMDL indicates that the US EPA has not reached a final remedial decision on certain Operable Units (OUs) at the Montrose Superfund Site that remain contaminated with DDT. Moreover, the Draft TMDL states (pg. 27), "The TMDL, its waste load and load allocations, and other regulatory provisions of this TMDL may be applicable or relevant and appropriate requirements (ARARs) as set forth in Section 121(d) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §§ 9621(d)) for those OUs." As noted above, the SQGs that are used within the Draft TMDL as TMDL targets were never intended to be used as ARARs and are inappropriate for that purpose. *WSPA objects to the use of the Draft TMDL targets as ARARs for cleanup actions under CERCLA or any other statute or regulation and requests that this language be deleted from the Draft TMDL.*	The TMDL implements adopted water quality standards, including the Regional Board's narrative toxicity objective. The TMDL sets as a goal, numeric levels to implement narrative objectives with respect to DDT. While not directly applicable, those numeric levels may be relevant and appropriate to the cleanup of the Montrose Superfund sites. The water quality objectives in the Basin Plan and the federal California Toxic Rule criteria are potential ARARs for the Superfund sites. Whether the water quality standards, or the goal set forth in the TMDL, are ARARs for the Superfund sites will be determined when USEPA develops records of decisions for those sites in accordance with CERCLA. Staff has added clarification to the TMDL with respect to ARARs as follows: Whether provisions within the TMDL are ARARs will be determined in accordance with CERCLA when USEPA develops Records of Decision for the Superfund sites.
39.	Rutan and Tucker, LLP Submitted on behalf of the City of Signal Hill and the Joining Los Angeles County Cities		
39.1		II. THE PRINCIPAL REQUIREMENT OF THE PROPOSED TMDL, I.E., THE REQUIREMENT TO REMOVE CONTAMINATED SEDIMENT FROM THE LOS ANGELES AND LONG BEACH HARBORS, IS A LIABILITY THAT HAS ALREADY BEEN RESOLVED BY THE LOS ANGELES AND ORANGE COUNTY CITIES THROUGH THE ISSUANCE OF A FORMAL	See response to comment 1.1.

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		CONSENT DECREE BY THE U.S. DISTRICT COURT. **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	
39.2		III. THE BOARD HAS COMPLETELY MISUSED THE TMDL PROCESS, AS TMDLS CANNOT BE USED AS A VEHICLE TO COMPEL THE CLEAN-UP OF CONTAMINATED SEDIMENT CAUSED BY PAST RELEASES OF HAZARDOUS SUBSTANCES. **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The fact that sediment is contaminated from prior releases of hazardous substances does not make this TMDL unlawful. In fact, bioaccumulation of pollutants in aquatic life tissue as well as sediment toxicity are two major factors used in placing water segments on the 303(d) list. (See State Water Board *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List*, Resolution No. 2004-0063.) For example, the San Francisco Bay Regional Water Quality Control Board recently adopted a TMDL for PCBs, which was approved by the State Water Board on 10/19/09 and the U.S. EPA on 03/29/10. Even though PCBs were banned in the late 1970s, they are known to persist in the environment. Likewise, this TMDL addresses PCBs and other toxic pollutants that persist in the environment from past discharges. TMDLs serve as a backstop provision of the Clean Water Act designed to implement water quality standards when other provisions have failed to achieve water quality standards.
39.3		IV. THE PROPOSED TMDL, IF ADOPTED, WOULD VIOLATE THE REQUIREMENTS OF THE CALIFORNIA ADMINISTRATIVE PROCEDURES ACT **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The TMDL is "necessary" to ensure that impaired water bodies attain water quality standards in a reasonable period of time. The TMDL is a program of implementation for existing water quality objectives and is necessary under Water Code section 13242. Moreover, the TMDL is necessary to comply with section 303(d)(1)(C) of the Clean Water Act. The need and reference for it to be a Basin Plan amendment is provided not only by Water Code section 13242, but also by 40 C.F.R. § 130.6(c)(1) (requiring incorporation into the state's water quality management plan, of which the Basin Plan is the only portion within the responsibility of the Los Angeles Regional

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			Board). With respect to the comments about "clarity," staff concurs that some changes would improve clarity. See the revised tentative Basin Plan Amendment.
39.4		V. THE REGIONAL BOARD HAS FAILED TO COMPLY WITH THE REQUIREMENTS OF CWC §§ 13000, 13240 AND 13241 IN DEVELOPING THE TMDLS **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	See response to comment 1.5. With respect to Water Code section 13240, this section merely ensures that Basin Plans are consistent with the statement of legislative policy set forth in Water Code section 13000. Neither section imposes any specific duty on the Boards to consider costs in establishing wasteload allocations, much less to adjust wasteload allocations in light of costs. (See *City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal.App.4th 156.)
39.5		VI. THE APPARENT PROPOSED IMPLEMENTATION OF THE TMDLs THROUGH THE USE OF NUMERIC LIMITS IN MS4 PERMITS IS NOT REQUIRED BY FEDERAL LAW AND IS CONTRARY TO EXISTING STATE POLICY **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The proposed TMDL does not address whether an NPDES permit implementing the TMDL uses best management practices or numeric effluent limits. The method of implementation will be determined when NPDES permits are revised to reflect an adopted TMDL. Federal regulation requires that NPDES permits must contain requirements necessary to achieve water quality standards (40 C.F.R. § 122.44(d)(1)). Additionally, federal regulations require that WQBELs are set consistent with the assumptions and requirements of any available WLA for the discharge (40 C.F.R. § 122.44(d)(1)(vii)(B). While federal regulations allow the permitting authority to specify – as conditions of an NPDES permit – the use of BMPs to control or abate the discharge of pollutants in stormwater pursuant to Clean Water Act section 402(p) (40 C.F.R. § 122.44(k)(2), this is only supportable under specified circumstances where the permit's administrative record supports that the BMPs are expected to be sufficient to implement the WLA in the TMDL. Furthermore, this does not substitute for the permitting authority's obligation to

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			include other requirements such as numeric effluent limits that may be necessary to achieve water quality standards. The State Water Resources Control Board also recently addressed the issue of translating TMDL wasteload allocations into effluent limits in MS4 permits and concluded that, "whether a future municipal storm water permit requirement appropriately implements a storm water WLA will need to be decided based on the regional water quality control board's findings supporting either the numeric or non-numeric effluent limitations contained in the permit." (Order WQ 2009-0008). See also response to comment 14.3
39.6		VII. THE TMDLS ARE NOT SUITABLE FOR CALCULATION, AND UNLAWFULLY INCLUDE "LOADS" THAT ARE NOT TOTAL MAXIMUM *DAILY* "LOADS" **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	Staff disagrees. The commenter's statement that the TMDL is not "suitable for calculation" is incorrect. The TMDL describes the analytical methods, the modeling techniques, and the data used to develop the TMDL. For example, the Staff Report details how current loads of metals in the Dominguez Channel freshwater were estimated using a Loading Simulation Program using monitoring data from NPDES discharges and land use runoff coefficients. The PAH loads were calculated using simulated flow and PAH Event Mean Concentrations, while the DDT and PCB loads were calculated by applying observed sediment concentrations to the simulated sediment concentrations in the modeling program. In the Dominguez Channel Estuary and Greater Harbor Waters, existing sediment loading for metals, PAHs, DDT, and PCBs were estimated using the Environment Fluid Dynamics Code model. Interim WLAs are based on the 95th percentile of sediment data collected from 1998-2006. The use of 95th percentile values to develop interim limits is consistent with NPDES permitting methodology. If the 95th percentile is equal to or lower than

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			the numeric target, then the interim limit is equal to the final WLA. Interim and final WLAs will be included in MS4 permits in accordance with NPDES regulations and guidance (40 CFR 144.22(d)(1)(vii)(B); US EPA Memorandum "Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs' " (November 12, 2010)). The applicable federal regulation states that "[TMDLs] can be expressed in terms of either mass per time, toxicity, or other appropriate measure. (40 CFR § 130.2(i).) The commenter cites to *Friends of the Earth, Inc. v. Environmental Protection Agency* (D.C. Circuit 2006) 446 F.3d 140, which stated that "daily means daily, nothing else." However, the Second Circuit found that same interpretation "absurd" and stated that for some pollutants "effective regulations may best occur by some other periodic measure than a diurnal one." (*Natural Resources Defense Council v. Muszynski* (2d Cir. 2001) 268 F.3d 91, 98-99.) In this case, the staff report and other documents in the record adequately explain the justification for using the targets and daily loads to implement the water quality objectives and is consistent with the federal regulations. The TMDL documents describe in detail, the technical basis for using the targets and load to implement the water quality objectives.
39.7		VIII. THE PROPOSED TMDL WAS NOT DEVELOPED IN CONSULTATION WITH LOCAL AGENCIES AS REQUIRED BY LAW **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The commenter asserts that the impacted municipalities are not aware of any means of actually achieving the wet weather portion of the TMDL, or that the in-stream bacteria objective is achievable. The commenter mischaracterizes the process used to develop the proposed toxic pollutants TMDL. The Regional Board staff has been working to develop this TMDL for a number of

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			years. Numerous municipal stakeholders participated in the process leading to the development of this TMDL, and local and state agencies have been consulted at numerous steps. The Regional Board is not bound by Water Code section 13144, but it takes its outreach efforts to local agencies seriously. These efforts have satisfied the requirements of section 13240 of the Water Code. These consultations have resulted in significant adjustments to the TMDL. The TMDL does evaluate the effectiveness of the methods of compliance. However, federal law does not require practicality to be a consideration in developing a TMDL. See *City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1428.
39.8		IX. THE MONITORING PROVISIONS IN THE TMDLS ARE CONTRARY TO LAW BECAUSE NO COST BENEFIT ANALYSIS HAS BEEN CONDUCTED, AS REQUIRED BY CWC §§ 13165, 13225(C) AND 13267 **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The commenter accurately quotes the statutes that "the burden, including costs, of such reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained there from" with respect to monitoring and technical reporting. However, Water Code sections 13165, 13225(c), and 13267 do not require a "cost benefit analysis." Staff has set forth the problem and evidence supporting the necessity for the TMDL and thus has shown a reasonable relationship between the burden and the benefits to be obtained from the monitoring, i.e. compliance with the TMDL and thus reduction of bacteria indicator densities. Further, section 13267 is inapplicable at this stage because the TMDL does not impose any orders under section 13267. The 13267 analysis will be conducted when the orders are issued. *City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1414.
39.9		X. THE PROPOSED TMDLs, ONCE EFFECTIVE AND ENFORCEABLE, WOULD RESULT IN THE IMPOSITION OF UNFUNDED STATE MANDATES	See response to Comment 20.16.

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		[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]	
39.10		XI. THE PROPOSED TMDLS VIOLATE THE CALIFORNIA ENVIRONMENTAL QUALITY ACT A. THE PROJECT DESCRIPTION IS UNCLEAR AND INCONSISTENT **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The project description is clear. The central purpose of the project is to adopt a TMDL that will address the 303(d) listings for various toxic pollutants. The TMDL will guide Regional Board permitting, enforcement, and other actions to require responsible parties to take appropriate measures to restore and maintain applicable water quality standards pertaining to these toxic pollutants in Dominguez Channel and greater Los Angeles and Long Beach Harbor waters. The TMDL cannot specify the manner or method(s) of compliance (Water Code section 13360). The TMDL includes a requirement to submit implementation plans after the TMDL is in effect to provide an opportunity for responsible parties to specify in detail their chosen implementation actions and milestones to achieve the WLAs per the TMDL implementation deadlines.
39.11		B. THE SED'S ASSESSMENT OF DREDGING IMPACTS IS INADEQUATE **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	Responsible parties may demonstrate compliance by achieving the ERLs or by demonstrating the protected condition of the sediment (Unimpacted or Likely Unimpacted) using the sediment triad of the SQO Part 1. Responsible parties may achieve the ERLs or the protective condition by a combination of many methods including by dredging. It is likely that the responsible parties will work to contain costs and dredge where dredging will be of genuine value, for instance where ERLs are exceeded and the protective condition of the sediment is not met and will be less likely to dredge where ERLs are exceeded but the protective condition of the sediment is met, since those areas would comply with the TMDL. See, also, response to **Comment 23.9.**

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			In addition, please note, this TMDL necessarily calculates the numeric targets, loading capacity and allocations from the numeric ERLs, but incorporates the triad approach of the 2009 SQO Part 1 as a method for the determination of compliance. Numeric targets and allocations must be included and SQO Part 1 does not provide a single number that can be used for a target and to calculate an allocation. Both Ports conduct dredging annually for navigation and project purposes. According to the Port of Los Angeles Channel Deepening Final SEIS/SEIR, to date the Port of Los Angeles has dredged, over a period of about 10 years, over 12.7 mcy of material for channel deepening purposes. The Ports are able to conduct dredging projects generally without significant negative impacts. Responsible parties implementing the TMDL will also have responsibilities under CEQA as they plan specific projects to comply with the TMDL. To the degree that certain compliance measures may result in significant adverse impacts, responsible parties are obligated to implement mitigation measures to reduce potential impacts or choose to implement other methods of compliance. Commenter identifies many considerations important at the project planning stage when the specific project is planned and when the project-level CEQA documents are prepared. See also response to **Comment 20.10.**
39.12		C. THE SED FAILS TO EVALUATE AND MITIGATE GOVERNMENTAL SERVICES IMPACTS FROM THE TMDL PROJECT **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The Regional Board is not required to conduct a project-level CEQA analysis. (Pub. Res. C. § 21159.2 The alleged diversion of fiscal resources is an economic impact, which does not contribute to and is not caused by a change in the physical environment, and thus not included in CEQA analyses. Further, no evidence has been offered to support

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			the claim that any resources would need to be "diverted," or why such alleged "diversions" of resources are significant, and why no other funding sources are available to pay for the needed services, considering possible tax assessments, user fees, grants, loans, etc. Further, no evidence has been offered to support the claim that any resources would need to be "diverted", or why such alleged "diversions" of resources are significant, and why no other funding sources are available to pay for the needed services, considering possible tax assessments, user fees, grants, loans, etc.
39.13		D. THE SED FAILS TO EVALUATE THE PROJECT'S IMPACTS ON GREENHOUSE GASES **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The SED does evaluate the project's potential impacts on greenhouse gases. See SED, page 46, section on air impacts. The SED includes a discussion of the addition of greenhouse gases from implementation of the TMDL. Commenter identifies calculations important at the project planning stage when the specific project is planned and when the project-level CEQA documents are prepared. In addition, the CEQA checklist now includes Air.c. (Will the proposal result in alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?) as a potentially significant impact.
39.14		E. THE DISCUSSION MITIGATION MEASURES IN THE SED IS DEFICIENT **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The commenter mischaracterizes the Regional Board's obligation under the certified regulatory program. Under Public Resources Code section 21159, the Regional Board must conduct an analysis of the reasonably foreseeable environmental impacts of the means of compliance, the reasonably foreseeable mitigation measures to lessen the environmental impacts, and the reasonably foreseeable alternative means of compliance. The SED and other documents contain detailed analysis of these three requirements, including mitigation measures. The Regional

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			Board need not ensure that mitigation measures are implemented. In fact, under Water Code section 13360, it may not specify the manner of compliance.
39.15		F. THE SED FAILS TO ADEQUATELY IDENTIFY AND EVALUATE CUMULATIVE IMPACTS OF THE PROJECT **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The SED includes an analysis of both program level and examples of project level cumulative impacts. The method by which a discharger decides to achieve compliance is a project-level decision that will require an independent environmental review (Pub. Res. C. § 21159.2) which is beyond the scope of analysis that the Regional Board is required to take (Pub. Res. C. § 21159(d).) However, staff has indicated reasonably foreseeable environmental impacts of the TMDL as an overall program, and reasonably foreseeable environmental impacts of feasible methods of implementing the TMDL. The environmental checklist draws on analysis contained in and conclusions reached in the staff report. Because the Regional Board does not prescribe the method of achieving compliance with the TMDL, staff cannot identify all project-level impacts (and associated mitigation measures) that might occur from the myriad of structural and non-structural implementation strategies that could be used to achieve the TMDL. However, staff considered substantial evidence when conducting CEQA review and identified feasible mitigation measures that would reduce impacts. Also staff note that while the implementation schedule for this TMDL is 20 years, that does not make potential impacts necessarily other than temporary in nature. That is, if individual projects undertaken to comply with this TMDL cause noise impacts, the noise will be temporary during the project and will not extend for 20 years.

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39.16		G. THE SED'S ALTERNATIVES ANALYSIS IS FATALLY DEFECTIVE 1. The SED Fails to Establish Project Objectives and Unlawfully Confuses the Concept of "Alternatives to the Project" with the Concept of "Alternative Methods of Compliance" With the TMDLs 2. The SED Fails to Analyze a Reasonable Range of Legitimate Project Alternatives a. The *Goleta II* Criteria b. The SED Does Not Analyze Three Alternatives As Alleged c. The "No Project" Alternative Discussed in the SED is Not a Legitimate Alternative, and a true "No Project" Alternative must be discussed in the SED and Considered d. The US EPA TMDL Alternative is Not a Legitimate Alternative e. An Example of an Alternative Project Analysis that Should have been Conducted in the SED 3. The SED Fails to Provide an Adequate Review of the Alternatives it Does Evaluate 4. The SED Fails to Explain Why It Selected and Rejected Alternatives and Fails to Identify an Environmentally Superior Alternative 5. The SED Does Not Comply With 14 Cal. Code Regs. Section 15123 6. Other Feasible Alternatives Are Not Analyzed	The CEQA Guidelines require the Regional Board to consider a "range of reasonable alternatives" which would "feasibly attain most of the objectives of the project" using a "rule of reason." See Tit. 14 Cal. Code Regs. §15126.6(a). In this case, as described in the staff report, the Regional Board is obligated to prepare the TMDL to address impairment due to pollution. The feasible alternatives are those that would meet this objective. The Regional Board reasonably chose the proposed TMDL and a TMDL prepared by USEPA because those are the only legal alternatives. The Regional Board also evaluated various alternatives to implementing the water quality objectives that it could use in the TMDL. The TMDL also has a very detailed description of the purpose of the project and the Regional Board's legal responsibility to prepare the TMDL, including the consequences if it does not. The CEQA Guidelines also require consideration of a "no project" alternative. For projects that are a revision of an existing policy, the project would be the continuation of the existing policy. Tit. 14 Cal.Code Regs. §15126.6(c). Consistent with this regulation, the TMDL discussed the existing conditions and what would be expected to happen if the TMDL was not implemented. In a case implementing the National Environmental Policy Act (NEPA), the Ninth Circuit Court of Appeals noted that the "NEPA alternatives requirement must be interpreted less stringently when the proposed agency action had a primary and central purpose to conserve and protect the natural environment, rather than to harm it." Kootenai Tribe of Idaho v. Veneman (9th Cir. 2002) 313 F.3d 1094, 1120. A narrow range of alternatives was also supported by the California Supreme Court in Mountain Lion Foundation v. Fish & Game Commission (1997) 16 Cal. 4th 105, 135-136, where the agency is legally constrained. In addition, it is acceptable to have less detail for plan-level CEQA

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		[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]	documents. See e.g., Al Larson Boat Shop, Inc. v. Board of Harbor Commissioners (1993) 18 Cal.App.4th 729. The TMDL's range of alternatives is consistent with the CEQA Guidelines and case law. The TMDL did not confuse the concept of project alternatives and alternative methods of compliance. The TMDL clearly sets forth alternatives to the project and provides detailed evaluation of reasonably foreseeable methods of compliance. The SED, pages 5 and 6, explains that CEQA requires the Board to perform a program-level of analysis, not a project-level analysis. The Regional Board is not required to evaluate the alternatives proposed by the commenter. The standards implemented by the TMDL are existing standards that are protective of designated beneficial uses. If those uses or objectives are revised, the TMDL would be revised accordingly to implement any new standards. The Regional Board is required to implement TMDLs even in the face of uncertainty.
39.17		H. THE SED FAILS TO ANALYZE SPECIFIC SITES **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The CEQA documents include the SED document and the Staff Report and its appendices. While responsible parties will develop the specific plans for site remediation, some sediment triad, SQO, sampling has been completed. See Table III.9.1. This assessment of sites gives an indication of sites where remediation by dredging would be of value.
39.18		I. THE SED DOES NOT INCLUDE REQUIRED INFORMATION **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The SED identifies potential effects and mitigation measures in Section 6.2.2, *Discussion of Environmental Evaluation*. In Section 6.2.2, 15.a includes use of energy efficient vehicles and equipment as a possible mitigation measure.

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			As noted above, the Regional Board may not specify the manner of compliance. In addition, it is not required to conduct a project-level CEQA analysis. (Pub. Res. C. § 21159.2) Local agencies that will be implementing the TMDL will be required to conduct environmental review, including taking into account all appropriate issues. Housing and population are discussed in the SED in Section 6.2.2, in Section 7.2.1 and in Section 7.2.2. Commenter does not identify how housing and population have not been analyzed.
39.19		J. THE SED UNLAWFULLY SEGMENTS THE PROJECT IN VIOLATION OF CEQA **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The SED complies with CEQA and does not unlawfully segment the project. The SED is a program-level analysis. The Regional Board is not required to conduct a project-level analysis. Failure to conduct project-level analysis of the reasonably foreseeable means of compliance does not result in segmenting the project. The Regional Board analyzed the entire project The Regional Board is not required to conduct one TMDL for all constituents in multiple waterbodies, although this TMDL does include targets and allocations for all the constituent causing impairments in the Harbor Waters.
39.20		K. THE FINDINGS AND EVIDENCE ARE DEFICIENT **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	The commenter is incorrect. The SED includes a checklist and detailed evaluation of the potential impacts and appropriate mitigation measures that could be implemented. The statement of overriding considerations clearly explains the benefits of the project as required by CEQA Guidelines section 15093. The statement also explains that other public agencies are responsible for implementing specific projects and any appropriate mitigation. The statement explains that alternatives and mitigation are generally available to reduce any impacts of the means of compliance to less than significant. Since, however, the Regional Board is not responsible for the implementation projects, it cannot assure

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			that the adoption of the TMDL will not result in significant impacts. Thus, the SED includes a statement of overriding considerations as required by the CEQA Guidelines section 15093(b).
39.21		L. CONCLUSIONS ON **CEQA** ANALYSIS **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	See responses to **Comment 39.10 to 39.21**.
39.22		XII. CONCLUSION For the foregoing reasons, the Cities respectfully request that the subject TMDLs not be adopted at this time. **[See Rutan & Tucker, LLP Comment Letter in the Board Package for the rest of the comment]**	Comment noted.
40.	Flow Science on behalf of the City of Signal Hill		
40.1		1. The Draft TMDLs use sediment quality guidelines (SQGs) to establish sediment targets and allocations, contrary to the State's Sediment Quality Objectives (SQO) policy and best available science. **[See Flow Science Comment Letter in the Board Package for the rest of the comment]** The SQG thresholds used in the Draft TMDLs (i.e., ERLs and TECs) were developed for use only as screening tools and were never intended for use as standards or regulatory endpoints. **[See Flow Science Comment Letter in the Board Package for the rest of the comment]** **Recommendation:** *We request that the Draft TMDLs be rewritten to eliminate the use of ERLs and TECs. Rather, the Draft TMDLs should rely upon the State 's SQO Policy to assess if sediment quality objectives are exceeded, and stressor identification should be performed to identify*	See response to **Comment 20.1**.

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		pollutant(s) responsible for any exceedance.	
40.2		2. It appears that air deposition alone exceeds the loading capacities calculated for DDT for all but one of the water bodies regulated by the Draft TMDL, such that even if all other inputs are. reduced to near zero, TMDLs would continue to be exceeded. Air deposition alone also exceeds the loading capacities for copper and zinc in the Inner Harbor area. If this is indeed the case, dredging would be required Harbor-wide on a continuous basis. Recommendation: *The assumptions regarding air deposition should be revisited, particularly the assumption that the entire pollutant load delivered to the water body by atmospheric deposition will deposit to the sediment bed.*	See response to **Comment 20.2.**
40.3		3. The application of interim and final allocations for toxicity is inappropriate for stormwater discharges. Toxicity tests measure the responses of certain test organisms, and toxicity test results can be influenced by numerous factors other than and in addition to effluent toxicity (e.g., ionic strength (salinity) differences between sample and control). In addition, the Draft TMDLs would apply toxicity limits for chronic toxicity to stormwater discharges. However, application of chronic toxicity test methods to stormwater is unsupported by appropriate studies and data collection. It is unclear that current chronic toxicity test methods could be applied to stormwater discharges-e.g., most methods require the collection of new samples daily for eight (8) days, and most stormwater discharges persist for a much shorter time period. The Draft TMDLs calculate an interim limit for toxicity using "average values" from toxicity tests conducted by the Los Angeles County Department of Public Works. It is inappropriate to use the average of	See response to **Comment 19.2.** In addition, Staff notes that most methods require the collection of water samples at a single water sampling event, followed by a test which takes 8 days and do not require *collections* for 8 days. Current data show water quality less than 2 TUc In addition, the fresh water interim allocation shall be implemented as a trigger requiring initiation and implementation of the TRE/TIE process as outlined in US EPA's "Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program" (2000) and current NPDES permits. See response to **Comment 14.6 and 38.2.**

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		available test data as a measure of current performance that can be applied to single samples-rather, available data should be used to calculate an interim limit from the maximum (or upper percentile value) of individual samples. Finally, toxicity testing should be conducted in the receiving water, as envisioned by the monitoring requirements of the Draft TMDLs, not for individual effluent samples, as appears to be required by the interim and final allocations. Additional detail is included in Attachment A to these comments. **Recommendation:** *Chronic toxicity testing requirements should be removed from the Draft TMDLs*	The freshwater interim allocation shall be implemented in accordance with US EPA, State Board and Regional Board resolutions, guidance and policy at the time of permit issuance, modification or renewal.
40.4		4. The allocations of the Draft TMDLs were derived using a combination of watershed modeling (using the LSPC model) and hydrodynamic modeling of the Harbor Waters (using the EFDC model). However, the model predictions have only marginal agreement with observations, some major assumptions made for the purposes of modeling are flawed, and the modeling was used inappropriately in developing the allocations of the Draft TMDLs. Limited data availability and poor model performance lead us to question the utility and accuracy of the model results used to formulate the Draft TMDLs.**[See Flow Science Comment Letter in the Board Package for the rest of the comment]** **Recommendation:** *The TMDL load and waste load allocations should be revised to account for the fact that the majority of the pollutant load to the Harbor passes through the Harbor and fails to deposit to Harbor sediments. Further, load allocations should not be assigned for bed sediments, and more realistic assumptions should be made regarding the fraction of pollutants from air deposition that will be carried into the*	See response to **Comment 19.6**. Based on the limited amount of data, the existing calibration and validation are sufficient for TMDL calculations. In addition, the simulated values used for TMDL or existing loading rate calculations were annual averages. Given that the model is in the range of observed values and averages are likely similar, the model is being appropriately used to determine loading estimates. See response to **Comment 23.6a(iv)**, **Comment 23.6a(iii)**, and **Comment 19.1.**

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		bed sediments. The allocations of the TMDL should be revised upward accordingly.	
40.5		The method used to calculate load and waste load allocations from the loading capacity is flawed.**[See Flow Science Comment Letter in the Board Package for the rest of the comment]** This calculation method penalizes *de minimus* dischargers to water bodies-i.e., dischargers are required to reduce their loadings to water bodies to near zero levels even when model results indicate that their discharges have no effect on bed sediment concentrations, and when continued discharge at current levels would result in an identical outcome (i.e., no change in bed sediment pollutant concentrations). For example, in Cabrillo Marina, bed sediment concentrations are simulated to remain at about 235 mg/kg copper whether upland sources are held at existing levels or reduced to zero, but the WLAs for MS4 discharges to Cabrillo Marina nonetheless require a near total reduction of pollutant loads. The problem with the calculation is that the "% difference" calculated from the two model runs has no relationship to the loading capacity of the bed sediment, because so much pollutant mass is already resident in the receiving water bed sediments and is not the result of direct inflows from the watershed. **Recommendation:** *The City requests that the Regional Board and USEPA revisit and recalculate load and waste load allocations using an appropriate methodology.*	All pollutant sources, regardless of quantity, receive allocations. CWA does not state that 'de minimus' dischargers should not subject to TMDLs nor NPDES regulations. Commenter's choice of selecting Cabrillo Marina is example of selecting a unique waterbody (within context of all waterbodies addressed by these TMDLs) and unique pollutant sources and contributions (sediment levels appear not to be significantly influenced by stormwater inputs). Staff disagree with comment the model is flawed. For Cabrillo Marina, if the model suggests there is "so much pollutant mass is already resident in the receiving water bed sediments and is not the result of direct inflows from the watershed" then this indicates prioritized implementation would focus on minimizing pollutant sources in sediment, yet it does not relieve the MS4 discharges of reducing pollutant loading. If, in future, more monitoring data is available for enhanced model calibration, then this will help clarify the relative contributions from different sources.
40.6		As noted above, model-estimated sediment concentrations for the "no upland scenario" were found in many cases to exceed the Draft TMDL targets, indicating that **even if all**	See response to **Comment 23.6a(i)**, **Comment 23.6a(ii)**, and **Comment 23.6a(iii)**.

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		upland contaminant inputs are completely eliminated, the Draft TMDLs would continue to be exceeded. Because pollutants already present in bed sediments appear to be the main cause of exceedances of Draft TMDL targets (e.g., Tetra Tech notes that "DDT bed sediment contamination is predominantly a legacy issue and upland sources appear to be contributing loads of sediment that are cleaner than what is currently in bed sediments...suggesting that sediment remediation is required in each [water body] zone to achieve sediment targets"), it appears that a **TMDL, which regulates loads to a water body, is not a suitable regulatory vehicle** for addressing these supposed sediment impairments. **Recommendation:** *Pollutants present in the Harbor primarily as a result of legacy (historic) discharges, and for which current inputs are de minimus, should be eliminated from the Draft TMDLs and regulated through other means. These pollutants include DDT, PCBs, and PAHs.*	
40.7		Concentrations (and loadings) of <u>legacy</u> pollutants (e.g., DDT, PCBs and chlordane) in stormwater were estimated by assuming that concentrations in the top five centimeters of receiving water (Harbor) bed sediment were representative of present-day stormwater concentrations. Such assumptions are flawed, and the **calculated watershed pollutant loadings very likely over-represent the actual loadings.** In fact, if the assumption held, then concentrations of these pollutants would have been present above detection levels in river measurements. However, river and stream measurements of these pollutants are consistently below detection levels. **Recommendation:** *Modeling should be revised to more*	See response to **Comment 23.6b**. The TMDL modeling incorporated the best available data and information at the time the modeling was conducted, which is consistent with TMDL requirements. It was not possible, nor required, to collect additional data during the study period.

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		properly estimate concentrations of pollutants on sediments delivered to (and through) the Harbor from the upstream watersheds. If necessary, additional measurements should be made during the TMDL development process, prior to TMDL adoption, to allow these important corrections to be made.	
40.8		**The EFDC modeling erroneously assumed that pollutant concentrations are uniform with depth within the sediment column.** However, it is likely that the highest concentrations of legacy pollutants such as DDT and PCBs are present at depth within the sediments, since their manufacture and use peaked long ago. This assumption has several important implications. First, model results will be inaccurate if pollutant concentrations within the bed are not represented correctly within the model. Second, it is likely that bioturbation (sediment movement by biota resident in the sediment bed), pore water diffusion, and other processes transport higher concentrations of these pollutants from depth to the surface sediment layers. This would mean that river and stream contributions are not responsible for the presence of pollutants at the sediment surface (see prior point). Finally, remedial measures such as dredging are likely to expose and redistribute higher concentrations present at depth, increasing environmental damage compared to current, baseline conditions. **Recommendation:** *Data from sediment cores should be used to characterize pollutant concentrations within the sediment column, and new modeling should be conducted to utilize this information to establish TMDL targets and allocations and to revise estimates of current river loadings. If not available, sediment cores should be collected and characterized prior to adoption of the Draft*	See response to **Comment 23.6b** and **Comment 23.6c**. Data from sediment cores will prove useful when considering remediation activities such as dredging and can be collected during implementation of the TMDLs.

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		TMDLs.	
40.9		**Harbor modeling was not calibrated or validated for wet weather conditions.** The sensitivity analysis that was performed using the model to evaluate the impacts of key model assumptions, and the impacts of proposed management actions, was conducted for the dry weather condition. The dry weather sensitivity analysis found that model results were relatively insensitive to open boundary condition concentrations and upstream watershed loads. However, LSPC model results show that daily pollutant loads are several orders of magnitude higher during wet weather conditions than during dry weather conditions. Thus, it is unsurprising that adjusting dry weather loading rates has relatively little impact on sediment concentrations. Most important, it appears that the model was not calibrated or validated for the wet weather conditions that deliver the bulk of sediment and associated pollutants to the Harbor. Given the assumptions detailed above and those that were made for the wet weather condition, we have little confidence in the model results. **Recommendation:** *Additional data collection should be undertaken before the TMDLs are adopted to measure sediment and pollutant concentrations and loadings for the critical wet weather condition. Model assumptions should be revised to be consistent with the observations, and both the LSPC and EFDC models should be re-run with revised, realistic assumptions.*	See response to **Comment 23.6d**. The TMDL modeling incorporated the best available data and information at the time the modeling was conducted, which is consistent with TMDL requirements. It was not possible, nor required, to collect additional data during the study period. The assumptions used in the TMDL models were appropriate and consistent with other TMDLs in the region given the available data and information.
40.10		**Model calibration and validation approaches and model performance assessments appear to be based on visual comparisons and cursory, qualitative assessments.** Model predictions of in-stream pollutant concentrations (based on the LSPC model) and water	The TMDL modeling incorporated the best available data and information at the time the modeling was conducted, which is consistent with TMDL requirements. The watershed modeling utilized a regional modeling approach that has been developed as a cost-effective strategy to complete TMDLs in

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		column and bed sediment pollutant concentrations (based on the EFDC model) have limited resemblance to the observations. Despite their poor performance, the models and their predictions were deemed adequate and were used in developing the allocations of the Draft TMDLs. **Recommendation:** *Consistent with the comments detailed above, key model assumptions should be revised, and model calibration and validation should be performed in a more quantitative manner, particularly for the wet weather condition and to compare modeled bed sediment pollutant concentrations to measured values.*	areas with limited data. Based on the limited amount of data, the existing calibration and validation are sufficient for TMDL calculations. In addition, the simulated values used for TMDL or existing loading rate calculations were annual averages. Given that the model is in the range of observed values and averages are likely similar, the model is being appropriately used to determine loading estimates. See also response to **Comment 19.6**. Visual comparison is a common approach for evaluating model results as it provides an indication of whether the model is predicting the general magnitude and timing of flow as well as pollutant concentrations and loads. This type of comparison was used as well as some simple comparative statistics in tabular format, which is consistent with many other TMDLs in the region and nationally.
40.11		**Concerns with Implementation of the Draft TMDL** 5. The Draft TMDLs indicate that during Phase I of the implementation, submission of an **Implementation Plan** and a **contaminated Sediment Management Plan** is required of all parties other than the Los Angeles and San Gabriel River responsible parties; for these two groups of responsible parties, only an Implementation Plan is required. In some parts of the Draft TMDLs (e.g., bottom of p. 28 of Attachment A to Resolution No. Rl 1-XXX), it appears that the Cities of Los Angeles and Long Beach (and their ports) and the California State Lands Commission would be responsible for the development and implementation of Sediment Management Plans. In other portions of the Draft TMDLs (e.g., at p. 32 of Attachment A to Resolution No. Rl 1-XXX), the development and implementation of Sediment Management Plans is assigned to "responsible parties," which are identified to include several individual MS4 permittees. **The City of**	The Cities of Los Angeles and Long Beach (and their ports) and the California State Lands Commission are responsible for the bed sediment allocations and the development and implementation of Sediment Management Plans in the Harbor Waters. The Basin Plan Amendment has been clarified to include a Los Angeles River Estuary Subgroup for bed sediment and fish which includes Signal Hill.

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		Signal Hill strenuously objects to being named a "responsible party" for the purposes of development and implementation of Sediment Management Plans. **Recommendation:** *The City of Signal Hill requests that the Draft TMDLs be modified to state that the City is not a "responsible party" for the purpose of development and implementation of Sediment Management Plan.*	
40.12		6. **The Draft TMDLs do not appear to contain information to indicate how the TMDL requirements would be implemented in permits.** Although the Draft TMDLs appear to indicate that implementation in MS4 permits would occur over a 20-year period, it is unclear whether or not the permits would include interim and/or final numeric effluent limitations for concentrations in the water column, numeric effluent limitations for bedded sediment, or numeric effluent limits for pollutants associated with sediments that may be discharged in stormwater or urban runoff. It is particularly unclear how allocations that are expressed in terms of kg/yr for bed sediments and in terms of mg/kg dry sediment could be implemented within NPDES permits, although it appears that monitoring would require the collection, separation, and analysis of suspended sediment material, which is technically very challenging. **Without additional clarification, it is impossible to understand or to comment upon the impacts to Signal Hill, or to plan for or implement the Draft TMDLs.** Further, and as detailed in the Attachment to this letter, the City believes that it is infeasible to establish numeric effluent limitations for MS4 discharges based on the Draft TMDL. **Recommendation:** *The Draft TMDLs should be revised to make clear that the waste load allocations of the Draft*	The Basin Plan Amendment has been clarified in several respects: the fresh water interim allocation shall be implemented as a trigger requiring initiation of TIEs; additional flexibility due to additional methods of compliance for interim and final sediment allocations; a clarification that individual mass-based WLAs for an individual MS4 Permittee will be calculated based on its share, on an area basis, of the mass-based WLA or other approved approach available at the time final mass-based WLAs are in effect and incorporated into the permit.. The exact method of including the WLA into the NPDES permits is not determined by this TMDL, but will be based on the administrative record for the permit at the time. The final WLA must be met at the end of the implementation schedule; staff anticipates several iterations of the discharger permits during the TMDL implementation period.

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		TMDLs will not be incorporated into MS4 permits as numeric effluent limitations, but that the permits will be consistent with the assumptions and requirements of the waste load allocations.	
40.13		**The Draft TMDLs incorrectly assigns Los Cerritos Channel Metals TMDLs responsible parties to the group of Greater Los Angeles and Long Beach Harbor Responsible Agencies.** When discussing responsible agencies and potential implementation strategies, the Draft TMDLs erroneously disregard the Los Cerritos Channel Total Maximum Daily Loads for Metals established by USEPA on March 17, 2010. These TMDLs cover the Los Cerritos Channel Freshwater Watershed. Discharges from the jurisdictions of the MS4 permittees in this watershed flow through the freshwater channel before entering the Los Cerritos Channel Estuary, which in turn discharges to Alamitos Bay. The Draft TMDLs include a portion of the Los Cerritos Channel Freshwater Watershed, defined by USEPA as a Nearshore Watershed. The Draft Staff Report (p. 65) defines nearshore areas as "areas with freshwater inputs that discharge directly to saline receiving waters." As noted above, this is clearly not the case for discharges from responsible agencies within the Los Cerritos Freshwater Watershed. **Recommendation:** *The Draft TMDLs should recognize and name the Los Cerritos Channel Freshwater watershed. Discharges to the Los Cerritos Channel should be recognized as discharges to freshwater, and should not be included in the "nearshore watersheds" category, as discharges to this channel are not discharges to the saline waters of the Harbor.*	See response to **Comment 1.4.**

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40.14		8. The Draft TMDLs should invoke available regulatory mechanisms for air deposition. Sections 13146 and 13247 of the California Water Code are tools to require State offices, departments, or boards to comply with State policy for water quality control and with water quality control plans approved or adopted by the State Board. The applicability of these tools for controlling atmospheric deposition of metals was recognized by the State Board in Resolution 2008-046, approving the Los Angeles River Metals TMDLs, and should be acknowledged in the Harbor Toxics TMDL. Further, since air deposition is by itself a large enough source to result in chronic non-compliance with the Draft TMDL, the Draft TMDLs should identify responsible parties for air deposition, and should identify the implementation actions required of those parties. Finally, the implementation sections of the Draft TMDLs should recognize the success of SB346, which will require reductions in the copper content of brake pads and reduce the amount of copper arriving to the water bodies and watersheds regulated by the Draft TMDLs. Recommendation: The Draft TMDLs should be revised to include reference to Sections 13146 and 13247 of the California Water Code. The Draft TMDLs should be revised to identify the parties that will be responsible for attaining the air deposition loads, and to ident' the actions that will be required of those parties. The implementation sections of the Draft TMDLs should also be revised to recognize the future load reductions that are anticipated to occur for copper as a result of SB 346, which will require reductions in the copper content of brake pads.	At this point in time, it is premature to reference Water Code sections 13146 and 13247 because further studies that characterize direct air deposition are needed before the load allocations can be directly translated into enforceable air quality management standards. The tentative BPA explains that additional monitoring of pollutants at air sampling sites – site that more closely resemble the respective waterbodies - will help characterize these loadings. With respect to identifying the responsible parties for air deposition, the Regional Board does not separate by source, but only between WLAs and LAs. The Basin Plan has taken into account revisions to lead emissions. The lead air deposition allocation has been developed by using the recent SCAQMD air quality lead criteria (2010) multiplied by the surface area of each waterbody to produce direct air deposition allocations. Future changes to Cu, Zn and PAH air quality criteria, other regulation such as brake pad requirements, or other improvement in air quality may allow for re-calculations of air deposition allocations in future revisions to the TMDL. Therefore, when the new brake pad law has resulted in less atmospheric loading that may allow for re-calculations of copper allocations in future revisions to the TMDL.
40.15		**Environmental and Economic Impacts of the Draft TMDLs**	The Staff Report did *not* estimate *between* 11 mcy and 35mcy of potential dredging; instead the Staff Report estimated 11

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		9. The TMDL Staff Report estimates that between 11 and 35 million cubic yards of material would need to be dredged from seven areas within the Harbor complex, at a total estimated cost of $680 million (for 11 million cy) to $2.2 billion (for 35 million cy). As detailed in Attachment A to these comments, because of the way in which TMDL targets were derived and applied, this is likely a gross underestimate. The estimate would be particularly low if dredged areas would subsequently need to be capped with significant quantities of clean sediment. This possibility was suggested by Peter Kozelka (USEPA, personal communication, February 11, 2011) in response to the possibility of higher pollutant concentrations at depth within the sediment column, and would greatly increase the cost of the proposed dredging program. Finally, because air deposition to the water surface is, per the Draft TMDL analysis, sufficient to result in non-compliance, it appears that dredging of the entire Harbor may be required on an ongoing, continuous basis. Further, the environmental impacts of dredging and/or capping are likely to have been underestimated as well. As noted previously, the Regional Board and USEPA have performed no analysis of pollutant concentrations at depth in cores below the surface layers to be dredged. Because many of the pollutants present in the Harbor are legacy pollutants whose use was banned long ago, higher concentrations are likely to be present at depth and may be disturbed and redistributed into the environment by the remedial actions themselves. Both dredging and capping are likely to last for years and to result in extraordinary environmental impacts, as detailed in Attachment A. **Recommendation:** *The environmental and cost analyses*	mcy based on triad data available at this time. The 35 mcy/ERL figure was included for comparison. It might be useful and appropriate, in some cases, to cap sediment, too. This would have to be determined on a project by project basis. In addition, see response to **Comment 23.9.**

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		should be revised to more completely and comprehensively account for the duration and extent of dredging, and for the impacts and costs that will result from this reasonably foreseeable implementation requirement. **[See Flow Science Comment Letter in the Board Package for attachment]**	