

STATE WATER RESOURCES CONTROL BOARD

Comment Summary and Responses Regarding

Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL

Adopted by the Los Angeles Regional Water Quality Control Board on May 5, 2011

State Water Board Comment Deadline: 12:00 p.m. October 28, 2011

Comment Reference	Commenter	Representative
Similar comments		
1	City of Azusa	Tito Haes
2	City of Baldwin Park	Edwin "William" Galvez
3	City of Duarte	Steve Esbenshade
4	City of Irwindale	Kwok Tam
5	City of La Puente	Bret M. Plumlee
6	City of Lawndale	Earl Schwartz
7	City of Pico Rivera	Arturo Cervantes
8	City of San Dimas	Krishna Patel
9	City of San Gabriel	Daren T. Grilley
10	City of South El Monte	Louie Aguinaga
Similar comments		
11	City of Downey	Louis A. Atwell
12	City of Hawthorne	Arnold Shadbehr
13	City of Norwalk	Thomas E. Lynch
14	City of South Gate	George Troxcil
Similar comments		
15	City of Carson	M. Victor Rollinger
16	City of El Monte	Rene Bobadilla
17	City of Glendora	David A. Davies
18	City of Inglewood	Jim Davis
19	City of San Fernando	Ron Ruiz
20	City of West Covina	Steve Herfert

Other Comments		
21	City of Bellflower	Bernardo Iniguez
22	City of Claremont	Craig Bradshaw
23	City of Los Angeles Department of Water and Power	Katherine Rubin
24	City of Los Angeles	Enrique C. Zaldivar
25	City of Signal Hill	Susan C. Paulsen, Flow Science Incorporated
26	County of Los Angeles	Gary Hildebrand
27	Heal the Bay	Kirsten James
28	Los Angeles County Flood Control District	Gary Hildebrand
29	Montrose Chemical Corporation of California	Latham & Watkins, LLP
30	Port of Long Beach	Richard D. Cameron
31	Port of Los Angeles	Christopher Cannon
32	Rutan & Tucker	Richard Montevideo
33	U.S. EPA	Cindy Lin
34	Western States Petroleum Association	Catherine H. Reheis-Boyd

No.	Author	Comment	Response
0.1	Multiple	Several of the comments submitted to the State Water Resources Control Board (State Water Board) regarding approval of this amendment were submitted verbatim to the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) without further explanation.	<p>The State Water Board's Notice of Opportunity to Comment concerning this Basin Plan amendment accurately informs interested persons of the procedural requirements used to implement the State Water Board's regulatory programs. According to the State Water Board's CEQA Regulations (23 Cal. Code Regs. § 3779, subd. (f)):</p> <p>The state board, when considering approval of a regional board's adoption of an amendment to its water quality control plan or guideline, shall prescribe a comment period of not less than 30 days. The state board may refuse to accept any comments received after the noticed deadline. All comments submitted to the state board must be specifically related to the final amendment adopted by the regional board. If the regional board previously responded to the comment, the commenter must explain why it believes that the regional board's response was inadequate. The commenter must include either a statement that each of the comments was timely raised before the regional board, or an explanation of why the commenter was unable to raise the specific comment before the</p>

No.	Author	Comment	Response
			<p>regional board. The state board may refuse to accept any comments that do not include such a statement. The state board is not required to consider any comment that is not in compliance with this section.</p> <p>Several of the comments submitted to the State Water Board on this matter are identical to a comment submitted to the Los Angeles Water Board at the time the draft version of this regulation was under Los Angeles Water Board consideration. During its consideration, the Los Angeles Water Board received and provided written responses to all significant comments. The Los Angeles Water Board's responses either indicated that changes would be made to the regulatory provisions or related documentation in view of the comment (in which case corresponding changes were made), or the Los Angeles Water Board's written responses indicated that changes would not be made, and the response indicated why not.</p> <p>Where a commenter has merely repeated the comment submitted below, the State Water Board cannot divine what the commenter believes has been adequately satisfied and what has not, nor can it determine the reason for any remaining dissatisfaction.</p> <p>Without that information, the State Water Board does not have a fair opportunity to understand what if any remaining concerns exist, and the State Water Board is therefore unable to use its authority under Water Code section 13245 to address them. The doctrine of exhaustion of administrative remedies is intended to allow agencies like the State Water Board an opportunity to address the concerns of the commenters. The State Water Board cannot do so if those concerns have not, as here, been fairly presented.</p>
0.2	Multiple	<p>Commenters assert that a TMDL without a mass balance calculation is not technically sound.</p> <p>For example: "As identified in our February 22, 2011 comment package, the TMDL contains a</p>	<p>State Water Board disagrees. Neither the Clean Water Act (CWA) nor TMDL regulations require the specific mass balance calculation implied by the commenter. Many different technical approaches are possible and scientifically defensible for TMDL linkage analyses and calculation of the associated loading capacity. These include, but are not limited to, mass-balance calculations (whether simplistic or spreadsheet-based models), steady-state or dynamic models, statistical data analyses, or flow and</p>

No.	Author	Comment	Response
		<p>serious mass balance calculation defect which violates generally accepted scientific principles and results in a TMDL which cannot reflect the actual assimilative capacities of the affected waterbodies. This calculation defect was the subject of several subsequent discussions between Montrose and Regional Board staff after the close of the public comment period. At the May 5, 2011 adoption hearing, the Board directed staff to continue to work with stakeholders on this key technical issue. The Regional Board Response confirms that no mass balance calculation was performed, thereby underscoring the TMDL's lack of sound technical foundation and showing that the reliability of the sediment targets or allocations of the TMDL has not been established. Since a TMDL is itself a mass balance between assimilative capacity on the one hand, and allocation and other categories on the other, the absence of mass balance also is a legal defect, and violates the CWA and implementing regulations and policy."</p> <p>Many stakeholders commented on the modeling. Many comments are detailed and technical and suggest more data, better calibration, better measures of uncertainty, and so forth.</p>	<p>load duration curve frameworks. These methods are not inclusive of the possible technical approaches, nor are any of them specifically required based on the CWA or TMDL regulations.</p> <p>For this TMDL, the Los Angeles Water Board chose to rely on a hydrodynamic and water quality model to evaluate pollutant loadings into and out of the system. This model was used for the linkage analysis and output from the model was used to calculate the TMDLs. More specifically, the model determined overall average sediment deposition rates that considered input from upstream sources, bedded sediment erosion rates, and the influences of tides and currents. Because the tides and currents are influences that extend beyond the immediate harbor waters, use of the simulated sediment deposition rates can be interpreted as a mass balance calculation as they consider the various inputs and losses to the system as a whole. Pollutant concentrations were applied to each waterbody-specific net sediment deposition rate to determine the loading capacity as well as to estimate the current loads. Comparison of current loads vs. allowable TMDL loads are best represented in the Basin Plan Amendment or TMDL Staff Report tables 6-10 and 6-12.</p> <p>For each specific waterbody, the Environmental Fluid Dynamics Code (EFDC) model determined the net sediment deposition rate, which is dependent on the incoming sediment rate and the outgoing sediment rate. While the commenters feel this is insufficient as a mass balance calculation, it is important to note that the model did account for incoming and outgoing sedimentation, including sediment matter leaving the greater Harbor waters into Outer San Pedro Bay. Subsequent application of either observed sediment concentrations or desired sediment target levels on these rates yielded the corresponding pollutant transfer which is equivalent to net pollutant deposition to each waterbody. The model was applied for various hydraulic conditions as the model period included several dry periods as well as an extremely wet period (winter 2004) that included high stream flow rates for the Dominguez Channel, Los Angeles River, San Gabriel River, and nearshore watersheds.</p>

No.	Author	Comment	Response
			<p>Since 2004, Los Angeles Water Board and EPA staff have met with stakeholders (including a technical advisory committee) regarding these TMDLs and associated models. Therefore public input and comments have been received over the years on the following aspects: model selection, integration of available ambient monitoring results, studies to be completed and utilized in model development, model calibration and validation efforts, and model scenarios for pollutant load reductions. Also the Loading Simulation Program C++ (LSPC) and EFDC model codes are public domain; therefore, interested parties could develop concurrent models. Currently, the Ports of Los Angeles and Long Beach have been using and updating the TMDL models to further explore pollutant loading variation within existing vs. potential implementation actions in the watersheds, receiving waters, or both. The State Water Board understands that the Los Angeles Water Board and EPA staff will continue consultation with the Ports on model development and application as part of TMDL implementation via the Ports' Water Resources Action Plan.</p> <p>While there is continually new data that can be considered (particularly in the case of the Greater Harbor Waters where there is extensive monitoring), and it is always possible to add to or improve a complex model, there is no compelling need to do so at this time; the model developed provides a reasonable and sufficient understanding of the functioning of the watersheds, including pollutant loading, and of the Greater Harbor Waters and has generated meaningful allocations.</p> <p>See also Los Angeles Water Board's responses to comments (19.6; 20.2; 23.6a; 36.74; 40.10).</p>
0.3	Multiple	<p>Several commenters commented on DDT and air deposition.</p> <p>For example: "for certain pollutants such as DDT, air deposition loading to the water</p>	<p>The TMDL provides estimates of air deposition load directly onto waterbody surface area based on available air monitoring data in the Los Angeles area. For metals air deposition, there were several studies with diverse geographical locations and the Los Angeles Water Board deliberately separated inland results to apply to Dominguez Channel</p>

No.	Author	Comment	Response
		<p>surface alone exceeds the loading capacities...[this implies] 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.” Restoration of bedded sediment—presumably via continuous dredging—will be futile since recontamination will occur via air deposition alone. There is inadequate analysis and understanding of the source contribution from aerial deposition, and no attempt was made to estimate reductions or put forward reduction strategies. 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. The Regional Board’s response was: “...Staff acknowledges the DDT TMDL is smaller than the air deposition load for certain water bodies; 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.” (Regional Board Responses to All Comments “Comment Responses” at p. 107 = RTC #23.8)</p>	<p>watershed and coastal results to apply to the greater Los Angeles and Long Beach Harbor waters. For organic pollutants, the Los Angeles Water Board had only one site in Wilmington with three measurements by SCCWRP between Sept. 19 and Oct. 26, 2006. Without these air monitoring results, even if only limited data, air deposition for organic pollutants (e.g., PAHs and DDT) would be completely absent from the source assessment and inappropriately excluded from allocations. Also, it should be noted that the commenters do not provide, nor cite any additional data regarding DDT air deposition within the Dominguez Channel watershed or LA coastal region.</p> <p>The Los Angeles Water Board carefully considered the results of the SCCWRP study as well as the limitations associated with sample location and collection techniques; thus our description of ‘preliminary’ direct deposition results. The dry deposition study did rely on a ‘sticky plate’ to collect the air monitoring samples. Some commenters find objection with this sample collection technique based on concerns that it does not adequately represent potential resuspension of (air) deposited materials back into the air. This preliminary study assumed that once organic pollutants sorbed onto the water surface, they became entrained into the water column. (The exception is PCBs which showed more flux from water into air than vice versa; this characteristic of PCBs has been shown in other air monitoring studies; e.g., San Francisco Bay.) Another comment was the Wilmington air monitoring site is three miles inland and should have been closer to the coast; e.g., San Pedro or on land areas jutting out into Outer Harbor. These issues and others can be addressed in future special air monitoring studies as described in the TMDL Implementation Plan (BPA, pp. 34-35).</p> <p>The State Water Board has several additional responses to the specific comment implying that restoration of bedded sediment—presumably via continuous dredging—will be futile since recontamination will occur via air deposition alone.</p> <p>a. The Los Angeles Water Board did not intend to imply, or require continuous dredging since the Regional Board recognized that</p>

No.	Author	Comment	Response
			<p>dredging typically occurs on an intermittent basis and under site-specific conditions. Nonetheless, it is appropriate to acknowledge within the TMDL and Implementation Plan that active dredging has occurred and will continue in future years as part of the Ports' operations, Army Corps of Engineers navigational activities and possibly Los Angeles Water Board orders (e.g., to address sediment hotspots). Such efforts remove contaminated sediments and thereby reduce pollutant loads within sediments as well as fluxes into the water column.</p> <p>b. Multi-media flux study results show the sediments' diffusive flux into water is the <u>dominant</u> mode of DDT into water column. The air deposition portion of this flux study concluded there is more absorption (from air to water) than volatilization. Based on these results, efforts to reduce pollutant loads into the water column should initially focus on sediment remediation to make significant water (and sediment) quality improvements.</p> <p>c. If future special study results reveal lower air deposition rates (for any TMDL pollutant), then this would imply that efforts to reduce loading from air would be less fruitful than other implementation options. If special study results demonstrate that aerial transport from dusty land areas into surface waters is relatively significant, then stakeholders might consider capping dusty land areas or other means of minimizing <u>pollutant</u> transport via air deposition into the saline receiving waters.</p> <p>As noted in the Implementation Plan, a variety of implementation strategies are described within Phases I, II and III. These strategies include watershed-wide implementation actions and additional BMPs to reduce upstream inputs. And the plan includes pollutant control via sediment management and planned site-remedial actions. Past and present dredging projects have proceeded apparently without unintended consequences. For example, the Port of Los Angeles and Army Corps <i>Channel Deepening</i> project, which is nearly complete, has removed large quantities of sediments (and some pollutants) from Inner and Outer Harbor waters. The Port of Long Beach IR site 7 and Berth 240 are</p>

No.	Author	Comment	Response
			<p>scheduled to take place in 2012 and will safely remove an additional 1.3M cubic yards of contaminated sediments. As indicated in the Implementation Plan, Dominguez Channel estuary, Consolidated Slip and Fish Harbor are still characterized as 'sediment toxic hotspots' and remain as the highest priority locations for reducing pollutant loads from existing contaminated sediments. One added benefit of sediment remediation actions, in comparison to single pollutant efforts, is that a wide variety of toxic pollutants, including metals, PAHs, PCBs, legacy and current use pesticides will removed from the waterbody.</p> <p>See also Los Angeles Water Board's responses to comments (9.3; 20.9; 33.21; 36.3; 36.7; 36.61) and SWRCB response 29.60.</p>
0.4		<p>Several commenters state that TMDL compliance will require dredging the whole harbor or that the Regional Board should calculate environmental impacts or costs from such assertion.</p>	<p>PCB and DDT sediment concentrations in several individual Harbor waters are often above the PCB and DDT fish tissue target-related sediment targets established by this TMDL, leading commenters to express the concern that the "whole Harbor will require dredging to comply with the TMDL." The State Water Board notes that the Ports' method of presenting the DDT and PCB sediment data (see Anchor QEA memo, Attachment 9B of Port comments) does not depict the variability in the data; that is, the DDT and PCB "hotspots" such as Consolidated Slip and Fish Harbor are shown as the same PCB and DDT level as sediment data for sites which did not exceed the targets (Cabrillo Marina and Outer Harbor). To clarify this particular matter, we note the Los Angeles Water Board's Basin Plan Amendment for the TMDL shows commitment to incorporate new data, special study results and prioritized assessment of contaminated sediment management. See pp. 30-31 of the Basin Plan Amendment.</p> <p>The State Water Board also notes the Port of Los Angeles and Port of Long Beach were co-authors (amongst others) of a presentation "<i>Incorporating Rate of Recovery Studies in TMDL Implementation and Compliance</i>" February 10, 2011 (Attachment 12F to Port comments). This presentation envisioned an implementation plan that incorporates ongoing pollutant recovery. Data presented here, show significant</p>

No.	Author	Comment	Response
			<p>improvement in the Harbor sediments for DDT and PCBs. As the Ports and their Cities develop the TMDL Implementation sediment management plan, the Ports can recommend that ongoing pollutant recovery be included in conjunction with other compliance measures to avoid dredging sediments which are likely to recover naturally in the 20 year implementation schedule. Attenuation is specifically envisioned in the proposed sediment management plan in the TMDL Staff Report. The Figure 7.1 flowchart, <i>Proposed Sediment Monitoring Program and Priority Assessment Flowchart</i>, describes that several options exist after ranking sites based on risk-based decision criteria to prioritize remediation actions. One option is “Attenuation¹ will result in necessary improvement” and the next step is “Continue to monitor to confirm compliance.” See Staff Report, middle of pg. 109.</p> <p>See also Los Angeles Water Board’s responses to comments (19.7; 20.9, 31.2; 33.21, 36.3, and 36.7).</p>
1-10	City of Azusa, Baldwin Park, Duarte, Irwindale, LaPuente, Pico Rivera, San Dimas, and San Gabriel		
		<p>Establish the Outfall or Nearest Storm Drain Point Upstream of it to Determine WLA Compliance.</p> <p>The DC/Harbor Toxics TMDL allows for both the outfall and receiving water as compliance determinants. According to the DC/Harbor Toxics TMDL staff report:</p> <p>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 storm drain outfalls or at a point in the receiving water, which suitably represents the combined discharge of cooperating parties discharging to Dominguez</p>	<p>WLAs and compliance options including how exceedances should be handled will be discussed and determined in detail when the TMDL is incorporated into the MS4 permit</p> <p>The exact manner in which compliance options are incorporated into permits is not established at the time of TMDL development, because the means of incorporating the compliance options depends in part on the supporting evidence in the permit’s administrative record. The co-permittees to the MS4 NPDES permit discharge to a common conveyance system where their discharges commingle. This commingled waste discharge is</p>

¹ Attenuation refers to natural or biodegradation of chemicals. The half-life of DDT or PCBs in sediment is estimated within decades (not days or months).

No.	Author	Comment	Response
		<p>Channel and Greater Los Angeles and Long Beach Harbor waters².</p> <p>The problem is that an outfall can discharge runoff from more than one MS4 permittee. This then raises the question of how an exceedance would be handled. What if two permittees discharge to the same outfall and one permittee meets the WLA but another does not? An exceedance would hold both permittees responsible. However, should the Regional Board or a third party take action against both permittees it would be difficult to determine which permittee actually caused the exceedance. This very issue was at the heart of NRDC v. Los Angeles County Flood Control District. In that recent case, the 9th District Court of Appeal pointed to the difficulty in knowing whether the County flood control district had caused or contributed to a receiving water exceedance. The monitoring data was taken from in-stream mass emissions stations in receiving water bodies that detected exceedances over several years. Because the County was not the only discharger to the receiving waters, it was impossible to know who in fact caused or contributed to the exceedances. The same issue would be raised if an outfall, which federal regulations define as a 36" pipe or larger, discharges runoff from two separate MS4 permittees. Monitoring for WLA compliance, therefore, would have to occur at the last point of discharge before entering an outfall that is shared by one or more other MS4 permittees.</p> <p>The DC/Harbor Toxics TMDL's option of allowing permittees achieve compliance in the receiving water - if part of a coordinating monitoring plan with other permittees - presents the same problem. In this case, there would be multiple dischargers responsible for meeting a single WLA in the receiving water. In contrast, allowing each permittee to monitor discharges that are</p>	<p>a source of the toxic metals discharged to the Dominguez Channel watershed. It is the comingled discharge that is subject to the TMDL. The implementation of the TMDL occurs through the MS4 permit and the parties to that permit are required to establish and implement controls necessary to address the discharge of pollutants that is impairing the water. MS4 co-permittees are also required to implement a monitoring program to determine compliance with permit provisions. The most appropriate monitoring locations for this purpose will be determined in the permitting forum. During the development of the monitoring program, the co-permittees can determine in conjunction with Regional Board staff how to address potential differences in their contributions to exceedances at receiving water and/or outfall monitoring locations.</p>

²Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants, page 110.

No.	Author	Comment	Response
		<p>representative of pollutants generated from within its jurisdiction allows for a more accurate determination of the extent to which it is complying with a WLA.</p> <p>It also enables the permittee to evaluate the performance of structural and non-structural best management practices (BMPs) in meeting a WLA. <i>Having</i> multiple MS4 permittees <i>subject to a single WLA that</i> would be measured in the receiving water would make it difficult if not possible to know if the BMPs implemented by a specific MS4 are attaining WLAs.</p> <p>The City raised the issue of outfall versus receiving water monitoring for compliance purposes in the comments that it submitted to the Regional Board. In its response to comments, the Regional Board did not address the issue.</p> <p>The City believes it is imperative to establish either at the outfall (if an MS4 permittee exclusively discharges from it) or an upstream point within its MS4 nearest to the outfall, the compliance point as required under federal stormwater regulations. Outfall/end-of-pipe data from individual MS4s would provide valuable data in evaluating the effectiveness of a MS4 permittee's BMPs as well. Receiving water monitoring should only be used to generally gauge the health of the receiving water and verifying the adequacy of the WLA required to protect its beneficial use(s).</p>	
1.2		<p>TMDL cannot Use Fish Tissue, Sediment, and Water Quality Monitoring to Determine Compliance.</p> <p>Compliance with this TMDL will be determined through water, sediment, and fish tissue monitoring and comparison with the</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 14.3.</p>

No.	Author	Comment	Response
		<p>DC/Harbor Toxics TMDL waste load and load Allocations and numeric targets³. As mentioned, compliance with the DC/Harbor Toxics TMDL should be determined by BMPs, which translates WLAs through Water Quality Based Effluent Limits (WQBELs). While WLAs can be established to protect a beneficial use for a receiving water, they cannot be used require absolute compliance, Such monitoring exceeds federal stormwater regulations and lies outside the scope of MS4 permit.</p>	
1.3		<p>Reference Water Quality Based Effluent Limitations (WQBELs) as the means of Translating the DC/Harbor Toxics TMDLs Numeric Waste Load Allocation (WLA) into BMPs.</p> <p>The final staff report for this TMDL states that: 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)).</p> <p>Although these memoranda give the permitting authority the discretion to resort to numeric or non-numeric WQBELs in meeting a WLA, it appears that Regional Board staff has interpreted the memo to mean that only numeric WQBELs may be used. Further, the Regional Board is interpreting a numeric WQBEL to mean absolute compliance with a numeric waste load allocation by any BMP means necessary. Both of these views are inaccurate.</p> <p>In its response to comments, Regional Board staff asserted that if the WLA is translated into the NPDES permit directly as a</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>Please see response to comment 0.1 and Los Angeles Water Board's response to comment 14.3.</p> <p>The TMDL for Toxic Pollutants in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters does not dictate how an NPDES municipal separate storm sewer system (MS4) permit expresses the TMDL's waste load allocations (WLAs). The means of expression will be determined when NPDES MS4 permits are revised to incorporate provisions consistent with the assumptions and requirements of the WLAs to effectively implement the TMDL. Federal regulations require that NPDES permits must contain requirements necessary to achieve water quality standards (40 CFR § 122.44(d)(1)) and that water quality based effluent limitations 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</p>

³ Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants, page 116

No.	Author	Comment	Response
		<p>numeric WQBEL, nothing limits the Board's authority to require compliance with this limitation⁴. On its face, the Regional Board's responder here is partially correct, As the permitting authority the Regional Board can use a numeric WQBEL to translate a WLA into BMPs. It can also rely on narrative, non-WQBELs. What it cannot do is require a WQBEL and WLA to be one of the same, which is the Regional Boards staffs incorrect definition of a numeric WQBEL. This is consequential because it means that affected permittees must comply with the WLA by any BMP means necessary.</p> <p>This view is by no means worst-case; This is exactly what the Los Angeles Regional Board did when it incorporated the Santa Monica Bay Beaches dry weather bacteria TMDL into the current Los Angeles MS4 permit in. 2007. Compliance with the dry weather WLA was absolute. Exceedances detected in an in-stream monitoring station in Santa Monica Bay prompted the Regional Board to issue notices of violation to 22 municipal permittees. Furthermore, in placing this TMDL into the current permit, the Regional Board clearly did not comply with USEPA's TMDL guidance memorandum issued in November of 2002:</p> <p>Where a TMDL has been approved; NPDES permits must contain effluent limits and conditions consistent with the requirements and assumptions of the waste load allocations in the DC/Harbor Toxins TMDL. See 40 CFR § 122.44(d)(1)(vii)(B).. Effluent limitations to control the discharge of pollutants generally are expressed in numerical form. However, in light of 33 U.S.C §1342(p)(3)(B)(iii), EPA recommends that for NPDES-regulated municipal and small construction storm water discharges effluent limits should be expressed as best management practices (BMPs) or other similar requirements, rather than as numeric effluent limits..</p>	<p>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 as an expression of a TMDL's WLA where the permit's administrative record substantiates that the BMPs are expected to be sufficient to fully implement the WLA in the TMDL, consistent with the implementation schedule established in the TMDL (US EPA 2002). Iterative approaches without such a record to substantiate them shall not qualify for consideration as an expression of a TMDL's WLA. Furthermore, this does not substitute for the permitting authority's obligation to include other requirements such as numeric effluent limitations that may be necessary to achieve water quality standards.</p> <p>The State Water Board recently addressed the issue of translating TMDL waste load allocations into effluent limitations in NPDES MS4 permits and concluded that, "whether a future municipal storm water permit requirement appropriately implements a storm water wasteload allocation 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)." State Water Board staff agrees with the Los Angeles Water Board's response in regards to the absence of an Adaptive/Iterative process.</p>

⁴ Comment Summary and Responses Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters, page 12

No.	Author	Comment	Response
		<p>See Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits, 61 FR 43761 (Aug. 26, 1996). The Interim Permitting Approach Policy recognizes the need for an iterative approach to control pollutants in storm water discharges⁵.</p> <p>A WQBEL, numeric or non-numeric, is a mechanism that translates compliance with a WLA into BMPs. In <i>Divers' Environmental Conservation Organization v. State, Water Resources Control Board</i>, the 4th District Appellate Court held that CWA §122.44(k)(2) authorizes the use of BMPs in meeting water quality standards addressed under § 122.44(d)(1)(ii). The court explained:</p> <p>The best management practices authorized by §122.44(k)(2) constitute water quality based effluent limitations that a permitting authority may employ⁶</p> <p>In reviewing 122.44(k)(2) it is clear that BMPs are to be ' used when authorized under section 402(p) of the CWA for the control of stormwater discharges:</p> <p>k) Best management practices (BMPs) to control or abate the discharge of pollutants when ... (2) Authorized under section 402(p) of the CWA for the control of storm water discharges⁷.</p> <p>And section 402(p)(iii), which applies to municipal and industrial stormwater discharges, requires:</p> <p>...controls {BMPs} to reduce the discharge of pollutants to the maximum extent practicable, including management practices,</p>	<p>Moreover, the Los Angeles Water Board has provided permittees under the LA County MS4 NPDES permit 19 years, since the first MS4 Permit was adopted in 1990, to iteratively apply BMPs to achieve water quality standards. TMDLs are the backstop for the Clean Water Act in cases where effluent limitations, or BMPs in the case of MS4 permits, 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 necessarily in the best interest of water quality.</p> <p>This TMDL provides a 20-year implementation schedule, which supports adaptive stormwater management while providing a firm date for reaching compliance with the WLAs.</p>

⁵ USEPA, *Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs*, November 22, 2002, page

⁶ See *Divers*, 145 Cal App 4'h 246; 51 Cat. Rptr. 3d 497

⁷ See 40 CFR 122.44(k)(2)

No.	Author	Comment	Response
		<p>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 pollutants⁸</p> <p>Since the DC/Harbor Toxics TMDL contemplates implementation through the MS4 permit, it is clear that BMPs (structural and non-structural) are to be used to meet water quality standards, including TMDLs.</p> <p>This view is also supported by TMDLs and MS4 permits adopted by other Regional Boards, including Santa Ana, San Diego, and San Francisco. For example, the San Diego Regional Board referenced WQBELs and how they are to operate in the Revised Total Maximum Daily Loads for Indicator Bacteria Project 1 - Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek):</p> <p>The DC/Harbor Toxics TMDLs will be implemented primarily by revising and re-issuing the existing WDRs and National Pollutant Discharge Elimination System (NPDES) requirements that have been issued for discharges from Phase / MS4s and Caltrans MS4s. Federal regulations <u>require</u> 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(BMPs program of expanded or better-tailored BMPs.⁹</p> <p>Furthermore, the MS4 permit limits the BMPs to intra-jurisdictional implementation - not outside of it, as is suggested in the</p>	

⁸ See CWA Section 402(p)(iii).

⁹ Revised Total Maximum Daily Loads For Indicator Bacteria Project I - Twenty Beaches and Creeks in The San Diego Region (Including Tecolote Creek), Final Technical Report, Adopted by the California Regional Water Quality Control Board, February 10, 2010, page 5

No.	Author	Comment	Response
		<p>DC/Harbor Toxics TMDL's reference to remediation of contaminated sediment in the harbors. Once again; an MS4 permit is a point source permit that controls stormwater discharges through BMPs from the end-of-pipe to a receiving water. A receiving water, therefore, does not lie within the scope of the MS4 permit.</p> <p>Returning to the matter of numeric WQBELs, which the City interprets to mean "numeric, BMPs," which are an alternative to narrative, non-numeric WQBELs, the Regional Board also appears to be unclear on the federal definition of a numeric WQBEL. In its November 2010 revised memorandum on TMDL WLA incorporation into MS4 permits, USEPA recommended, where feasible, the use of numeric WQBELs in implementing WLAs by relying on numeric parameters such as pollutant concentrations, pollutant loads, or numeric parameters such as a surrogates for pollutants...¹⁰ Further, the memorandum discusses two types of numeric WQBELs: numeric BMPs and surrogate parameters. Neither suggests absolute compliance with a WLA by any means necessary.</p> <p>In terms of numeric BMPs, USEPA's 2010 guidance memo, under the heading of <i>Providing Numeric Water Quality Based Effluent Limitations in NPDES Permits for Storm Water Discharges</i>, explains:</p> <p>Where WQBELs in permits for storm water discharges from MS4s, small construction sites or industrial sites are expressed in the form of BMPs, the permit should contain objective and measurable elements (e.g., schedule for BMP installation or level of BMP performance). <u>The objective and measureable elements should be included in permits as</u></p>	

¹⁰ Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Waste d Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs," page 2

No.	Author	Comment	Response
		<p><u>enforceable provisions. Permitting authorities should consider including numeric benchmarks for BMPs and associated monitoring protocols or specific protocols for estimating BMP effectiveness in stormwater permits.</u> These benchmarks could be used as thresholds that would require the permittee to take additional action specified in the permit, such as evaluating the effectiveness of the BMPs, implementing and/or modifying BMPs, or providing additional measures to protect water quality.¹¹</p> <p>Thus, within the context of the above, a numeric BMP (1) is measurable and when placed in the MS4 permit is enforceable; and/or (2) includes numeric benchmarks for BMPs to evaluate their performance. On the hand other, a surrogate parameter-type of numeric WQBEL is one that (1) replaces a numeric WLA (e.g., 1 toxic unit chronic for the Dominguez Channel/Harbors TMDL) with flow or impervious cover, for example; and (2) uses BMPs that reduce flow or impervious cover to attain the surrogates (low impact development strategies, primarily). As USEPA's 2010 guidance memorandum explains:</p> <p>A more straightforward way to regulate stormwater contributions to water body impairment would be to use flow or a surrogate, like impervious cover, as a measure of stormwater loading (such as in the Barberry Creek TMDL [Maine DEP, 2003, pp. 16-20] or the Eagle Brook TMDL [Connecticut DEP, 2007, pp. 6-10]). <u>Flow from individual stormwater sources is easier to monitor, model, and even approximate as compared to calculating the loadings of individual contaminant in stormwater effluent. Efforts to reduce stormwater flow will automatically achieve reductions in pollutant loadings.</u>¹²</p>	

¹¹ bid page 3

¹² Ibid page 3

No.	Author	Comment	Response
		<p>The Maine model, for example, which addresses the Barberry Creek TMDL, sets a 10% impervious cover reduction over the term of the MS4 permit. Impervious cover reduction serves as a surrogate for the mix of pollutants in stormwater, and for lead (Pb) and zinc (Zn) which serve as surrogates for the array of metals in stormwater. Reducing impervious cover, of course, reduces flow. Implemented through the City of Portland's MS4 permit, different categories of BMPs are required to meet the surrogate target, including disconnection and conversion of impervious surfaces, stream restoration techniques, as well as a list of BMPs for mitigating impacts of impervious cover.</p> <p>What is also important to note about this TMDL alternative is that it is incorporated into Portland's MS4 permit and calls for an "adaptive management approach" (same as adaptive/iterative approach). In other words, if the impervious cover reduction (which really means reduced flow) target is not met by the end of the term of the permit, Portland would not be out of compliance. <u>Therefore, a surrogate parameter as a numeric WQBEL cannot be viewed as something that requires absolute compliance with a numeric limit.</u></p>	
1.4		<p>DC/Harbors TMDL to Reference to the Adaptive/Iterative Process.</p> <p>As with the Los Angeles Rivera Bacteria TMDL, the DC/Harbors Toxics TMDL does not discuss the adaptive/iterative process. When this issue was brought to the Regional Board's attention in written comments prior to the DC/Harbor Toxics TMDL's adoption, staff asserted that:</p> <p>... 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</p>	See response 1.3.

No.	Author	Comment	Response
		<p>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.¹³</p> <p>The Regional Board commenter may be correct in asserting that federal stormwater regulations do not require an adaptive iterative process. However, USEPA stormwater guidelines do in fact recommend this procedure in three documents: (1) Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits (1996); (2) Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on those TMDLs (November 22, 2002) and (3) 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 TMDLs, November 12, 2010.</p> <p>Regarding USEPA's interim permitting approach memorandum, USEPA's policy intent here was to use best management practices (BMPs) in first round storm water permits, and expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards.¹⁴ In fact, this language is reflected in the aforementioned bacteria TMDLs adopted by the Santa Ana and San Diego Regional Boards.</p> <p>Similarly, the 2002 USEPA memorandum on TMDL guidance states:</p>	

¹³ Comment Summary and Responses Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters, page 13

¹⁴ Memorandum from Robert Perciasepe, Assistant Administrator, to EPA Water Management Division Directors, August 8, 1997, page 1

No.	Author	Comment	Response
		<p><i>Under certain circumstances, BMPs are an appropriate form of effluent limits to control pollutants in storm water. If it is determined that a BMP approach (including an iterative BMP approach) is appropriate to meet the storm water component of the DC/Harbor Toxics TMDL, EPA recommends that the DC/Harbor Toxics TMDL reflect this: Where BMPs are used, EPA recommends that the permit provide a mechanism to require the use of expanded or better-tailored BMPs when monitoring demonstrates they are necessary to implement the WLA and protect water quality¹⁵.</i></p> <p>This message is repeated again in USEPAs revised 2010 memorandum, In its discussion of the aforementioned "numeric benchmarks" for BMPs, this memorandum also explains:</p> <p>These benchmarks could be used as thresholds that would require the permittee to take additional action specified in the permit, such as evaluation the effectiveness of the BMPs, implementing and/or modifying BMPs, or providing additional measures to protect water quality.¹⁶</p> <p>It can be inferred from this statement that the iterative process even applies to numeric WQBELs.</p> <p>The Regional Board's comment about 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 is premature. None of the DC/Harbor Toxics TMDLs incorporated into the MS4 permit has been subject to the iterative process. This includes the Santa Monica Bay Beaches Dry Weather Bacteria TMDL and the Los Angeles River</p>	

¹⁵ Memorandum from Robert H. Wayland, III, Director Office of Wetlands, Oceans, and Watersheds, and James A Hanlon, Director, Office of Wastewater Management, USEPA to Water Division Directors, Regions 1-10, November 22, 2002, page 5

¹⁶ *Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs," page 2.*

No.	Author	Comment	Response
		<p>Trash TMDL. And the DC/Harbor Toxics TMDLs that are planned for implementation in the next MS4 permit will constitute the first iteration of BMPs to be implemented in it - assuming that that their WLAs are first translated into BMPs through a WQBEL. Put another way: MS4 permittees have not had the opportunity to implement TMDLs, other than trash, through the MS4 permit. There has been nothing, therefore, to iterate.</p> <p>And while federal stormwater regulations do not specifically reference the adaptive/iterative process, the State Board has stated in a precedent-setting order that the iterative process is to be followed in MS4 permits. In State Water Board Order WQ 2001-15 (BIA) the board asserted: ... we will generally not require 'strict compliance' with water quality standards through numeric effluent limitations," and instead "we will continue to follow an iterative approach, which seeks compliance over time" with water quality standards.¹⁷ This explains why most MS4s permits in California adopted by other Regional Board contain a reference to an iterative process.</p>	
1.5		<p>TMDL should not require Permittees to Conduct Monitoring Outside Their MS4s.</p> <p>The DC/Harbor Toxics TMDL requires fish tissue, water column, and sediment testing. All of these monitoring-related tasks are extra-MS4 systemic. Federal stormwater regulations [(§ 122.26(d)(2)(iii)) require intra-MS4' system monitoring, from the outfall/end-of-pipe -- not outside of it.. Should the Regional Board insist that permittees perform these extra-federal monitoring tasks, including reporting, it will need to comply with CWC §13267.</p>	<p>The monitoring requirements for water column, fish tissue, and sediment are appropriate to measure the progress of pollutant reductions and improvements in water, sediment quality, and fish tissue, and to determine compliance with the assigned WLAs. As indicated on page 34 of the Basin Plan Amendment, MS4 dischargers can demonstrate compliance with stormwater WLAs <i>at the storm drain outfall</i> of the permittee's drainage area. Alternatively, if stormwater discharges select a coordinated compliance monitoring option, the compliance point for the stormwater WLA may be a storm drain outfalls or at a point in</p>

¹⁷ State Water Resources Control Board, Order WQ 2009-0008, August 4, 2009, page 8

No.	Author	Comment	Response
			<p>the receiving water, which suitably represents the combined discharge of cooperating parties.” Therefore, the monitoring can indeed occur at the storm drain outfall, as the commenter requested. In addition, Water Code section 13267 is inapplicable at this stage because the TMDL does not impose any orders under section 13267. If an order pursuant to section 13267 is issued in the future, the required analysis will be conducted. <i>City of Arcadia v. State Water Resources Control Bd.</i> (2006) 135 Cal.App.4th 1392, 1414.</p>
1.6		<p>TMDL Monitoring Outside Their MS4s Constitutes an Unfunded Mandate Under the California Constitution.</p> <p>Fish tissue, sediment, and water column monitoring are not required, under the federal stormwater regulations for compliance purposes. The Regional Board can compel extra-federal regulatory monitoring, but it will have to rely on the State's water code, which would, therefore, constitute an unfunded mandate under the California Constitution.</p>	<p>The State Water Board disagrees. The Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters are included in the 303(d) impaired water list for toxic pollutants in one or more environmental media: water column, sediment, and/or fish tissue. Therefore, the monitoring requirements for water column, fish tissue, and sediment are appropriate to measure the progress of pollutant reductions and improvements in water, sediment quality, and fish tissue, and to determine compliance with the assigned WLAs. In addition, the TMDL is not an unfunded state mandate because, among other reasons, it is compelled by federal law. See response 32.79.</p>
1.7		<p>The DC/Harbor Toxics TMDL Inappropriately Requires MS4 Permittees to Pay for Removal or Containment of Contaminated Sediment in the Harbors and Should Be Revised or Clarified to Eliminate this Possible Interpretation.</p> <p>The DC/Harbor Toxics TMDL references dredging and capping as</p>	<p>State Water Board disagrees. The TMDL allocation section on page 14 clearly identifies that 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. The TMDL does not contain language that could be</p>

No.	Author	Comment	Response
		<p>a means of remediating contaminated sediment in the harbors. Some have suggested that the Port of Los Angeles and Long Beach will be primarily responsible for performing this task. However, the DC/Harbor Toxics TMDL contains language that could be interpreted to mean that MS4 permittees - including those that are situated in the Los Angeles and San Gabriel Rivers - will be required to share the cost. MS4 permittees could be required to meet waste load allocations in this TMDL. If the WLAs are not met, affected permittees could be found in violation and could be compelled to fund remediation. This could be achieved through the next MS4 permit by requiring absolute compliance with WLAs -- as it had with the Santa Monica Bay Beaches Dry Weather Bacteria TMDL.</p> <p>It should be noted that the MS4 permit is limited to controlling pollutants in stormwater from the MS4 (to the receiving water) and to prohibiting non-stormwater discharges to the MS4 (not to the receiving water). The MS4 NPDES permit is a point-source permit (see 40 CFR §1222). Under Clean Water Act section 402 <i>MS4 permits are limited to 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.</i>¹⁸ The MS4 NPDES permit is limited to compliance with water quality standards, including TMDL WLAs), in stormwater at the point of discharge (outfall or at the end-of-pipe), not <i>in the receiving water</i>. The MS4 NPDES permit's limitation to controlling discharges at the end of the point source suggests that the Regional Board may, in the alternative, rely on a waste discharge requirement (hereinafter "WDR"), pursuant to the California Water Code (hereinafter "CWC"),. If the Regional Board intends to impose the DC/ Harbor Toxics TMDL WLA or an</p>	<p>interpreted that MS4 permittees that are situated in the Los Angeles River and San Gabriel River would be required to share the cost to implement remediation to achieve the LAs in the Harbors.</p> <p>The TMDL also states that after remediation activities that address existing sediment contamination are complete and when LAs are attained, if bed sediments are recontaminated as a result of continued pollutant discharges from the surrounding watersheds (including the Los Angeles River or San Gabriel River watersheds), the WLA compliance monitoring data will be used, along with other available information, to assess the relative contribution of watershed dischargers and determine their responsibility and allocations for secondary remediation activities.</p> <p>In addition, the TMDL is not an unfunded state mandate because, among other reasons, it is compelled by federal law. See response 32.79.</p>

¹⁸ See CWA 402 p(iii)

No.	Author	Comment	Response
		alternative compliance requirement on the City exclusively through a WDR then it must first comply with CWC section 13241. Further, if an MS4 permittee is compelled to pay a share of cost associated with remediating contaminated sediment in the harbors an argument could be effectively made that such a requirement constitutes an unfunded mandate under the California Constitution.	
1.8		<p>The DC/Harbor Toxics TMDL Inappropriately Includes Los Angeles River and San Gabriel River Permittees and Its Applicability is Unclear.</p> <p>Although the DC/Harbor Toxics TMDL states that the Las Angeles River and San Gabriel River is not its focus, it nevertheless includes them. The DC/Harbor Toxics TMDL mentions both of these water bodies as contributing fresh water to the harbors, The DC/Harbor Toxics TMDL also references the Los Angeles and San Gabriel River as "responsible parties." In the DC/Harbor Toxics TMDL (staff report) implementation appears to restrict these responsible parties to submitting a Report of Implementation, which will directly or indirectly support the goals of this TMDL.¹⁹ Regional Board staff has asserted that Los Angeles and San Gabriel River responsible parties are only subject to implementing already metals TMDLs. This is reflected in the DC/Harbor Toxics TMDL's staff report which states that under Phase f (which has no commencement date): Responsible parties in these watersheds are implementing other TMDLs, which will directly or indirectly support the goals of this TMDL.²⁰</p> <p>However, under Table 7-2 of the DC/Harbor Toxics TMDL, "responsible parties" are required to meet the interim allocations as of the effective date of the DC/Harbor Toxics TMDL. It is not clear if the term "interim allocations" refer to the metals TMDLs for</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 1.2.</p> <p>Table 7-40.2 clearly indicates that it pertains to the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL. Therefore, tasks included in Table 7-40.2 are those that are required under the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL, including tasks 1,2,3,4, and 7. These tasks do not change or replace the implementation requirements of the Los Angeles River Metals TMDL or San Gabriel River Metals TMDL.</p> <p>The terms "responsible agencies" and "responsible parties" are meant to be interchangeable, and what one TMDL references has no bearing on what another TMDL might</p>

¹⁹ Dominguez Channel and Greater Los Angeles and long Beach Harbor Waters Toxic Pollutants, page 108

²⁰ Ibid, page 108

No.	Author	Comment	Response
		<p>the Los Angeles and San Gabriel Rivers or to the harbors to which these water bodies contribute freshwater. Table 7.2 of the DC/Harbor Toxics TMDL is titled: Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxics Pollutants TMDL: Implementation Schedule. Under Task 2 of this implementation schedule, the Los Angeles and San Gabriel rivers are required to: Submit a Monitoring Plan to the Los Angeles Regional Board for Executive Officer Approval 9 months after the effective date of the DC/Harbor Toxics TMDL.²¹ It is unclear as to whether the monitoring plan refers to the Dominguez Channel/Harbors Toxics TMDL or to the Los Angeles and San Gabriel River Metals TMDLs. The same holds for the tasks 3, 4, and 7.</p> <p>Further complicating matters, the term "responsible parties" is not referenced in either the Los Angeles or San Gabriel River Metals TMDLs. The Los Angeles River Metals TMDLs uses the term responsible agencies - not responsible parties. The San Gabriel River Metals TMDL, which USEPA was compelled to adopt, makes no mention of either responsible agencies or parties. In fact, no municipal permittees are mentioned at all. Therefore, neither of the DC/Harbor Toxics TMDLs should be applicable to the Dominguez Channel/Harbors Toxics TMDL.²²</p> <p>Beyond this, including the Los Angeles River and San Gabriel River and, presumably MS4 permittees located therein, ' ignores the fact that only a few of them are subject to metals TMDLs. In the case of the USEPA-adopted metals TMDL, which again does not mention what MS4 permittees are subject to it, only Reach 2, the San Jose Creek, and Coyote Creek, have been listed as impaired. Not all of the some 32 municipal permittees that partially or fully situated in the San Gabriel River drain into Reach 2 and</p>	<p>reference. TMDLs are waterbody-specific and contain load and wasteload allocations to the sources of pollutants to that water body. The contributors of these pollutants are generally referred to as responsible parties, but sometimes they may be referred to as responsible agencies. These terms do not change the legal effect of the basin plan amendment.</p> <p>For list of responsible parties/agencies, see table 7-13.3 of the Los Angeles River and Tributaries Metals TMDL, and the Implementation Provisions section of Total Maximum Daily Loads for Metals and Selenium: San Gabriel River and Impaired Tributaries developed by USEPA (http://www.epa.gov/region9/water/tmdl/final.html.) which includes the permits and MS4 permit municipalities.</p> <p>The TMDL currently requires Los Angeles River Watershed and San Gabriel River Watershed responsible parties identified in effective metals TMDLs for Los Angeles River and San Gabriel River to only conduct water and sediment monitoring above the Los Angeles River Estuary and at the mouth of the San Gabriel River to determine the Rivers' contribution to the impairments in the Greater Harbor waters.</p>

²¹ Ibid, page 116

²² This should be of interest to the Office of Administrative Law.

No.	Author	Comment	Response
		San Jose and Coyotes Creek. Thus the DC/Harbors Toxics TMDL cannot extend its requirements to the San Gabriel River MS4 permittees based on the mere fact it contributes freshwater to the downstream harbors. As for the Los Angeles River, not all municipal permittees are subject to the metals TMDL. Reach 2 of the Rio Hondo, which is tributary to the Los Angeles River system, is not 303(d) listed for metals. Therefore, the 16. MS4 permittees located in this reach cannot be included in the DC/Harbors Toxics TMDL based on the metals TMDL connection.	
1.9		<p>Request for 45 Public Hearing Notice.</p> <p>The City fervently hopes that the State Board will recognize the several deficiencies contained the DC/Harbors Toxics TMDL and returns it to the Regional Board for correction without the need for a State Board hearing. If, however, the State Board wishes to review the matter at a public hearing, the City requests that it be given 45 days of advanced notice.</p>	<p>The Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL was adequately developed, reviewed, and adopted by the Regional Board.</p> <p>According to the State Water Board's CEQA Regulations (23 Cal. Code Regs. § 3779, subd. (f)):</p> <p style="padding-left: 40px;">The state board, when considering approval of a regional board's adoption of an amendment to its water quality control plan or guideline, shall prescribe a comment period of not less than 30 days. The state board may refuse to accept any comments received after the noticed deadline...</p> <p>State Board has appropriately provided 30 days comment period for the proposed approval of the TMDL.</p>
11-14	Cities of Downey, Hawthorne, Norwalk, and South Gate		
11.1		This TMDL combines multiple watersheds, multiple pollutants and two harbors. The net result is a TMDL that is far too complex and cumbersome for municipal agencies	Due to the scope and complexity of the TMDL, Los Angeles Water Board provided an extended 60-day comment period instead of standard 45-

No.	Author	Comment	Response
		to understand much less implement.	<p>day comment period to review the TMDL. The Regional Board has worked closely and collaboratively with EPA Region 9, a stakeholder-led Technical Advisory Committee, County of Los Angeles, the City of Los Angeles and its port, the City of Long Beach and its port, other watershed municipalities, Caltrans, dischargers, and non-governmental organizations during development of the TMDL. The TMDL was reasonably developed and reviewed by the Los Angeles Water Board and stakeholders before adoption. The alternative to a <i>single TMDL</i> addressing multiple pollutants in multiple watersheds is <i>multiple TMDLs</i> addressing fewer pollutants or watersheds each, which could add to complexity and decrease the efficiencies gained by identifying and implementing integrated approaches to address multiple pollutants.</p>
11.2		<p>The Cities of Downey, Norwalk, and South Gate (the Cities) are already covered by existing TMDLs (see original comment letters for complete list). Approval of this TMDL in its current format would add an unnecessary level of complexity to the cities' stormwater program, as well as introducing another element of confusion (ie: which TMDL takes precedence?)</p>	<p>The Cities discharge stormwater to Dominguez Channel, and/or Los Angeles River, and/or San Gabriel River, which are listed on the 303(d) list for various pollutants, and are responsible for meeting the assigned WLAs in each TMDL for all listed constituents. It is their responsibility to select, organize, and implement appropriate BMPs that can achieve compliance with the assigned WLAs in each TMDL. All TMDLs should be implemented and incorporated into the permit. However, the Cities can select BMPs that can address multiple TMDLs at the same time for cost effective implementation and/or can prioritize BMP implementation based on the implementation timeframes provided in the TMDLs.</p>

No.	Author	Comment	Response
11.3		<p>City of Downey, Hawthorne, Norwalk, and South Gate were part of the earlier Montrose Chemical settlement has thus should be specifically removed as a responsible party for discharges of DDT and related, toxic pollutants.</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 1.1.</p> <p>In 1999, the Regional Board entered into a Consent Decree that settled claims brought under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§9601-9675 ("CERCLA"), in the matter of <i>United States and State of California v. Montrose Chemical Corp., et al.</i>, C.D. Cal, No. CV 90-3122-AAH (JRx). That Consent Decree addressed natural resource damages and CERCLA response costs incurred by USEPA and the State of California related to the release of DDT and PCBs into the environment. The Cities of Downey, Hawthorne, Norwalk, and South Gate were included as "Settling Local Governmental Entities" and were parties to the Consent Decree. The Consent Decree defined the "Montrose NPL Site" (also known as the Montrose Superfund Site) to include, among other properties, the Montrose DDT Plant Property, portions of the Normandie Avenue Ditch, the Kenwood Drain, the Torrance Lateral, the Dominguez Channel (from Laguna Dominquez to the Consolidated Slip), the portion of the Los Angeles Harbor known as the Consolidated Slip, the Joint Outfall, and the Palos Verdes Shelf where effluent from the Joint Outfall deposited DDT and PCBs.</p> <p>The Consent Decree addresses CERCLA liability and does not relieve the Settling Local</p>

No.	Author	Comment	Response
			<p>Governmental Agencies from complying with the requirements of the Clean Water Act, including implementing allocations established in TMDLs and requirements contained in NPDES permits. See, e.g., Paragraph 18(c) of the Consent Decree (explicitly reserving the plaintiff agencies' enforcement rights under the Clean Water Act, NPDES permits, and the Porter-Cologne Water Quality Control Act). Paragraph 30 of the Consent Decree states: "This Amended Decree shall not be construed in any way to affect any past, current, or future obligation of the Settling Local Governmental Entities (individually or collectively) or any other person or entity to comply with any federal, state, or local law." The TMDLs require these agencies to implement the WLAs through NPDES permits and other regulatory mechanisms. In addition, the Consent Decree addressed PCBs and DDT, whereas the TMDL applies to many constituents, not just DDT and PCBs.</p> <p>Also, the Consent Decree addresses DDT and PCB contamination at the Montrose NPL Site, whereas the TMDL applies to a significantly broader geographical area. The responsible entities identified in the TMDL are responsible under the Clean Water Act to implement the TMDL once incorporated into their NPDES permits.</p>
11.4		The Toxics aspect of this TMDL is more of a clean-up and abatement order rather than a TMDL.	While clean-up and abatement orders can, in some circumstances, be used to establish and implement a TMDL if there is a single source that can be regulated through a single action, this TMDL must establish allocations for multiple

No.	Author	Comment	Response
			sources, including allocations to reduce sediment loadings from all sources including sediment loading from Dominguez Channel and upstream watersheds. These multiple sources are not all under the control of one entity and cannot all be regulated through a single order. See Section 7, Implementation Section of the Staff Report for implementation options.
15-20	Cities of Carson, El Monte, Glendora, Inglewood , San Fernando and West Covina		
15.1		<p>The City's comments are contained in the petition the City filed with the State Board in early June of this year. As you may be aware, the State Board rejected the City's petition in a letter dated June 9, 2011. This action was based on an opinion from the Assistant Chief Counsel, who concluded that Regional Board adoptions of basin plans are not subject to review by petition to the State Board, per CWC §13320. However, we struggle to find anything in this section that prevents the State Board from reviewing a Regional Board's adoption of a TMDL as a basin plan amendment. It states clearly that:</p> <p>(a) Within 30 days of any action or failure to act by a regional board under subdivision (c) of Section 13225, Article 4 (commencing with Section 13260) of Chapter 4, Chapter 5 (commencing with Section 13300), Chapter 5.5 (commencing with Section 13370), Chapter 5.9 (commencing with Section 13399.25), or Chapter 7 (commencing with Section 13500), any aggrieved person may petition the state board to review that action or failure to act. In case of a failure to act, the 30-day period shall commence upon the refusal of the regional board to act, or 60 days after request has been made to the regional board to act. The state board may, on its own motion, at any time, review the regional board's action or failure to act and also any failure to act under Article 3</p>	<p>See State Water Board letter response to the petition of the City dated June 9, 2011:</p> <p>“ Actions regarding Basin Plans are adopted pursuant to Article 3 (commencing with Section 13240) of Chapter 4 of Division 7 of the Water Code. Such Actions and failures to act are not subject to review by petition to the State Water Board. (Wat. Code, § 13320) The Basin Plan amendments are not effective unless and until they are approved by the State Water Board. (Wat. Code, § 13245).”</p>

No.	Author	Comment	Response
		(commencing with Section 13240) of Chapter 4. It is apparent that nothing in the above suggests the State Board cannot review a Regional Board's adoption of a basin plan amendment as a "failure to act" issue. Further, the City knows of no case law that supports that conclusion. Perhaps one day this issue will be resolved by the legislature.	
15.2		The DC/Harbor Toxics TMDL Inappropriately Requires MS4 Permittees to Pay for Removal or Containment of Contaminated Sediment in the Harbors and Should Be Revised or Clarified to Eliminate this Possible Interpretation.	See response to comment 1.7.
15.3		The DC/Harbor Toxics TMDL Inappropriately Includes Los Angeles River and San Gabriel River Permittees and Its Applicability is Unclear.	See response to comment 1.8.
21	City of Bellflower		
21.1		The Regional Board included the City of Bellflower, along with the Cities of Lakewood, Paramount and Signal Hill, under the Harbors TMDL's Category 2 of responsible parties for the "Greater Los Angeles and Long Beach Harbors" because "the cities are part of the Los Cerritos Watershed." The Los Cerritos Channel Freshwater Watershed, as the name indicates, is a freshwater watershed; therefore, discharges to the Los Cerritos' Channel should be recognized as discharges to freshwater, and should not be included in the "nearshore watershed" category, as discharges to this channel are not discharges to the saline waters of the Harbors. Discharges from the City of Bellflower, and other cities that drain to the Los Cerritos Channel, should be included in the MS4 waste load allocations, as other MS4 discharges regulated by the Harbors TMDL.	The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 32.41 and Los Angeles Water Board's response to comment 1.4.
21.2		The Regional Board added new language to the Harbors TMDL at	See response to comment 34.1.

No.	Author	Comment	Response
		the adoption hearing and after the close of all opportunity for public comment. The new language represents an important change in the overall TMDL, as it indicates that the targets and allocations, of the Harbors TMDL may be changed at any time, and bases compliance with the Harbors TMDL on fish tissue targets that are identical to OEHHA's Fish Contaminant Goals (FCGs). We believe that the Regional Board should have used OEHHA's Advisory Tissue Levels (ATLs) instead of FCGs and should have solicited public comment on the proposed changes.	
21.3		The Harbors TMDL is not based upon best available science. Specifically, it fails to implement the State's Sediment Quality Objectives (SQO) Policy and instead uses Sediment Quality Guidelines (which were explicitly supplanted by the SQO Policy) as TMDL targets. Further, the modeling used to develop the Harbors TMDL makes key assumptions that are inappropriate and unsupported, and that lead to a TMDL that is not scientifically defensible and that may not regulate the pollutant(s) that may be responsible for impairment within the Harbors.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 1. 4.
21.4		The Harbors TMDL assigns allocations to bed sediment, despite the fact that a TMDL is by definition "a calculation of the maximum amount of pollutant that a waterbody can receive and still meet water quality standards" (USEPA definition, 2011). Many of the pollutants regulated by the Harbors TMDL are legacy pollutants; current inputs are a very small fraction of historic loads, and the sediments contain a vast repository of these legacy pollutants. Regulating current inflows of pollutants to the Harbor waters will do almost nothing to change the mass or concentration of those pollutants that already reside within the Harbor sediments. Thus, a TMDL that regulates inflows is an ineffective and inappropriate mechanism for achieving attainment within the Harbors.	The State Water Board agrees that much of the source of the impairment is the result of legacy pollutants, however, pollutants continue to be discharged to the impaired water bodies and are required to be controlled under the CWA. In addition, the sediments are a continuing source of pollutants into the water column that result in impacts on fish tissue. The TMDL definition does not preclude consideration of legacy pollutants as a cause of an impairment.

No.	Author	Comment	Response
21.5		The Regional Board has not responded to the specific concerns we raised about its CEQA analysis.	The Los Angeles Water Board responded to all significant CEQA comments. See Los Angeles Water Board's response to comments 20.8-20.14; 36.30; 36.31; 36.48 and additional responses contained herein.
22	City of Claremont		
22.1		<p>The Los Angeles Regional Board's Resolution No. R11—008 expressly provides that the Los Angeles and San Gabriel Rivers "are not [the] focus of this TMDL." The Regional Board's responses to comments also stress this point, stating that "the Los Angeles River Watershed and San Gabriel River Watershed are not [the] focus of these TMDLs." (See Response to Comment No. 1.2) The responses to comments further provide that "WLAs and LAs are not assigned to [the] Los Angeles River and San Gabriel River" and that dischargers in those watersheds are not identified as responsible parties for achieving compliance at this time. (See Response to Comment No. 1.3 and 14.2) Nevertheless, the Basin Plan Amendment incorporating the TMDL purports to establish and assign waste load allocations for "MS4-LA County Permittees." Moreover, the Basin Plan Amendment purports to incorporate by reference "responsible parties" from the Los Angeles River and San Gabriel River Metals TMDLs into this TMDL, and purports to impose unclear by apparently new monitoring requirements on those parties. (See Basin Plan Amendment at p. 12 and 22-23)</p> <p>Such a backhanded approach to a Basin Plan Amendment incorporating a TMDL is not appropriate either procedurally or substantively. Procedurally, Claremont has not been provided with fair notice about how the Basin Plan Amendment might apply to it and no evidence of why Claremont should be incorporated by reference into this Amendment. It is fundamentally unfair to cast such a wide but indirect net through the Basin Plan process.</p>	<p>See response to comment 1.8.</p> <p>The public has had a full and fair opportunity to participate in the review of the Basin Plan Amendment. A draft of the 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 the Los Angeles Board's 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 held a public hearing on May 5, 2011 to consider adoption of the TMDL, and the public had an opportunity to address the Regional Board and make oral comments. Therefore, the Regional Board has provided due process.</p>

No.	Author	Comment	Response
22.2		<p>Substantively, it is unfair to layer additional requirements on Claremont above and beyond any portions of the San Gabriel River Metals and Selenium TMDL that apply to it. During the development of the San Gabriel River metals and Selenium TMDL, Regional Board staff responded to a comment regarding the breadth of that TMDL by stating as follows: “addressing the impairing metals and selenium throughout the San Gabriel River Watershed will ensure that they do not contribute to impairments elsewhere in the watershed. Thus, any loading is addressed by that TMDL. Since the San Gabriel River Selenium and Metals TMDL addresses these potential loads, there is no basis to include Claremont in a TMDL that does not focus on the San Gabriel River but addresses issues at the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters. The Regional Board's responses to comments confirm this fact by noting that other TMDL's address upstream loading, but the Basin Plan Amendment has not been revised to remove Claremont.</p>	<p>See response to comments 1.7, 1.8, and 9.2.</p>
22.3		<p>For these reasons, Claremont believes that the State Board must: (1) revise the Basin Plan Amendment to make it clear that Claremont is not a "responsible party" on the TMDL; or (2) at a minimum, clarify that the Basin Plan Amendment creates no additional requirements - direct or indirect - for Claremont beyond compliance with any applicable provisions (including monitoring) of the San Gabriel River Selenium and Metals TMDL.</p>	<p>The TMDL appropriately identifies Claremont as a responsible party to the TMDL as part of the Los Angeles River and San Gabriel River Watersheds TMDL group because it discharges stormwater to Walnut Creek and San Jose Creek in the San Gabriel River watershed. The TMDL, as it is adopted by the Los Angeles Water Board, requires that Los Angeles River Watershed and San Gabriel River Watershed responsible parties identified in effective metals TMDLs for Los Angeles River and San Gabriel River, including the City of Claremont, 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.</p>

No.	Author	Comment	Response
23	City of Los Angeles Department of Water and Power		
23.1		<p>Stormwater Wasteload Allocations, RTC 23.2 Pages 12 and 13 of the Basin Plan Amendment (HBPA) have 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). In the Response to Comments, the RWQCB stated that they disagreed, but did not provide a reason for the disagreement.</p> <p>Recommendations: The BPA should clarify that compliance for stormwater requirements should be expressed as BMP implementation for construction and industrial stormwater permits, as long as estimates for BMP performance in total provide a reasonable assurance that concentration targets or sediment quality objectives may be achieved to the maximum extent practicable.</p> <p>The BPA should also specify the maximum design storm that dischargers should use in planning BMPs for reduction of pollutants.</p> <p>Furthermore, the RWQCB seems to be requiring permit writers to implement concentration-based effluent limitations in stormwater permits. Implementation of the Best Management Practices (BMPs) consistent with the stormwater management program and the Minimum Control Measures outlined in 40 CFR 132.34 is considered to constitute compliance with the standard of compliance, maximum extent practicable or MEP. To achieve reductions in stormwater discharges, EPA regulations establish</p>	<p>The State Water Board agrees with the Los Angeles Water Board response. See Los Angeles Water Board response to comment 39.5: “The 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).</p> <p>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 include other requirements such as numeric effluent limits that may be necessary to achieve water quality standards.</p>

No.	Author	Comment	Response
		<p>six categories of Minimum. Control Measures BMPs that must be met by permittees (these are "narrative" permit effluent limitations). The six BMP categories, also called, "minimum control measures" in the Federal regulations, are: 1. Public education and outreach on stormwater impacts 2. Public involvement /participation consistent with state/local requirements in the development of a stormwater management plan. 3. Illicit discharge detection and elimination, including mapping of the existing stormwater sewer system (including at least the outfalls) and adoption of an ordinance to prohibit illicit connections and control erosion and sedimentation from development. 4. Control of runoff from construction sites when one to five acres of land are disturbed. (Phase I covered sites larger than five acres.) 5. Post-construction stormwater monitoring and management in new development and redevelopment, and 6. Pollution prevention and good housekeeping for municipal operations and maintenance facilities Under Phase II, permittees are also required to establish measurable goals for each BMP. EPA has developed a National Menu of BMPs available for meeting the minimum control measures. Information can be found on EPA's website at: http://cfpub.epa.gov/npdes/stormwater/menuofbmps/menu.cfm.</p>	<p>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)."</p>
23.2		<p>Use of Effects Range Low Values are Inappropriate as TMDL Targets, RTC 23.3 LADWP commented that Effects Range Low values (ERLs) are not appropriate and also unreliable for evaluating waterbody toxicity.</p> <p>The Response to Comments refers the reader to RTC 20,1, which states that "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</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 20.1.</p> <p>In summary: While several stakeholders questioned the use of ERLs to set sediment targets because the State now has a 'triad' approach using the Statewide Sediment Quality Objectives (SQOs) and also because, if the</p>

No.	Author	Comment	Response
		<p>chemical conditions. Because this TMDL also allows compliance to be demonstrated using the triad [from the Sediment Quality Objectives or SQOs], healthy sediments in the Harbors considered to be in compliance even if the ERL target is exceeded.</p> <p>The Response to Comments further explains; "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...is consistent with previously adopted TMDLs in the Los Angeles Region..." "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..."</p> <p>LADWP disagrees with the RWQCB's response. For sediment toxicity, the WLAs given are based on Effects Range Low (ERLs) and Threshold Effects Concentrations (TECs) rather than quantities based on the triad approach specified by the California Sediment Quality <i>Objectives</i>. <i>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,</i></p> <p><i>"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</i></p>	<p>harbors were to use ERLs as dredging clean-up goals, most of both harbors would require dredging and the cost would be great. Per federal requirements, TMDLs necessarily include numeric targets and allocations. Because it is not possible to calculate numeric TMDLs or allocations from a categorical assessment such as the SQOs provide, ERLs are included in this TMDL. ERLs are a meaningful target for sediment quality and are protective. In addition, the use of ERLs as numeric targets is consistent with previously adopted TMDLs in the Los Angeles Region.</p> <p>This TMDL allows the use of the State's SQOs as a means of demonstrating compliance with the TMDLs for direct effects (even at sampling locations where ERLs may be exceeded). The TMDL also includes the use of the SQOs to determine hotspots for potential remediation action. Therefore, there will be no compelling reason to dredge to ERL levels. The TMDL has been revised to clarify the alternative means of demonstrating compliance and that ERL values are not 'clean-up standards.'</p>

No.	Author	Comment	Response
		<p><i>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."</i></p>	
23.3		<p>The impairment assessment of the proposed draft BPA did not utilize the SQO Policy (nor did it use ERLs but instead Effects Range Medians or ERMs), 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.</p>	<p>State Water Board disagrees. Using SQO-Part 1 assessment procedures, Los Angeles Water Board staff and EPA 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.</p> <p>The Basin Plan Amendment (p. 33) includes:</p> <p>“Optional special studies, which could result in changes to these TMDLs, include but are not limited to: studies to further refine the site specific link between sediment pollutant concentrations, depth of bed sediment contamination and fish tissue concentrations; foraging ranges of targeted fish; additional data to refine watershed and hydrodynamic</p>

No.	Author	Comment	Response
			<p>models, including that collected pursuant to this TMDL; additional data on contaminant contributions of the Los Angeles River or San Gabriel River to Greater Harbor waters; stressor identifications; and additional diazinon data. Completion of studies to further refine the site specific link between sediment pollutant concentrations and fish tissue pollutant concentrations and evaluate the range and habitat of specific fish populations will be used to evaluate changes in TMDL targets, WLAs and LAs, and to guide future implementation actions.”</p> <p>The TMDL is 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.</p> <p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.1, 23.1, 23.4, and 38.7.</p>
23.4		Sediment Quality Guidelines such as ERLs and ERM s were developed for use only as screening tools and were not intended for use as regulatory standards or endpoints (as they are proposed to be used in the TMDL). The SWRCB explicitly considered and rejected the continued use of Sediment Quality Guidelines as a CEQA alternative when it adopted the SQO Policy. The SWRCB Staff Report for the SQO Policy presented citations for a number of scientific research articles,	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 20.1.</p> <p>The Staff Report for this TMDL included this reference on the sediment quality guidelines:</p>

No.	Author	Comment	Response
		<p>and utilized the input of a highly qualified Scientific Steering Committee and peer reviewers, in evaluating and rejecting the use of Sediment Quality Guidelines like ERLs for future use within the State (see, for example, SQO Policy Staff report, September 16, 2008, at p, 5-22). Documents produced during the SQO Policy development process and included in that record indicate that even Dr. Ed Long, the original author of ERLs and ERMs and a member of the Scientific Steering Committee for the State Water Board SQO Policy, rejected their use as regulatory endpoints.</p> <p>By contrast, the RWQCB, in its response to comments, has not provided a citation to support its assertions that "the toxicity predictive ability of ERLs has been tested in the field" or that ERLs are "protective predictors.</p> <p>Recommendation: RWQCB should work with dischargers and/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 and ERMs), as well as gather data necessary to support de-listing of the sediment.</p>	<p>Long, E.R., D.D. MacDonald, S.L. Smith, and F.D. Calder. 1995. Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuarine sediments. Environm. Mgmt. 19: 81-97.</p> <p>In addition, the predictive ability of Sediment quality guidelines is discussed by the same authors in: Long, E.D. and D.D. MacDonald. 1998. Recommended uses of empirically derived, sediment quality guidelines for marine and estuarine ecosystems. Human and Ecol. Risk Assess. 4: 1019-1093.</p>
23.5		<p>Existing USEPA-Approved Variances, RTC 23.5 Page 4 of the 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 (freshwater). 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.</p> <p>The Regional Board's response was that variances should be considered on a site-specific basis, and also that variances</p>	<p>Variances may indeed be superseded 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.</p> <p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 23.5.</p>

No.	Author	Comment	Response
		<p>should be explored on a site-specific, chemical specific basis, not as part of a watershed wide pollutant budget.</p> <p>Recommendation: In its adopting resolution, RWQCB should clarify that existing EPA-approved variances are allowed for qualified dischargers.</p>	
23.6		<p>Using Modeling to Calculate WLAs and LAs, RTC 23.6a(i) - 23.6a(iv) LADWP noted in its comments that the allocations that were calculated (from the model results) did not consider through-Harbor flux of sediment, as <i>indicated in the response to Comment 23.6a(iv)</i>. For <i>this reason</i>, it is not clear what the load and waste load allocations actually represent-or how they might be implemented in permits. It is also unclear. how the fraction of load from any given source that settles to the Harbor sediments was calculated or estimated. It appears that <i>it is incorrect to apply the WLAs and LAs as permit limits</i>, since these allocations are only for the small fraction of sediment and pollutant discharged that settles to the Harbor floor.</p> <p>The RWQCB disagreed in its response, stating that the model did, in fact, allow for the through-Harbor flux. However, LADWP believes that although the modeling included through-harbor flux, this same flux was neglected when Load and Wasteload Allocations were calculated.</p> <p>Recommendation: The RWQCB should not only ensure that the modeling incorporates sediment flux out of the Harbor, but the Load and Wasteload Allocation calculations should also incorporate the flux. LADWP requests that the TMDL allocations be revised to include an allowance for sediment and associated pollutants that flow out of the harbor.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 23.6a (iv).</p>

No.	Author	Comment	Response
23.7		<p>DDTs and PCBs in Sediment, RTC 23.6b</p> <p>LADWP commented that 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 contradicted by <i>the fact that most measurements of these pollutants in tributary streams are present below detection levels.</i></p> <p>In the RWQCB's response, the RWQCB stated "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.</p> <p>LADWP disagrees.</p> <p>The LADWP has not seen data that would support this theory. As shown in figures within the Staff Report and its appendices, simulated concentrations of DDT and PCBs are well above detection limits, such that if the theorized concentrations of pollutants were actually present in inflows, they should have been detected. However, concentrations in samples collected from inflowing streams are below detection limits. There is no evidence that pollutant concentrations on sediment particles in rivers and streams entering the Harbor are anywhere near the levels assigned to them within the model.</p> <p>Recommendation: The RWQCB should provide data that shows that higher pollutant concentrations <i>on sediments washing into the Greater Harbor actually exist.</i></p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 23.6b.</p>

No.	Author	Comment	Response
23.8		<p>Higher Concentrations of Pollutant at Greater Depth in Sediment, RTC 23.6c</p> <p>LADWP expressed concern that concentrations of pollutants in bedded <i>sediments were assumed to be uniform with depth</i>. <i>This assumption is also unrealistic, particularly for legacy pollutants such as DDT; which was banned in 1972.</i> 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 a conservative generalization that overestimates 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.</p> <p>The RWQCB's response was that the best available data was used, and that core sampling would be done before any dredging.</p> <p>LADWP believes that the best available data was insufficient for TMDL calculations.</p> <p>The assumption that pollutant concentrations within the sediment bed are uniform is an oversimplification and appears to be unsupported by any data. The higher pollutant concentrations at depth within the sediment may materially affect surface concentrations and remediation methods, depths, and extent, and the Regional Board's economic and CEQA analyses. Also, surface concentrations of pollutants-within the Harbor are almost certainly the result of historic discharges of higher concentrations of pollutants, not the result of current-day inflows. The RWQCB's response has not addressed these points.</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 23.6c.</p>

No.	Author	Comment	Response
		<p>The RWQCB's claim that sediment core sampling can be deferred until consideration of remediation activities (such as dredging) misses the point that information about the distribution of contaminants in the sediment will have significant implications for the modeling results used to establish the TM DLs.</p> <p>Recommendation: The RWQCB should address the pollutant concentrations at various depths and their relation to historic discharges and modeling results.</p>	
23.9		<p>Insufficient Wet Season Modeling Data, RTC 23.6d The RWQCB failed to evaluate wet season conditions in detail. The RWQCB's response was that modeling was based on best available data and can be refined with new data in the future.</p> <p>LADWP's response The wet weather loads are, in the modeling, 'responsible for the vast majority of pollutants in inflows to the Harbor, yet the Regional Board has no data upon which to evaluate these loads or the model's representation of these loads. For this reason, the results of the modeling for wet weather needs more statistical support, not because the Regional Board relied upon "best available data" but because sufficient data was not available to support the modeling and TMDL development.</p> <p>Recommendation: Since the largest amounts of pollutants are believed to be deposited during wet weather, the TMDL should be remanded to the RWQCB until appropriate data have been collected and modeling with the new data is completed. Alternatively, compliance with TMDL Load and Wasteload Allocations should be delayed until further wet weather sampling and modeling have been completed and the</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 23.6d.</p>

No.	Author	Comment	Response
		TMDL reconsidered.	
23.10		<p><i>Air Deposition Alone Exceeds the TMDLs for Some Pollutants, RTC 23.8</i> LADWP commented that atmospheric deposition alone exceeds the TMDL. Regional Board's <i>response was that air deposition estimates were based on measurements from 2006. "...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 the first five years of implementation."</i></p> <p>Recommendation: The RWQCB provides no support for the assertion that constant remediation will not be required by a source that contributes more than the loading capacity for the waterbody. If the RWQCB believes this to be true-for example, if it believes that the assumed aerial deposition fluxes are too large, <i>or that not all of the material that enters the waters of the Harbor from the atmosphere will be deposited to the sediments-then the modeling and allocations of the TMDL should be revised and adjusted to reflect these beliefs, and the beliefs themselves should be clearly stated in the TMDL and supported by data or evidence.</i></p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comments 23.7; 23.8; and 36.52.</p>
23.11		<p>Economic Impacts, RTC 23.9 LADWP commented that economic and environmental impacts were underestimated. RWQCB's response <i>is that they probably actually overestimated costs, and actual costs are likely to be lower than they indicated.</i> RWQCB relies upon a memorandum <i>presented by the Ports'</i> consultants for these calculations.</p> <p>LADWP is concerned regarding the RWQCB analysis. LADWP notes that the TMDL targets and allocations are based on</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 23.9.</p>

No.	Author	Comment	Response
		<p>ERLs, and these would be the legally applicable requirements if the TMDL becomes effective; However the RWQCB's cost estimates are based not on compliance to ERL targets, but rather on dredge volumes based on SQO Policy.</p> <p>Furthermore, the TMDL appears to indicate that continuous dredging will be required based on aerial deposition alone (see 23.8), so that it's very unclear that the RWQCB's cost or environmental evaluations are tied to the TMDL that the RWQCB has adopted.</p> <p>Recommendation: The RWQCB should revise the compliance costs based on compliance with ERLs for all associated subwatersheds.</p> <p>Conclusion and Recommendation: In conclusion, LADWP believes that the TMDL as written contains sufficient deficiencies that warrant significant reanalysis and revision.</p>	
24	City of Los Angeles		
24.1		<p>COMPLIANCE OPTIONS FOR BIOACCUMULATIVE COMPOUNDS ARE INAPPROPRIATELY BASED UPON ATTAINING TISSUE VALUES FOR PROTECTION OF FINFISH AND WILDLIFE</p> <p>A modification to the compliance options for Mass-Based Allocations for Bioaccumulative Compounds (Wasteload and Load Allocations Section; pg. 21 of the Final BPA), specifically, compliance option d (see italicized text below), was made to the final version of the BPA. Page 21 of the Final BPA states (emphasis added): Compliance with these bioaccumulative TMDLs may be demonstrated via any of four different means.</p> <p>a. Fish tissue targets are met in species resident to the</p>	<p>An amendment of the Enclosed Bays and Estuaries Plan for sediment quality, protective of fish tissue, has not been developed. The additional language does not specifically address any potential ultimate receptor such as human health or fish or other wildlife health and is appropriately general.</p>

No.	Author	Comment	Response
		<p>TMDL waterbodies.</p> <p>b. Final sediment allocations, as presented above, are met.</p> <p>c. Sediment numeric targets to protect fish tissue are met in bed sediments over a three year averaging period.</p> <p>d. <i>Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.</i></p> <p>In the February 18, 2011 comment letter to the Regional Board, the Bureau did request clarification regarding compliance language associated with WLAs for bioaccumulative compounds. The Bureau requested that the BPA recognize that revisions to the numeric targets are anticipated after Phase II sediment quality objectives (SQOs) to protect human health are established by the State Board. Such objectives will become the applicable water quality standards and should replace the guidelines utilized as the basis for the numeric targets. Per the response in A42 in the Response to Comments, the Regional Board viewed the existing language (compliance options a. and b.) as sufficient.</p> <p>However, the compliance options related to fish tissue were revised in the Final BPA, but the modified language does not address the pending Phase II sediment quality objectives for the protection of human health; rather, the revised language implies that attainment of the wasteload allocations developed to protect <i>human health</i> would need to be demonstrated by the attainment of tissue values developed to protect <i>resident finfish and wildlife</i>.</p> <p>The TMDL makes no finding of impairment for wildlife or resident finfish, the numeric targets are selected to protect human health, not wildlife or resident finfish, and the allocations are designed to reduce sediment levels to result in lower tissue</p>	

No.	Author	Comment	Response
		<p>values to protect human health, not wildlife or resident finfish. For bioaccumulative compounds, the TMDL was specifically developed to protect human health, as noted in the Final BPA (emphasis added):</p> <p>"Fish tissue targets were determined from Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene, developed by OEHHHA (2008) to assist agencies in developing fish tissue-based criteria for pollution mitigation or elimination and to protect humans from consumption of contaminated fish. Associated sediment targets required to achieve the fish tissue targets were determined from several sources depending on the contaminant."- Fish Tissue and Associated Sediment Targets, pg. 5.</p> <p>"Fish tissue levels of certain bioaccumulative compounds are above desired numeric targets. These TMDLs are designed to reduce contaminated sediment levels, which will result in lower corresponding pollutant levels in fish tissue." - Mass-Based Allocations for Bioaccumulative TMDLs, pg. 18.</p> <p>To achieve the above, the Bureau respectfully requests consideration of the following modifications to compliance option d for consistency with the intent of the TMDL and modifications incorporated into the Final BPA (deletions shown in strikeout text; additions in bold, double underline text):</p> <p>Compliance with these bioaccumulative TMDLs may be demonstrated via any of four different means:</p> <ol style="list-style-type: none"> Fish tissue targets are met in species resident to the TMDL waterbodies. Final sediment allocations, as presented above, are met. Sediment numeric targets to protect fish tissue are 	

No.	Author	Comment	Response
		<p>met in bed sediments over a three year averaging period.</p> <p>d. Demonstrate that the sediment quality condition protective of fish tissue <u>human health</u> is achieved per the Statewide <u>Water Quality Control Plan for Enclosed Bays and Estuaries Plan</u>, as amended to address contaminants in resident finfish and wildlife.</p> <p><i>Requested Action: Revise Compliance Option d. on Page 21 of the Final BPA in order to:</i></p> <ul style="list-style-type: none"> <i>Provide for compliance to be based upon attaining the Phase II sediment quality objectives, after such objectives are adopted by the State Board; and</i> <i>Remove the inconsistency in the revised language that implies attainment of tissue values for human health can be demonstrated by the attainment of tissue values for resident finfish and wildlife.</i> 	
24.2		<p>EXCLUDING CHROMIUM FROM A COMPLIANCE OPTION BASED UPON THE PHASE I SQOs IS INCONSISTENT WITH STATE BOARD POLICY</p> <p>A modification to the compliance options for Mass-Based Allocations for Metals and PAH Compounds (Wasteload and Load Allocations Section; pg. 14 of the Final BPA), specifically, compliance option b (see underlined italicized text below), was made to the final version of the BPA: In the Regional Board's Response to Comments (RTC), Regional Board staff indicates in several responses that the BPA was revised to allow compliance with WLAs through demonstrating attainment of the Phase I SQOs. The revision adequately and correctly addressed concerns raised by the Bureau and other stakeholders. However, the Final BPA specifically excludes chromium. The compliance options for Final Concentration-Based Sediment WLAs for metals</p>	<p>The State Water Board's SQO Response to Comments quoted by the commenter answer a different question than the question posed, here: are SQOs sufficient to determine if an established impairment has been corrected.</p> <p>The three comments from the State Water Board's SQO RTC in 2008, for which responses are provided by the commenter, were about whether other chemicals in general (and some nonchemical factors) should be included on the SQO chemical list and the need to update the chemical list. The SQO Response to Comments did not settle State Water Board's intention as to how to handle an established impairment for a</p>

No.	Author	Comment	Response
		<p>in Dominguez Channel Estuary, Consolidated Slip and Fish Harbor state:</p> <p>Compliance with these sediment TMDLs for Cu, Pb, Zn, Cd, Cr, Hg and total PAHs may be demonstrated via any one of three different means (emphasis added):</p> <ol style="list-style-type: none"> Final sediment allocations, as presented above, are met. <i>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 I, is met, <u>with the exception of Cr, which is not included in the SQO Part 1.</u></i> Sediment numeric targets are met in bed sediments over a three-year averaging period. <p>The exclusion of chromium from compliance option b. is inconsistent with the <i>Water Quality Control Plan for Enclosed Bays and Estuaries - Part I (Phase I SQOs)</i>, adopted by the State Board in 2008 and approved by USEPA in 2009 and results in a modification to the Final BPA that is inconsistent with the RTC. The applicability of the Phase I SQOs is not limited to the chemicals listed in the chemistry line of evidence (LOE), which is clearly demonstrated in State Board's RTC for the adoption of the Phase I SQOs:</p> <ul style="list-style-type: none"> "The chemical LOE does not reflect the chemicals that are being regulated under this draft Part 1; rather the chemical LOE provides a means to assess the overall risk of exposure to pollutants in sediments. If the MLOE indicates a potential risk of exposure and some evidence of biological effect, stressor identification is required to determine the cause. As more data becomes available, the list of chemicals is anticipated to increase." - RTC, Part 1 SQOs, Comment 1015 "While staff agree that the current list of chemicals is limited, it is not intended to be a complete list. Rather, the 	<p>chemical not included on the SQO list.</p> <p>There is a chromium impairment in Consolidated Slip. The impairment is included in the State's CWA Section 303(d) list and was reconfirmed during the development of this TMDL. Therefore, it is appropriate to exclude from compliance option b.</p>

No.	Author	Comment	Response
		<p>chemicals simply serve as surrogates for potential exposure. Sediment toxicity is also used in the integration scheme to provide a means for an exposure measurement when there are no chemicals present at levels suggestive of an exposure risk." - RTC, Part 1 SQOs (Comment 83)</p> <ul style="list-style-type: none"> "The toxicity and benthic community lines of evidence do reflect impacts from other chemicals and toxicants. Incorporation of the toxicity data as part of determining the chemical exposure potential during the assessment reduces the likelihood that sites impacted by constituents not on the SQO chemical list will be identified during the assessment. The list of chemicals in the plan does not imply that those are the only chemicals of concern; the list is based on chemicals of concern for which sufficient data was available to include in development of the chemical indices." - RTC, Part 1 SQO, Comment 208 and 1050 <p>The chemistry LOE is only one part of the Phase I SQOs and does not limit the chemicals that are regulated under the SQOs to those listed in the chemistry LOE (e.g., if it's not on the list in the chemistry LOE, it is not appropriate to state that the Phase I SQOs exclude that chemical). In the case of chromium in particular, chromium was purposefully not included in the chemistry LOE of the Phase I SQOs as chromium, like nickel, is heavily influenced by regional geochemistry (i.e., natural background concentrations) (personal communication, Chris Beegan, State Board staff).</p> <p>As this BPA is the first to incorporate the Phase I SQOs into a TMDL, it is important the precedent this TMDL sets is consistent with the Phase I SQOs. Therefore, <i>in</i> order to remove the inconsistency with the Phase I SQOs, the Bureau respectfully requests that the compliance options on page 17 of the final BPA are modified as follows (deletions shown in strikeout text): Compliance with these sediment TMDLs for Cu, Pb, Zn, Cd, Cr, Hg</p>	

No.	Author	Comment	Response
		<p>and total PAHs may be demonstrated via any one of three different means (emphasis added):</p> <ul style="list-style-type: none"> 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, 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. <p><i>Requested Action: Modify the compliance options on page 17 of the final BPA, as noted above, in order to remove a statement that is inconsistent with the Phase I SQOs adopted by the State Board.</i></p>	
24.3		<p>ADDITIONAL CLARIFICATION IS NEEDED RELATED TO THE FINAL MASS-BASED SEDIMENT ALLOCATIONS</p> <p>There are two components of the final mass-based sediment allocations the Bureau requested clarification for in the Bureau's February 18, 2011 comment letter to the Regional Board:</p> <ul style="list-style-type: none"> A. Identifying the appropriate assessment point for the mass-based allocations B. Including means of compliance consistent with the intent of the TMDL <p>The response to Comment I.A (presented on page 69 of the RTC matrix) states that: "The exact method of including the WLA into NPDES permits is not determined by this TMDL, but will be based on the administrative record for the permit at the time." The Bureau's request was to clarify the method for developing the WLAs so that NPDES permits could be written consistent with the</p>	<p>The mass-based sediment WLAs were developed based on hydrodynamic modeling of the amount of sediment deposited. The allocations for MS4 permittees and other permittees represent the allowable settleable load. That is, the allocations can be incorporated into permits in different ways, as long as the permit conditions the manner in which the allocation is included in the permit.</p>

No.	Author	Comment	Response
		<p>assumptions of the WLAs. The response did not address the lack of clarity; rather it further supports the necessity to provide clarity.</p> <p>The response to Comment 1.B (presented on page 69 of the RTC matrix) states that:</p> <p style="padding-left: 40px;">"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 targets can be considered as third option of compliance with direct effects allocation for sediment."</p> <p>The BPA was revised to provide additional means for demonstrating compliance based on this reasoning. However, the RTC did not respond to one approach specifically requested in the Bureau's Comment Letter.</p> <p>As such, the. Bureau respectfully requests consideration of the following comments, revised for consistency with the Final BPA.</p> <p>A. <u>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, page 17 of the Final BPA 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 assumptions of</p>	

No.	Author	Comment	Response
		<p>the WLAs, which are based on an acceptable bed sediment condition rather than a discharge condition, but would also require dischargers to reduce loadings well below a level that would cause or contribute to an impairment in the sediment.</p> <p>B. <u>Means of Demonstrating Compliance</u></p> <p>For demonstrating compliance with direct and indirect effects allocations, revisions to the Tentative BPA resulted in additional clarity in the Final BPA associated with attaining targets in bed sediments. However, additionally clarity is needed so that discharges (i.e., waters discharged from a responsible party) that meet the sediment targets also represent a means for demonstrating compliance. Simply put, if a discharge concentration does not exceed a TMDL target then a discharger should be in compliance.</p> <p><i>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:</i></p> <ul style="list-style-type: none"> <i>Add the following clarifying language prior to the both the direct and indirect effects mass-based allocation tables on pages 14 and 18, respectively: "The mass-based sediment allocations indicate the allowable settleable load to bed sediments from each source."</i> <i>In the means to demonstrate compliance following both the direct and indirect effects mass-based allocations tables include the following on pages 17 and 21, respectively: "Discharge concentrations meet the TMDL sediment targets on a three year averaging period in all waterbodies."</i> 	
24.4		CLARIFICATION OF RESPONSIBLE PARTIES TO THE	The State Water Board agrees that the Waste

No.	Author	Comment	Response
		<p>DOMINGUEZ CHANNEL ESTUARY BED SEDIMENTS</p> <p>In the Bureau's February 18, 2011 comment letter to the Regional Board, the Bureau requested clarification on which parties were assigned the responsibility to meet bed sediment load allocations in the Dominguez Channel Estuary. The response to this comment (presented on page 81 of the RTC matrix) indicated that the BPA had been revised on page 31 of the tentative BPA. However, no changes addressing the comment appear on page 31 of the tentative BPA and no changes are apparent in the Final BPA. As such, the Bureau respectfully requests consideration of the following comment.</p> <p>In the Mass-based Allocations for Metals and PAHs compounds section of the Final BPA (page 14), bed sediment allocations are assigned as follows: "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." Thus all the bed sediment allocations for metals and PAHs in all waterbodies appear to have only been assigned to the cities of Los Angeles and Long Beach and the States Land Commission.</p> <p>In the Mass-based allocations for Bioaccumulative Compounds section of the Final BPA (page 18), bed sediment allocations are assigned as follows: "The Greater Harbor Waters (excluding LA River Estuary and Consolidated Slip) 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." Thus all the bed sediment allocations for bioaccumulative compounds in the Greater Harbors Waters appear to have only been assigned to the cities of Los Angeles and Long Beach and the States Land Commission.</p> <p>However, the bed sediment allocations for Dominguez Channel do not appear to have been assigned to any responsible party. The Implementation Plan section (page 29) of the Final BPA</p>	<p>Load and Load Allocations section of the adopted Basin Plan Amendment is not necessarily explicit in how the LA are assigned, however the State Water Board agrees with the Los Angeles Water Board that the Implementation Plan section No. 6 Application of Allocations to Responsible Parties spells out the responsible parties with sufficient clarity.</p> <p><i>(Implementation Plan Section No. 6, Application of Allocations to Responsible Parties, is on page 35 of the adopted Basin Plan Amendment and page 31 of the tentative Basin Plan Amendment).</i></p> <p>The TMDL allocation section on page 14 clearly identifies that 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. The TMDL does not contain language that could be interpreted that MS4 permittees that are situated in the Los Angeles River and San Gabriel River would be required to share the cost to implement remediation to achieve the LAs in the Harbors.</p>

No.	Author	Comment	Response
		<p>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." Also in the Implementation Plan section (page 30) of the Final BPA, sediment reductions within the Ports are assigned to the cities of Los Angeles and Long Beach and it is assumed they are assigned the responsibilities as the owner operators.</p> <p>In the Machado Lake Toxics TMDL (Regional Board Resolution No. R10-008), 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 clarified as being assigned 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.</p> <p>Requested Action: For consistency with previously adopted TMDLs and consistency within this TMDL, please clarify within the allocations and implementation sections that the bed sediment load allocations and corresponding implementation actions for the Dominguez Channel and Estuary are assigned to the Los Angeles County Flood Control District.</p>	
24.5		<p>CLARIFICATION ON THE INTERACTION BETWEEN PARTIES RESPONSIBLE FOR ADDRESSING BED SEDIMENTS AND THE POTENTIALLY RESPONSIBLE PARTIES TO THE MONTROSE SUPERFUND SITE IS NEEDED</p> <p>There are two Superfund sites located within Dominguez Channel Watershed: the Montrose Superfund Site and the</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and changes to the Basin Plan Amendment and agrees with its responses. See response to comment 0.1 and 11.3 and Los Angeles Water Board's response to comment 21.8.</p>

No.	Author	Comment	Response
		<p>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. As such, in the Bureau's February 18, 2011 comment letter to the Regional Board, the Bureau requested that the BPA acknowledge:</p> <ol style="list-style-type: none"> 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 MS4 responsibilities, such actions are not expected prior to the adoption and implementation of a final remedial decision for the Montrose Superfund Site. <p>The response from the Regional Board (presented on page 82 of the RTC matrix) states that it would be reasonable for the TMDL responsible parties to participate in cleanup of sediments. The Bureau agrees that it is reasonable to require TMDL responsible parties to participate in cleanup of sediments. However, TMDL responsible parties should participate with the Superfund Potential Responsible Parties (PRPs).¹ As the TMDL is currently written, TMDL responsible parties may be required to clean up Dominguez Channel prior to a final remedial decision. Thus, the TMDL responsible parties would bear the burden of the PRPs' responsibilities under Superfund. It is unreasonable to require TMDL 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</p>	<p>USEPA 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 the TMDL implementation plan, the TMDL responsible entities must consult with USEPA 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 USEPA's actions at the OU2 site.</p> <p>Some of the parties responsible for sediments containing DDT and PCBs were also parties to a Consent Decree with USEPA and some agencies of the State of California. See Response to Comment 11.3. The Consent Decree did not determine the timing or scope of cleanup, but USEPA agreed to implement cleanup of some areas under the Consent Decree.</p> <p>The TMDL allocation section on page 14 clearly identifies that 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. The TMDL does not contain language that could be interpreted that MS4 permittees that are situated in the Los Angeles River and San Gabriel River would be required to share the cost to implement remediation to achieve the LAs in the Harbors.</p>

No.	Author	Comment	Response
		<p>responsible parties within Dominguez Channel Watershed to meet the TMDL should be directly tied to USEPA's decision making process.</p> <p><i>Requested Action: Clarify in the BPA that to the extent that cleanup is necessary to meet the MS4 responsibilities, such actions are not expected prior to the adoption and implementation of a final remedial decision for the Montrose Superfund Site.</i></p> <p>The Bureau is committed to improving and protecting the local environment as evidenced by the leadership role the City has taken in implementing previously adopted TMDLs, such as the LA River Trash TMDL, and in proactively implementing clean water projects, such as the Echo Park Lake Ecosystem Rehabilitation Project, via the voter approved Proposition 0 ballot measure. These investments in the future are done in partnership with your agency to achieve maximum return in local environmental programs and infrastructure.</p>	
25	City of Signal Hill		
25.1		<p>The Regional Board added new language to the Harbor TMDL at the adoption hearing and after the close of all opportunity for public comment. The new language represents an important change in the overall TMDL, as it indicates that the targets and allocations of the Harbor TMDL may be changed at any time, and bases compliance with the TMDL on fish tissue targets that are identical to OEHHA's Fish Contaminant Goals (FCGs). We believe that the Regional Board should have used OEHHA's Advisory Tissue Levels (ATLs) instead of FCGs and should have solicited public comment on the proposed changes. See the attachment for greater detail.</p>	See response to comment 34.1.
25.2		<p>The Harbor TMDL is not based upon best available science. Specifically, it fails to implement the State's Sediment Quality Objectives (SQO) Policy and instead uses Sediment Quality Guidelines (which were explicitly supplanted by the SQO Policy) as TMDL targets. Further, the modeling used to develop the</p>	See response to comments 23.4 and 25.12 and 25.13, below.

No.	Author	Comment	Response
		TMDL makes key assumptions that are inappropriate and unsupported, and that lead to a TMDL that is not scientifically defensible and that may not regulate the pollutant(s) that may be responsible for impairment within the Harbor.	
25.3		The Harbor TMDL assigns allocations to bed sediment, despite the fact that a TMDL is by definition "a calculation of the maximum amount of pollutant that a waterbody can receive and still meet water quality standards" (USEPA definition, 2011). Many of the pollutants regulated by the TMDL are legacy pollutants; current inputs are a very small fraction of historic loads, and the sediments contain a vast repository of these legacy pollutants. Regulating current inflows of pollutants to the Harbor waters will do almost nothing to change the mass or concentration of those pollutants that already reside within the Harbor sediments. Thus, a TMDL that regulates inflows is an ineffective and inappropriate mechanism for achieving attainment within the Harbor.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.38 and 40.5.
25.4		The Regional Board has not responded to the specific concerns we raised about its CEQA analysis.	See responses to CEQA comments, below.
25.5		FSI's Response to LARWQCB's Response to Comment no. 40.1. It is unclear which portions of the lengthy response to Comment 20.1 the Board believes to be relevant to Comment 40.1, but it seems that the Board's response was essentially: 1) that SQO part I methodology was applied as part of an "assessment review," and there were sufficient exceedances according to that methodology to confirm impairment and to warrant the TMDL; 2) that SQGs were necessary to translate judgments of sediment impairment into the numeric targets required for a TMDL, something that SQO methodology cannot do; and 3) that compliance with the TMDL may be demonstrated by attaining SQO standards and not merely by meeting the SQG-based TMDL loads.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 23.4 and Los Angeles Water Board's response to comment 20.1 The impairments addressed by this TMDL are well documented (Staff Report sections 2.3 – 2.8); in addition, the "assessment review" using available data, did, in fact, confirm impairments. The responsible parties will develop a monitoring plan to include conduction SQO assessments per the SQO Policy and stressor identifications, when appropriate.

No.	Author	Comment	Response
		<p>These responses are inadequate for several reasons. First, although the Board undertook an "assessment review" according to SQO part 1 methodology, the Regional Board's assessment falls well short of the SQO assessment required by the State's SQO Policy. Most notably, the assessment did not use the most recent, relevant data, and stressor identification was not conducted, as discussed in greater detail below.</p> <p>Second, the Regional Board's failure to conduct the stressor identification portion of the SQO Policy means that the specific contaminants that are the subject of the TMDL may not be responsible for the alleged impairment. It is through the stressor identification process that it is established (1) that pollutant(s) are responsible for impairment, and (2) which pollutant(s) are responsible for impairment. Rather than conduct stressor identification, the Board has <u>assumed</u> without scientific basis that the pollutants they selected (i.e., those that exceed ERL values) are responsible for the supposed sediment impairment, but has failed to confirm that those pollutants are responsible for impairment and fails to identify other pollutants that may be responsible for impairment. For example, pyrethroid compounds have been demonstrated to cause impairment in sediments in other parts of the state. Pyrethroids have relatively long half-lives, and one, bifenthrin, is quite stable in aquatic environments (see, e.g., Fecko, 1999, <i>Environmental fate of Bifenthrin</i>). However, the Regional Board hasn't analyzed if pyrethroids may be responsible for the impairment alleged under this TMDL, and pyrethroids are not regulated by this TMDL. Before it adopts a TMDL to address sediment impairments, the Regional Board should evaluate whether or not pyrethroids and other compounds are responsible for sediment impairment, and should assess the control of these compounds through regulations issued by the California Department of Pesticide Regulation. The TMDL as written may require unnecessary implementation measures to control other pollutants but will have failed to require controls (e.g., source</p>	

No.	Author	Comment	Response
		<p>controls, bans on the use of pyrethroids in affected watersheds) that could result in TMDL attainment.</p> <p>Third, the fact that compliance with the TMDL may be achieved by demonstrating that sediments meet SQO guidelines is largely beside the point. The original comment was that SQO methodology was not used in <u>establishing</u> impairment in the first place. Thus, the Regional Board has not used best available science either in determining impairment or in establishing controls for responsible pollutants.</p> <p>Fourth and finally, the response does not address the comment originally raised i.e., that SQGs were never intended for use as regulatory standards or endpoints (as they are proposed to be used in the TMDL). Rather, they were developed for use only as screening tools. Thus, the Regional Board's use of them as regulatory standards is clearly contrary to their intended use as specified in the State's SQO Policy and contrary to good science. The Board's response did nothing to reply to that comment.</p> <p>The State's SQO Policy became effective when approved by USEPA on August 25, 2009. Many TMDLs within the Los Angeles Region approved prior to this date included the use of ERLs. However, as clearly stated within the SQO Policy itself, one reason the SQO Policy was adopted was because the use of a single line of evidence (LOE), such as pollutant sediment concentration, produced erroneous and misleading results; the SQO Policy was intended to correct and supersede the practice of using SQGs as regulatory endpoints. (See, for example, the State's SQO Policy at p. 7: <i>None of the individual LOE [lines 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 the causality of specific chemicals...</i>).</p>	

No.	Author	Comment	Response
		<p>The SWRCB explicitly considered and rejected the continued use of Sediment Quality Guidelines (such as ERLs) as a CEQA alternative when it adopted the SQO Policy. The SWRCB Staff Report for the SQO Policy presented citations for a number of scientific research articles, and utilized the input of a highly qualified Scientific Steering Committee and peer reviewers, in evaluating and rejecting the use of Sediment Quality Guidelines like ERLs for future use within the State (see, for example, SQO Policy Staff report, September 16, 2008, at p. 5-24). Documents produced during the SQO Policy development process and included in that record indicate that even Dr. Ed Long, the original author of ERLs and ERM's and a member of the Scientific Steering Committee for the State Water Board SQO Policy, rejected their use as regulatory endpoints.</p> <p>By contrast, the Regional Board, in its response to comments, has not provided even one citation to support its assertions that "the toxicity predictive ability of ERLs has been tested in the field" or that ERLs are "protective predictors".</p>	
25.6		<p>FSI's Response to LARWQCB's Response to Comment no. 40.2.</p> <p>It is unclear how the Regional Board's response addresses the question raised, namely that air deposition appears to exceed loading capacities, which would imply that continuous dredging would be required for the foreseeable future, even if all other incoming loads were to be reduced to zero. Thus, even very costly and environmentally damaging implementation measures would not be expected to result in attainment.</p> <p>Further, the Regional Board's summary of our comments (and response to those comments) does not include the supplemental information found on p. A-11 of the comments. There, Flow Science provided a detailed discussion of atmospheric deposition, sediment grain size, and transport of fine-grained sediments</p>	See response to comment 0.3.

No.	Author	Comment	Response
		within the Harbor. The Regional Board has not addressed these comments.	
25.7		<p>FSI's Response to LARWQCB's Response to Comment no. 40.3.</p> <p>The Regional Board's response to Comment 40.3 is inadequate for several reasons. First, EPA's guidance (see, e.g., USEPA's Toxic Support Document for Water Quality-Based Toxics Control, 1991, at p. C-1, or USEPA's short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms, 4's edition, 2002) assumes that either daily collection or sample collection on Test Days 1, 3, and 5 will be undertaken for 8-day chronic toxicity tests. We find no reference suggesting that a single sample can be used for the entirety of an 8-day chronic test.</p> <p>Indeed, toxicity tests are intended to quantify the effects that result from an exposure of a specified frequency, magnitude, and duration (see USEPA, 1991, Technical Support Document for Water Quality-based Toxics Control). Although it is possible to assess chronic toxicity by artificially extending the exposure period (e.g., by assuming that a short-duration stormwater exposure will last for 8 days by artificially creating that condition within a laboratory), that test result would have no toxicological relevance to condition(s) that may actually occur in the environment. Thus, it is inaccurate and inappropriate to suggest that short-duration discharge conditions (e.g., a one- or two-day exposure that would be typical of storm events) may cause an adverse, sub-lethal effect as measured during an eight-day chronic toxicity test.</p> <p>Second, the response to Comment 14.6 indicates that "interim limits will be incorporated into the appropriate permits and become enforceable," which implies that they will be inserted into</p>	<p>Toxicity testing should follow USEPA and/or State Board guidances. See USEPA guidance (EPA-821-R-02-013) for guidances on effluent sampling and receiving water sampling recommendations.</p> <p>Per EPA-821-R-02-013, when tests are conducted off-site for effluent sampling, a minimum of three samples are collected. If these samples are collected on Test Days 1, 3, and 5, the first sample would be used for test initiation, and for test solution renewal on Day 2. The second sample would be used for test solution renewal on Days 3 and 4. The third sample would be used for test solution renewal on Days 5, 6, and 7. For receiving water sampling, logistical problems and difficulty in securing sampling equipment generally preclude the collection of composite receiving water samples for toxicity tests. Therefore, based on the requirements of the test, a single grab sample or daily grab sample of receiving water is collected for use in the test.</p>

No.	Author	Comment	Response
		<p>permits as effluent limitations. Use as triggers for additional TIE/IRE testing, and not as numeric effluent limitations, would be appropriate, and we would request that the SWRCB state clearly that chronic toxicity limits shall not be used as effluent limitations.</p> <p>Third, the Regional Board's assertion that current data show Harbor toxicity to be less than 2 TUc is beside the point. It appears from the response to comment and from the TMDL itself that "recent toxicity data for the Dominguez Channel" were collected by the Los Angeles County Department of Public Works; we believe that these are receiving water, not effluent, samples. Titus, application of receiving water sample results to justify a target or limitation that is to be applied to effluent samples is inappropriate. Further, it is inappropriate to calculate an average value of multiple receiving water sample results, and apply the result of that calculation as a never-to-be-exceeded limit for individual effluent samples. Flow Science's original comment was that the method of determining the interim toxicity limit as an average was flawed insofar as the Board intends to compare individual, non-averaged samples to the limit. The fact that existing Harbor toxicity may be lower than this scientifically flawed limit does not address the fact that the limit remains flawed.</p> <p>Flow Science's comments also included technical and scientific reasons why chronic toxicity tests should not be applied as effluent limitations for stormwater discharges (e.g. that differences in ionic strength can influence toxicity test results- see p.A-12 of Flow Science's comment letter). The regional Board has not summarized or responded to these comments in its response to comments.</p>	
25.8		<p>FSI's Response to LARWQCB's Response to Comment no. 40.4.</p> <p>The Regional Board's response to Comment 40.4 seems to assert that the best modeling and TMDL calculation job possible</p>	<p>Because the allocations are based on the modeled sediment deposition rates, which account for loadings out of the Harbor, the allocations do consider through-Harbor flux. See</p>

No.	Author	Comment	Response
		<p>has been done with the few calibration and validation data available. The response also acknowledges that the modeling allows sediment and associated pollutants to be transported both into and out of the Harbor.</p> <p>These responses miss the point of Flow Science's comments. For example, Flow Science stated that the <u>allocations</u> (not the modeling) were calculated without considering the flux of sediment and associated pollutants out of the Harbor. In fact, Flow Science produced figures and calculations <u>based on the model results</u> that clearly show that the vast majority of potential pollutant loadings from the watershed are carried through and beyond the Harbor. However, the allocations that were calculated (ostensibly from the model results) did not include this through-Harbor flux, and thus are far lower than necessary.</p> <p>More importantly, Regional Board staff assert that it is appropriate to assign allocations to the sediments themselves, as the sediments can be a source of pollutants to the water column. It is undoubtedly true that the sediments can serve as a source of pollutants to the water column, and this was likely included in the modeling. However, the sediments are already present in the Harbor, and thus cannot be regarded as a load to the Harbor. In other words, there is no way to regulate the inflows of pollutants to the Harbor such that the flux of pollutant from the sediment to the water column changes in any significant way. In fact, the flux of pollutant from the sediment to the water column is almost certainly largely independent of the pollutant loads flowing from the watershed to the Harbor.</p> <p>As noted in the Flow Science comments, it is in fact not clear what the load and waste load allocations actually represent. See footnote 1 on p. 5 of Flow Science's comment letter-it is unclear if the WLAs for MS4 discharges represent the flux of pollutants from the watershed to the receiving water, as would be typical, or if the</p>	<p>response to comment 0.3.</p> <p>In regards to the specific on the models, State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comments 19.6 and 40.4. Here is an excerpt of these responses:</p> <p>“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.”</p> <p>State Water Board concurs with Los Angeles Water Board's approach to assigning allocations to bed sediments, see Los Angeles Water Board's response to comments 23.6a and 23.8. Also, it is reasonable to consider that pollutant flux levels will decline from less polluted bed sediments; thereby decreasing the pollutant load diffusing into the water column <u>and</u> decreasing the load within bed sediments, where benthic organisms reside.</p>

No.	Author	Comment	Response
		<p>WLAs for MS4 discharges instead only that portion of the MS4 discharge that actually settles to the sediment bed. The response to Comment 21.3 appears to indicate that the WLA for MS4 dischargers represents "the allowable settleable load," and that no WLAs for the total load from the MS4 are provided within the TMDL. The Regional Board's response to Comment 40.4 does not address this concern.</p> <p>The Regional Board's response to comments also asserts that "simulated metals loads were generally in the range of observed loads," and that similar modeling had been used in other TMDLs, leaving the impression that calibration/validation results were acceptable. However, Flow Science's comments (see pp. A-20 through A-27) provided specific examples from the model reports of instances where modeled results were greatly different from measurements. For example:</p> <ul style="list-style-type: none"> Modeled estimates of pollutant concentrations greatly exceeded (by an order of magnitude or more) the detection limits for those pollutants in inflows. Thus, if inflows really exhibited the pollutant concentrations predicted by the model, they should have been measured. But pollutant concentrations of DDT and PCBs have consistently been below detection limits. The only reasonable conclusion is that the model results grossly over-predict loadings of these pollutants to the Harbor. Flow Science's comments indicated that, for metals, "model predictions only marginally resemble the observations for the single storm event used in the analysis," and the "model appears to overestimate TSS concentrations in runoff from the Pier A watershed quite dramatically." Flow Science's comments included figures and calculations from the model reports in support of these comments. Flow Science asserted in 2006 that the watershed models had performed poorly in past TMDL analyses and were "inadequate for establishing fair and accurate waste load allocations." The Regional Board's response to those 	<p>For the LSPC Model, which was used to predict watershed loading, only the "Port activities" land use required model calibration and validation. All other land uses were parameterized using the regional modeling approach, which is an approach that has been previously calibrated and validated for use in several existing TMDLs in the region.</p> <p>For the "Port activities" land use, the best available data for calibration and validation were from one storm at three different locations. Using these data, the Forest and Pier A subwatersheds were used for calibration, which both consisted of 100% "Port activities" land use. Model fits were reasonable at these two locations as the model generally captured the range of observed data during this single storm. The Maritime Museum subwatershed was used for model validation. This watershed has more diverse land uses, which were largely parameterized with the regional modeling parameters. For this subwatershed and specific storm event, the model did not perform as well; however, the available data were so limited that these results did not justify re-calibration of the regional modeling parameters, which were used for many other TMDLs in the Region.</p> <p>The Los Angeles Water Board made numerous additions, and clarifications to the Staff Report as recommended by peer reviewers. However, the Los Angeles Water Board did not conduct additional revisions to the model because, although a model can always be expanded or improved, it was not necessary to do so to satisfy</p>

No.	Author	Comment	Response
		<p>comments stated that the models were not, in fact, used to establish TMDL allocations. See Flow Science's comments for further detail.</p> <p>The Regional Board did not respond to these specific assertions in its response to comments at all.</p> <p>The Regional Board also noted that the models had been peer reviewed. However, many of the peer review comments were not favorable. For example, peer reviewers noted that "The lack of transparency in the TMDL document with regards to the relatively poor calibration of the model is not acceptable scientific practice," "The description of methods [to calculate allocations] is quite vague, and thus hard to evaluate whether these critical calculations are scientifically sound...", and "I am not able to provide a firm conclusion about the validity of the final results..."</p> <p>It does not appear that the Regional Board made any significant changes to the Staff Report or calculations of the TMDL in response to the concerns of peer reviewers.</p>	<p>the needs of the TMDL.</p>
25.9		<p>FSI's Response to LARWQCB's Response to Comment no. 40.5.</p> <p>The Regional Board's response to Comment 40.5 is inadequate for several reasons. First, it appears that the Regional Board misunderstood the comments. The response to comments was off point because the comment did not suggest that de minimus dischargers should be excused entirely from TMDLs or NPDES regulations, and did not assert that the modeling itself was flawed. Rather, the comment suggested that the methodology used to calculate allocations from model results was flawed, and that such de minimus dischargers should bear a burden as a result of the TMDL that is proportional to the extent to which they contribute to sediment contamination. It is fundamentally unfair to require MS4 dischargers to bear the significant burden of completely eliminating their discharge when their contribution to the supposed problem is negligible; yet, this is exactly what the</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board response to comment 23.6a:</p> <p>"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."</p> <p>For additional clarification, the TMDL does assign a proportion of the loading capacity consistent</p>

No.	Author	Comment	Response
		<p>TMDL requires MS4 dischargers to do because of the flawed methodology used to calculate allocations. The Board response does nothing to address this point.</p> <p>Second, it is not clear what the Regional Board means by calling Cabrillo Marina a "unique waterbody." It appears that Regional Board staff believes Cabrillo Marina to be unique because the "no upland sources" modeling shows that inflows are negligible contributors to sediment pollutant concentrations within this water body. However, for copper, upland sources appear to be responsible for less than a 1% contribution to the sediment pollutant load in five of eleven modeled water bodies; for DDT, upland sources appear to be responsible for less than 1% of loads in six of eleven modeled water bodies, and for less than 5% of loads in ten of eleven modeled water bodies (see Tetra Tech memo in Appendix III to the Staff Report). Thus, Cabrillo Marina was used as an example but is hardly unique, and this example points out a significant flaw with the calculated load and wasteload allocations within the TMDL as a whole. The Board's response does not address the flaws with the calculation methodology used to derive allocations.</p>	<p>with the proportion that they are discharging during existing conditions. This proportion was identified using modeling scenarios that compared existing simulated concentrations with a simulation assuming only the input of clean sediment from the watersheds. The difference in the sediment bed concentration between the existing loading and the clean sediment scenarios was used to determine the proportion of loading from the watersheds. This proportion was then applied to the TMDL load to determine the associated WLA for watershed sources.</p> <p>State Water Board does not agree that this process for deriving allocations is flawed.</p>
25.10		<p>FSI's Response to LARWQCB's Response to Comment no. 40.6.</p> <p>The Regional Board's response to Comment 40.6 is inadequate for several reasons. First, the Board's response to Comment 24.6a(i) that dischargers "have been identified as a source of pollutant loading and are therefore responsible to reduce their loadings," is simply false. As noted throughout Flow Science's comments, many pollutants (including DDT and PCBs) are below detection levels in inflows; only by the erroneous assignment of bed sediment pollutant concentrations to inflows (a demonstrably false modeling choice) are inflows found to contribute to bed sediment pollutant concentrations today. Contrary to the Regional Board's response, the TMDL does not "assign[] a proportion of</p>	<p>See response to comments 25.8 and 25.9.</p> <p>While portions of some referenced responses may not be relevant to the commenter's specific comment, certain aspects are applicable. Referencing other responses is appropriate given that it ensures the State Water Board and the Los Angeles Water Board can respond to comments in a complete fashion.</p>

No.	Author	Comment	Response
		<p>the loading capacity consistent with the proportion they are discharging during conditions." Rather, it assigns a proportion of the loading capacity relative to the modeled contribution of current sources to bed sediment pollutant concentrations; this calculation is not related to discharges during current conditions, because, especially for DDT and PCBs, discharges during current conditions were modeled by assigning pollutant concentrations from bed sediments to inflows. The point of Comment 40.6 is to suggest that, according to the Board's own modeling, dischargers are not discharging quantities of DDT, PCBs, or PAHs that have any significant impact at all on sediment concentrations in the Harbor. As such they are not a source of pollutant loading for these constituents.</p> <p>Second, the Board's response to Comment 24.6a(ii) that "These additional exceedances [that occur even without upland sources of pollutants] are expected to be addressed through the load allocations for aerial deposition and existing bed . sediments," is irrelevant to Comment 40.6. If upland dischargers contribute no significant quantities of DDT, PCBs, and PAHs to the Harbor, reducing their loadings will have no impact within the Harbor. Whether other sources (aerial deposition, bed sediments) are regulated is irrelevant to the statement that upland dischargers contribute almost nothing to bed sediment pollutant concentrations.</p> <p>Third, the Regional Board's response to Comment 24.6a(iii), which discussed allocations for bed sediments, is irrelevant to Comment 40.6.</p>	
25.11		<p>FSI's Response to LARWQCB's Response to Comment no. 40.7.</p> <p>The Regional Board's response to Comment 40.7 is inadequate for at least two reasons.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board response to comment 17.3 and 23.6b:</p>

No.	Author	Comment	Response
		<p>As noted throughout our comments, the Regional Board has provided no data supporting the contention that the upland sources or inflowing rivers or tributaries are contributing to current loads. In fact, they acknowledge that pollutant concentrations in water samples collected from inflowing streams are non-detect for legacy pollutants. Only in the modeling, when the Harbor bed sediment pollutant concentrations are artificially "assigned" to inflows, is a current load hypothesized to occur. As noted in the response to Comment 24.6b, [redacted] "loads associated with these events are not quantified in the TMDL," and we are aware of no measurements that would indicate that this loading is a significant source of sediments under current conditions.</p> <p>There is clearly a significant difference of opinion with regard to the TMDL modeling. Regional Board staff assert that "the best available data and information at the time the modeling was conducted" were incorporated into the modeling effort. As is voiced throughout our comments, just because the best available data were used does not mean that the modeling results are scientifically defensible. The point of Comment 40.9 is that the modeling of pollutant concentrations in inflows is not scientifically defensible because the "best available data," as employed by the Regional Board, were inadequate for the task.</p> <p>Further, even if all parties agreed that the <u>modeling</u> incorporated best available information and produced scientifically defensible results (and we do not), we disagree with the <u>methods used to calculate allocations</u> from the model results (which was a separate exercise from the modeling itself).</p>	<p>"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."</p> <p>Clearly there is a significant difference of opinion with this comment regarding the TMDL modeling and available data. Los Angeles Water Board evaluated all available data and held discussions with stakeholders regarding appropriate data to be selected for model development – recent data record, dry and wet weather conditions, optimize site-specific data, etc. Los Angeles Water Board also evaluated model calibration results, again in consultation with stakeholders. Los Angeles Water Board concluded the model results and underlying data <u>were adequate</u> to assist with TMDL completion and distribution of allocations. State Water Board agrees with the conclusions.</p> <p>Although a model can always be expanded or improved with additional data, it was not necessary to do so to satisfy the needs of the TMDL.</p>

No.	Author	Comment	Response
25.12		<p>FSI's Response to LARWQCB's Response to Comment no. 40.8.</p> <p>The Regional Board's response to Comment 40.8 fails to address the three main points of the comment: first, that the assumption that pollutant concentrations within the sediment bed are uniform is a gross oversimplification; second, that the higher pollutant concentrations at depth within the sediment may materially affect surface concentrations and remediation methods, depths, and extent; and third, that surface concentrations are likely the result of historic discharges of higher concentrations of pollutants, not the result of current-day inflows. See also our comments on the response to Comment 40.7. The Board's response has not addressed these points.</p> <p>Finally, the Regional Board's claim that sediment core sampling can be deferred until consideration of remediation activities (such as dredging) misses the point of the comment that, in fact, information about the distribution of contaminants in the sediment will have significant effects on the modeling results used to establish the TMDLs. As noted in the comment, if the contaminant distribution assumed in the model is incorrect (as it surely is since a uniform distribution was assumed), then overall model results will be incorrect, thereby undermining the scientific defensibility of the TMDLs supported by the modeling.</p>	<p>All modeling efforts involve simplification of the system being studied. Assuming uniform concentrations across depths was a necessary simplification due to the lack of concentration data at varying depths throughout the waterbodies. Many of the core studies that were available were from areas that had already been dredged; therefore, the sediment used for these samples have been removed. Consolidated Slip is unique since it has sediment core results (EPA and POLA study, 2003) and has NOT been dredged. Such conditions must be considered prior to sediment remediation activities in this waterbody.</p> <p>State Water Board agrees with the concept that higher concentrations at depth might impact the surface concentrations and remediation methods; however; model output showed positive deposition rates for each waterbody. That is, sediment net deposition occurred on top of existing bed sediments, indicating that sediment concentrations at depth (below 5 cm) were not likely influencing surface sediment concentrations. These model results also indicate that watershed sediment sources can impact the surface concentrations.</p>
25.13		<p>FSI's Response to LARWQCB's Response to Comment no. 40.9.</p> <p>The Regional Board's response to Comment 40.9 is inadequate. As has been voiced several times above, just because the best available data was used does not mean that the modeling results are scientifically defensible. The point of Comment 40.9 is that the results of the modeling for wet weather are not scientifically</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 25.11 and Los Angeles Water Board's response to comment 40.9.</p>

No.	Author	Comment	Response
		defensible because the best available data were inadequate for the task.	
25.14		<p>FSI's Response to LARWQCB's Response to Comment no. 40.10.</p> <p>There is clearly a significant difference of opinion with regard to the TMDL modeling.</p> <p>As has been voiced several times above, just because the "best available data" were used does not mean that the modeling results are scientifically defensible. The point of Comment 40.10 is that the modeling validation, particularly for the wet weather condition, was not scientifically defensible because the best available data were inadequate for the task.</p>	See response to comment 25.11, 25.12, 25.13.
25.15		<p>FSI's Response to LARWQCB's Response to Comment no. 40.11.</p> <p>The Board's response to Comment 40.11 and the modifications to the TMDL are unclear.</p> <p>Specifically, the City of Signal Hill is included as part of the "Greater Los Angeles and Long Beach Harbor Waters MS4 Permittees" and as part of the "Los Angeles River Estuary Subgroup for bed sediment and fish."</p> <p>Table 7-40.2 of the final Basin Plan amendment (at pp. 37-38) includes the Implementation Schedule for the TMDL. The "Los Angeles River Estuary Subgroup for bed sediment and fish" is not named in this table at all. Item 5 in this table requires responsible parties, including the "Greater Harbors Responsible Parties," to submit "an Implementation Plan and Contaminated Sediment Management Plan (CSMP)." However, language found at p. 31 of the final Basin Plan amendment reads as follows: "To meet necessary reductions in sediment bed loads, a Sediment Management Plan shall be developed by the dischargers assigned a sediment bed load LA, the Cities of Los Angeles and</p>	<p>In the adopted basin Plan Amendment, Implementation Plan section No. 6 Application of Allocations to Responsible Parties spells out the responsible parties with clarity.</p> <p>The "Los Angeles River Estuary Subgroup for bed sediment and fish" is a subgroup of the "Greater Harbors Responsible Parties."</p>

No.	Author	Comment	Response
		<p>Long Beach and the State Lands Commission."</p> <p>Thus, it is not clear what the responsibilities of the City of Signal Hill (and other entities within the "Los Angeles River Estuary Subgroup for bed sediment and fish") truly are, or how the TMDL requirements will be implemented via NPDES or other permits or actions.</p>	
25.16		<p>FSI's Response to LARWQCB's Response to Comment no. 40.12.</p> <p>As noted in the response to Comment 40.3, the response to Comment 14.6 appears to indicate that chronic toxicity allocations will be implemented in NPDES permits as numeric effluent limitations. If this was not the Regional Board's intent, this should be clearly stated by the SWRCB if it approves the TMDL, or the TMDL should be remanded to the Regional Board for clarification.</p> <p>The manner in which the WLA will be divided among permittees (by land area, according to the Regional Board's response) appears to ignore an essential fact: i.e., the MS4 WLAs that are included in the TMDL are for that portion of the watershed load that actually settles to the Harbor sediments (see also discussion associated with Comment 40.4). Flow Science's comments showed that the model results indicate that the vast majority of pollutant loads from the watershed actually pass through the Harbor without settling. For example, Flow Science's comments indicate at p.5 that existing loads of DDT are estimated to be between 2,200 to 24,600 g/yr, but only about 595 g/yr (as little as 2.6%) of the modeled pollutant load is simulated to settle to the Harbor sediments. Thus, it is unclear what the allowable load from the watershed to the receiving water actually is. If the WLAs assigned in the Table at pp.19-21 of the final Basin Plan Amendment are applied in Flow Science's comments for PCBs, copper, lead, zinc, and PAHs.</p>	See response to comment 34.7 and 24.3.

No.	Author	Comment	Response
		<p>Thus, the point of Comment 40.12 is that it is unclear from the TMDL itself exactly what the WLAs in the TMDL represent, and we believe that there is significant risk that the WLAs in the TMDL would be divided amongst MS4 dischargers and applied directly as effluent limitations in MS4 permits. We believe that it is highly unlikely that a permit writer would have access to the model to recalculate the allowable loadings, relate them to the WLAs in the TMDL, and then calculate permit limits, as it appears they would be required to do to appropriately implement the WLAs of the TMDL.</p>	
25.17		<p>FSI's Response to LARWQCB's Response to Comment no. 40.13.</p> <p>We continue to reiterate our prior comment, and believe that the Regional Board's response to this comment is both non-responsive and confusing. Simply put, the City of Signal Hill drains to a freshwater watershed, and the saltwater objectives from CTR (the concentration-based allocations referred to in the Regional Board's response to comments) are not applicable to freshwater discharges to a freshwater water body. The Regional Board asserts that "only areas contributing directly to the saline TMDL receiving waters receive mass-based wasteload and load allocations," but then asserts that entities draining to a non-TMDL receiving water, i.e., Alamitos Bay, are for some reason to receive a concentration-based allocation.</p> <p>The City would remind Regional Board staff that the MS4 dischargers to the Los Cerritos Channel were assigned mass-based wasteload allocations by USEPA in the Los Cerritos Channel Total Maximum Daily Loads for Metals (adopted March 2010); the TMDL targets and allocations used by USEPA in this TMDL were for freshwater, not saline waters.</p> <p>Discharges from the City of Signal Hill (and other cities that drain to the Los Cerritos Channel) should not be assigned any wasteload allocation in the Harbor TMDL, and instead should only</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 1.4.</p>

No.	Author	Comment	Response
		be included in the Los Cerritos Channel MS4 WLAs. There is no technical basis for assigning the concentration-based allocation of the Harbor TMDL to Signal Hill and the other cities that drain to the Los Cerritos Channel.	
25.18		<p>FSI's Response to LARWQCB's Response to Comment no. 40.14.</p> <p>The Regional Board's response to Comment 40.14 is inadequate for several reasons. First, if applicability of Water Code sections 13146 and 13247 for controlling atmospheric deposition of metals was recognized by the State Board in Resolution 2008-046, approving the Los Angeles River Metals TMDLs, it is not clear why it is premature to recognize the applicability of those legal tools in the case of the Harbor TMDLs. The regional air deposition data relied upon by the Regional Board in the development of this TMDL appear to be adequate for this purpose.</p> <p>Second, with respect to identifying responsible parties for air deposition, the Board's claim that it "does not separate by source, but only between WLAs and LAs," seems irrelevant. The comment requested not that the Board "separate by source", but rather that it name responsible parties for relevant portions of the aerially deposited load. This is no-different than naming parties responsible for pollutants in storm water runoff, as the Board has done in the TMDLs. If the Regional Board is in need of more time to perform studies to address air deposition, these studies should be conducted first, before the TMDL is finally developed, adopted, and approved.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 40.14.</p> <p>The regional air deposition loads were calculated based on deposition rate from Wilmington site (3 km inlands), which is the only selected site that represents air deposition loading to the Harbors. The State Water Board agrees with the Los Angeles Water Board's response that further studies that characterize direct air deposition are needed before the load allocations can be directly translated into enforceable air quality management standards. Additional monitoring of pollutants at air sampling sites that more closely resemble the respective waterbodies will help characterize these loadings.</p> <p>Once air deposition loadings are well understood and appropriate allocations are defined, responsible parties for air deposition shall be responsible for their assigned allocations.</p>
25.19		<p>FSI's Response to LARWQCB's Response to Comment no. 40.15.</p> <p>The-Regional Board response to Comment 40.15 is inadequate for several reasons. First, it is unclear what the Board means by the claim, "The 35 mcy/ERL figure was included for comparison," or how this is supposed to make a difference to the issue at hand.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 0.3 and Los Angeles Water Board's response to comment 40.15.</p>

No.	Author	Comment	Response
		<p>In fact, the TMDL the Regional Board actually adopted uses the ERLs to calculate TMDL targets and allocations, and provides endpoints and requirements based upon die ERLs. In other words, it appears that the 35 mcy/ERL calculations are based upon the <u>actual, current requirements of the TMDL</u>. As noted throughout our comments, the procedure by which this target could be replaced by an SQO analysis is unclear. If the 35 mcy/ERL figure was included "for comparison purposes," surely the Board thinks it is within the realm of possibility as an upper limit of some sort.</p> <p>Second, the response that "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," does not address the point of the comment that if capping is required, the environmental impacts from the capping, its purpose and effectiveness (given ongoing air deposition), and the added costs from the needed capping would all need to be analyzed under CEQA. Clearly, the dredging cost estimate will be much higher than the one included in the TMDL implementation plan. EPA commented that capping is a "reasonably foreseeable" response to the TMDL, only further confirming the importance of the Board analyzing its effectiveness and the potentially significant environmental impacts.</p> <p>Third, the response fails to address at all the comment that dredging may be required on an ongoing basis due to aerial deposition-a consideration that would also greatly increase the cost of implementation-and the comment that dredging may well disturb high concentration-sediments at depth, which would result in substantial environmental impacts and additional implementation costs.</p> <p>Given the fact that capping and environmental costs associated with dredging have not been incorporated into the Board's implementation cost estimates, the Board's claim (in response to Comment 24.9) that implementation costs will likely be lower than stated in the TMDL document seems implausible at best.</p>	<p>In addition, re the "comments on environmental impacts" see response to comment B4.5.</p>

No.	Author	Comment	Response
		<p>Finally, Flow Science's comments include five pages of comments on the environmental impacts that would likely result from implementation of the Harbor TMDL. The environmental impacts discussed in Flow Science's comments-include. disruption of higher pollutant concentrations at depth, increasing exposures; environmental impacts of capping; large-scale destruction or alteration of the landscape areas adjacent to the Harbor as a result of dredge spoil storage; impacts to parks and open space; the potential for contamination of upland soils; the potential for underwater erosion and contaminant redistribution within the Harbor; changes in deposition in near-shore environments adjacent to the Harbor; air quality impacts associated with dredging and/or capping activities; and other impacts. Flow Science also raised significant concerns about the cost estimates provided by the Regional Board, including the cost estimates associated with sand/organic filter systems and the costs and efficiency of structural and non-structural BMPs employed in near-shore watersheds. The comments again restate that it is nearly impossible to know how TMDL requirements would be implemented in NPDES permits for individual dischargers, what implementation measures might be required, and how the TMDL requirements would be achieved. None of these comments or concerns is addressed in the Regional Board's response to Flow Science's comments.</p>	
25.20		<p>Language was added to the TMDL at the close of the adoption hearing and after the close of all opportunity for public comment, as follows (see final Basin Plan Amendment at p. 34): "If at any point during the implementation plan, monitoring data or special studies indicate that load and waste load allocations will be attained, but fish tissue targets may not be achieved, the Regional Board shall reconsider the TMDL to modify the waste load and load allocations to ensure that the fish tissue targets are attained."</p>	See response to comment 34.1.

No.	Author	Comment	Response
		<p>This change to the TMDL is a highly significant change to the TMDL. This language, added to the TMDL Basin Plan Amendment after the close of public comments, appears to indicate that the TMDL requirements can be changed at any time during the implementation period. As noted above and in our original comments, even before the addition of this new language, it was exceedingly difficult to understand how the TMDL might be implemented and what requirements the TMDL might place upon NPDES permittees. This language appears to indicate that the TMDL requirements are a moving target.</p> <p>This change is also problematic because fish frequently have wide ranges, and may move from less to more contaminated areas within and even beyond the Harbor. Finally, we note that the TMDL targets for fish tissue are "Fish Contaminant Goals," <i>which</i> "are based solely on public health considerations without regard to economic considerations, technical feasibility, or the counterbalancing benefits of fish consumption" (see OEHHA 2008, <i>Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish</i>). The City of Signal Hill did not initially comment upon this choice of TMDL target because it appeared that TMDL compliance could be demonstrated through the State's SQO Policy (although the exact means by which that could be done were unclear). The added language makes this issue more relevant, and we would encourage the SWRCB, as a matter of public policy, to require the use of OEHHA's "Advisory Tissue Levels" or "ATLs" as targets for this TMDL.</p> <p>At the very least, the SWRCB should remand back to the Regional Board and require that it reopen the public comment period and conduct a further hearing on this important change to the TMDL, so as to allow the affected parties the opportunity to comment on the need for the change, the technical soundness of the changes, and its costs and achievability.</p>	

No.	Author	Comment	Response
26	County of Los Angeles		
26.1		<p>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</p> <p>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 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.</p> <p>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.</p> <p>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.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3 and Los Angeles Water Board's response to comment 30.1.</p> <p>The TMDL allocation section on page 14 clearly identifies that 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. The TMDL does not contain language that the County of Los Angeles would be required to share the cost to implement remediation to achieve the LAs in the Harbors.</p> <p>The Amended Consent Decree did not preempt the State from requiring compliance with the Clean Water Act, including compliance with NPDES permits to prevent further discharges of pollutants to impaired water bodies.</p>

No.	Author	Comment	Response
		<p>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, 11 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, if 6.1.)</p> <p>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, 1j 11). Natural resource damages were defined to include loss of use, restoration costs and resource replacement costs, among other costs (Amended Consent Decree, 1l 6.L).</p> <p>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 County, to compel response activities or to recover response costs in connection with the Montrose NPL site (Amended Consent Decree, 1f 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, 1j 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(24)), and actions consistent</p>	

No.	Author	Comment	Response
		<p>with a permanent remedy such as diversions, dredging and excavations (see 42 U.S.C. § 9601(24).</p> <p>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, 1111 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, 1111 11 and 17).</p> <p>In response to comments, the Regional Board staff contended that there was no conflict between the Consent Decree and the proposed TMDL, that the Consent Decree does not preclude Regional Board staff from adopting the TMDL, and that the TMDL is not a removal or remedial action under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq.</p> <p>Regional Board staff recognized, however, that the TMDL forms the basis for further administrative actions that will address the pollutants that are the subject of the TMDL, including administrative action through amendment of the Los Angeles County M54 permit.</p> <p>The County disagrees with the Regional Board staff's assertion that the TMDL is not covered by the Consent Decree. The</p>	

No.	Author	Comment	Response
		<p>Consent Decree explicitly states that the Regional Board will not take any civil or administrative action against any of the settling local governmental entities, including the County for natural resources damages or to compel response activities (Amended Consent Decree, TT 1 1 and 17). The TMDL is an administrative action relating to natural resources damages and, as recognized in the response to comments, is an administrative action that is the foundation for future administrative actions.</p> <p>Moreover, even if the TMDL is viewed as not being an administrative action in violation of the Consent Decree, implementation of the TMDL through Los Angeles County MS4 permit definitely would be such an administrative act. It does not benefit to any party to set forth in the TMDL an administrative approach to remediation of the harbor sediments and waters, including assignment of waste load allocations, where that approach and assignment of WLAs cannot be implemented without violating the Consent Decree. If the pollutants in the harbor sediments and waters are to be addressed pursuant to this TMDL, then the TMDL should set forth an approach and assign VVLAs that realistically can be implemented. The TMDL should be consistent with the Consent Decree, not contrary to it.</p> <p>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 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 and does not further the remediation of the harbor sediments and waters.</p>	
26.2		Toxicity Waste Load Allocation for the Dominguez Channel Freshwater Should be Removed from the Proposed TMDL	State Water Board reviewed the Los Angeles Water Board's response on the use of both

No.	Author	Comment	Response
		<p>In its letter to the Regional Board dated February 24, 2011, the County commented that the sea urchin toxicity data should not be used to assess water column toxicity in Dominguez Channel. There is no scientific basis for using a marine species as indicator for freshwater toxicity. When examining <i>Ceriodaphnia dubia</i>, a freshwater species, test results over the last eight years (see table below) show only two toxic results between 2002 and 2005, and none after October 2005 when the United States Environmental Protection Agency (USEPA) banned the urban use of Diazinon</p> <p>Regional Board staff responded to the County's comment by suggesting that the County submit a request to replace sea urchin with a more appropriate species. The County will consider Regional Board staff's suggestion. In the interim, Regional Board staff's response does not adequately address the fundamental issue that the proposed freshwater toxicity WLA for Dominguez Channel lacks scientific basis. The absence of toxicity based on freshwater species following USEPA's diazinon ban in 2005 indicates diazinon as the likely cause of toxicity before 2005.</p> <p>Therefore, the County requests that the State Water Board remand the TMDL to the Regional Board and direct the Regional Board to revise the TMDL by removing the toxicity WLA for Dominguez Channel freshwater, specifically on pages 4, 9, and 11 of the Draft Basin Plan Amendment (BPA). Alternatively, if the toxicity WLA for Dominguez Channel freshwater is retained, the TMDL should be revised so compliance with the WLA is assessed based using freshwater species only.</p>	<p><i>Ceriodaphnia</i> and sea urchin data to assess water column toxicity in the Dominguez Channel. See response to comment 0.1 and Los Angeles Water Board's response to comment. 30.3.</p> <p>The commenter and the other responsible parties for the Dominguez Channel monitoring can propose appropriate freshwater species for toxicity testing in the required monitoring plan.</p>
26.3		<p>Determination of Total Recoverable Metals Should Use Consistent Values for Hardness and Conversion Factor</p> <p>The proposed TMDL calculates freshwater targets for total</p>	<p>According to the CTR, freshwater aquatic life criteria for certain metals are express as a function of hardness. There is no specific</p>

No.	Author	Comment	Response
		<p>recoverable metals using California Toxics Rule (CTR) acute dissolved criteria based on a median hardness and 90th percentile conversion factor. In its comments to the Regional Board. The County noted the inconsistency and suggested that either the median or the 90th percentile values be used for both parameters.</p> <p>Regional Board staff responded by referring to the CTR State Implementation Plan (SIP):</p> <p style="padding-left: 40px;">"The translator shall be derived using the median of data for translation of chronic criteria and the 90th percentile of observed data for translation of acute criteria" (P. 14)</p> <p>This statement from the SIP is in relation to conversion factors and does not mention the use of median hardness to calculate metals targets. Contrary to Regional Board staff's response, our review found that the SIP provides no guidance on the appropriate hardness value to use when calculating a metals target.</p> <p>In the absence of such guidance, the County requests that the State Water Board remand the TMDL to the Regional Board and direct the Regional Board to revise the TMDL by recalculating the total recoverable metals target using consistent values for hardness and conversion factor. The table below shows the total recoverable metals target values calculated with 90th percentile hardness and 90th percentile conversion factor. We recommend that freshwater metals targets for Dominguez Channel be replaced with the calculated values below.</p>	<p>recommendation or guidance in the CTR or the SIP on how should the hardness value be selected to calculate metals targets. Median (or 50 percentile) has been used in other adopted metals TMDL in the Los Angeles Region. Therefore, median hardness value are found to be appropriately selected to calculate the metal targets.</p>

No.	Author	Comment	Response																													
		<table><tr><th colspan="5">Freshwater Metals Targets for Dominguez Channel (µg/L)</th></tr><tr><th rowspan="2">Metal</th><th colspan="4">Using 90th percentile Hardness and Conversion Factor</th></tr><tr><th>Hardness (mg/L)</th><th>Dissolved Criteria</th><th>Conversion Factor</th><th>Total Metals</th></tr><tr><td>Copper</td><td>133</td><td>17.56</td><td>0.722</td><td>24.3</td></tr><tr><td>Lead</td><td>133</td><td>87.98</td><td>0.684</td><td>128.6</td></tr><tr><td>Zinc</td><td>133</td><td>149.2</td><td>0.935</td><td>159.6</td></tr></table>	Freshwater Metals Targets for Dominguez Channel (µg/L)					Metal	Using 90 th percentile Hardness and Conversion Factor				Hardness (mg/L)	Dissolved Criteria	Conversion Factor	Total Metals	Copper	133	17.56	0.722	24.3	Lead	133	87.98	0.684	128.6	Zinc	133	149.2	0.935	159.6	
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26.4		<p>All WLAs and LAs for Stormwater Discharges Should Be Expressed as Mass Per Year</p> <p>As currently written, the TMDL's final allocations are expressed as mass for certain metals (copper, lead, and zinc), PAHs, DDT, and PCBs in sediment for the Estuaries and Harbors, but as concentration for other pollutants (cadmium, chromium, mercury, chlordane, dieldrin, and toxaphene). Where data are available, WLAs and LAs should be expressed as mass per year.</p> <p>Mass-based allocations provide equal level of water quality protection as that with concentration-based allocations, but has the added benefit of encouraging the use of low-impact development (LID) practices or other infiltration best management practices (BMPs). LID and infiltration BMPs are designed to reduce runoff volume as opposed to pollutant concentration, thus concentration-based WLAs and LAs have the unintended effect of discouraging LID and other infiltration BMPs, which is contrary to the State's and local agencies' LID initiatives.</p> <p>For reasons described above, all TMDL allocations should be expressed as mass where data are available. If sufficient data does not exist to express some of these pollutants as mass, then the TMDL should state to that effect and acknowledge the need for addressing this issue during the TMDL reconsideration once sufficient data is collected. The County requests that the State Water Board remand the TMDL to the Regional Board and direct the Regional Board to revise the TMDL as discussed above.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses and adopted Basin Plan Amendment and agrees with the use of mass-based allocations for the majority of allocations and the limited use of concentration-based allocations where appropriate or where there is insufficient data to calculate a mass-based allocation. See response to comment 0.1 and Los Angeles Water Board's response to comment. 30.10.</p>																													

No.	Author	Comment	Response
26.5		<p>Dry-Weather Monitoring for Dominguez Channel and Torrance Lateral freshwaters Should Not Be Required</p> <p>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 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.</p> <p>Regional Board staff responded to the County's comment by stating that "[w]hereas 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." The County disagrees with the staff's response. The waterbodies are currently meeting the water quality objectives during dry weather, and continued monitoring of unimpaired water-body would have no added benefit, but instead divert the already scarce resources from being used for more urgent water quality issues. The County requests that the State Water Board remand the TMDL to the Regional Board and direct the Regional Board to remove dry-weather monitoring for Dominguez Channel and Torrance Lateral freshwaters.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment. 30.12.</p> <p>In addition, State Board finds that because of the downstream impairments in water, fish tissue and sediments, a complete set of data including wet and dry weather is especially valuable and should be required.</p>
27	Heal the Bay		
27.1		<p>Heal the Bay supports several aspects of the TMDL adopted by the Los Angeles Regional Water Quality Control Board on May 5, 2011. In particular, we support the inclusion of a numeric toxicity limit of 1 TUC and sediment targets based on Effects Range-Low (ERLs) and Threshold Effect Concentration (TECs) sediment guidelines. We also support the inclusion of the explicit 10% margin of safety in Dominguez Channel's loading capacity.</p>	<p>Comment noted.</p>

No.	Author	Comment	Response
		Another positive aspect of this TMDL is the requirement for a sediment management plan to remediate known hot spots of sediment contamination in the Harbor area.	
27.2		<p>Despite these positive aspects, Heal the Bay has a number of major concerns regarding the TMDL including:</p> <p>The TMDL should utilize the more protective approach of using single lines of evidence instead of using the narrative Sediment Quality Objectives integrated evaluation of multiple lines of evidence to determine TMDL compliance. Use of single lines of evidence would provide a margin of safety protective of marine life.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 35.1.</p>
27.3		The TMDL should include dry-weather and wet-weather numeric targets for each waterbody-pollutant combination included on the 303(d) List based on chronic aquatic life criteria. 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. Hence, the TMDL should include dry-weather numeric targets for copper, lead, and zinc in the Dominguez Channel.	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 35.2(a).</p>
27.4		The TMDL should provide clear guidelines for the monitoring program. The TMDL should provide clear guidance for how many sampling stations are necessary for each site, and criteria for selecting these stations during each sampling event. For example, 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 whole fish are tested instead of fillets.	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 35.4.</p> <p>The Los Angeles Water Board will consider comments on the specific proposed monitoring plan prior to the Executive Officer approval.</p>
27.5		The TMDL should define buried sediments as deep as 1 meter or	State Water Board reviewed the Los Angeles

No.	Author	Comment	Response
		more as the “active layer” of sediment, instead of the weak 5-centimeter layer proposed. Many marine organisms (e.g., clams, worms, and shrimp) live beneath the top 5 centimeters of sediment.	Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 35.2(b).
27.6		The TMDL should contain concrete implementation milestones to ensure existing impairments are addressed in a timely manner. For instance, 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 would ensure responsible parties will be on the path to meet sediment targets within 15 years and would add more specificity than the current requirement calling for milestones for remediation of only hot spots in the sediment management plan, which will take five years from the effective date of the TMDL to be drafted.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 35.3(a).
28	Los Angeles County Flood Control District		
28.1		<p>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</p> <p>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 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.</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 11.3, and 26.1 and Los Angeles Water Board's response to comment 30.1 and 31.1.</p> <p>In addition, the TMDL is not inconsistent with the Amended Consent Decree because the Amended Consent Decree does not establish WLAs or LAs, nor specify how to compliance with water quality standards or determine TMDL targets. The TMDL explicitly states that it does not establish cleanup levels.</p>

No.	Author	Comment	Response
		<p>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.</p> <p>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.</p> <p>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 Harbor known as the Consolidated Slip (Amended Consent Decree, 6.1.).</p> <p>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</p>	

No.	Author	Comment	Response
		<p>Consent Decree, ij 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).</p> <p>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, IT 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, li 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(24)), and actions consistent with a permanent remedy such as diversions, dredging and excavations (see 42 U.S.C. §9601(24)).</p> <p>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 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, TT 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, VI 11 and 17).</p>	

No.	Author	Comment	Response
		<p>In response to comments, the Regional Board staff contended that there was no conflict between the Consent Decree and the proposed TMDL, that the Consent Decree does not preclude Regional Board staff from adopting the TMDL, and that the TMDL is not a removal or remedial action under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq. Regional Board staff recognized, however, that the TMDL forms the basis for further administrative actions that will address the pollutants that are the subject of the TMDL, including administrative action through amendment of the Los Angeles County MS4 permit.</p> <p>The LACFCD disagrees with the Regional Board staff's assertion that the TMDL is not covered by the Consent Decree. The Consent Decree explicitly states that the Regional Board will not take any civil or administrative action against any of the settling local governmental entities, including the LACFCD for natural resources damages or to compel response activities (Amended Consent Decree, Ili 11 and 17). The TMDL is an administrative action relating to natural resources damages and, as recognized in the response to comments, is an administrative action that is the foundation for future administrative actions.</p> <p>Moreover, even if the TMDL is viewed as not being an administrative action in violation of the Consent Decree, implementation of the TMDL through Los Angeles County MS4 permit definitely would be such an administrative act. It does not benefit to any party to set forth in the TMDL an administrative approach to remediation of the harbor sediments and waters, including assignment of wasteload allocations, where that approach and assignment of WLAs cannot be implemented without violating the Consent Decree. If the pollutants in the harbor sediments and waters are to be addressed pursuant to this TMDL, then the TMDL should set forth an approach and assign</p>	

No.	Author	Comment	Response
		<p>WLAs that realistically can be implemented. The TMDL should be consistent with the Consent Decree, not contrary to it.</p> <p>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 and does not further the remediation of the harbor sediments and waters.</p>	
28.2		<p>Los Angeles County Flood Control District Should Not Be Responsible for Meeting Waste Load Allocations</p> <p>The proposed TMDL inappropriately names the LACFCD as a responsible party for meeting waste load allocations (WLAs) or for monitoring associated with assessing compliance with those 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. As we stated previously to the Regional Board, land areas draining into LACFCD storm drains that empty into these water bodies are under the 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</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 31.2.</p> <p>State Water Board disagrees that the LACFCD should be removed as a responsible party. State Water Board reviewed the Los Angeles Water Board's responses to these comments and changes to the Basin Plan Amendment and agrees with its responses. Please see response to comment 0.1 and Los Angeles Water Board's response to comment 31.2. Because the LACFCD is the owner and operator of the drain systems that empty into the impaired waters, they are responsible for the water and the quality of that water which it conveys.</p> <p>Pesticides and PCBs are generally legacy pollutants that persist at the microscopic level,</p>

No.	Author	Comment	Response
		<p>bodies.</p> <p>In response to this comment, the Regional Board staff contended that, even if the LACFCD merely functions as a conveyance, it is responsible as a point source that is discharging to the harbors. The LACFCD disagrees with this response and the response misses the point. 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, assigning WLAs to the LACFCD does not accomplish the proposed TMDL's goal of reducing the contribution of the pollutants to the receiving water bodies. In order to effectively reduce the pollutants entering the harbor waters, WLAs should be assigned to the parties who control the source of those pollutants. In Trash TMDLs adopted by the Regional Board, WLAs are assigned to the jurisdictions that have control over the areas that generate trash. The same approach should be used for pesticides and PCBs. There is no reason to treat these pollutants differently than trash; it is the party that controls the source that should be assigned the WLAs attributable to those sources. In the past the Regional Board has contended that trash is different because it is visible. No justification for that conclusion has been provided, and we cannot think of a justification for it. The fact that pollutants such as pesticides and PCBs are not generally visible should have no bearing on who is ultimately responsible for addressing them. If the proposed TMDL is going to control the introduction of these pollutants into the receiving waters, it must control the sources, and whether the pollutant is visible or not has no relevance to who has that responsibility.</p> <p>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 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,</p>	<p>comparing the control of pesticides and PCBs with that of Trash is wholly inappropriate. It is precisely the fact that pollutants, such as pesticides and PCBs, are not "generally visible and easily containable" that makes them difficult to control and determine the sources. It is because of that reason that it is necessary to control the input of sediment and water entering via the LACFCD's conveyances into the Dominguez Channel and Harbor waters. It is the only way to ensure that impairment will not continue. The success of this TMDL will require the cooperation of all the stakeholders involved, including the LACFCD.</p>

No.	Author	Comment	Response
		<p>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 <i>not for the implementation of the provisions applicable to. . . other Permittees</i> (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, page 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.</p> <p>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 35 and 36 of the proposed TMDL.</p>	
28.3		<p>The LACFCD Should Not Be Responsible for Monitoring or Clean Up In the Harbor Waters</p> <p>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, to the extent that the monitoring does not interfere with flood control activities, the LACFCD should not be responsible for conducting monitoring in the harbors because it is not a responsible agency. As discussed above, the LACED does not generate any of the flows being discharged into the harbor waters nor does it own, manage, or</p>	<p>The State Water Board disagrees that the LACFCD should be removed as a responsible party. The State Water Board reviewed the Los Angeles Water Board's responses to these comments and changes to the Basin Plan Amendment and agrees with its responses. See response to comment 0.1 and 28.2 and Los Angeles Water Board's response to comment 31.2.</p>

No.	Author	Comment	Response
		operate the harbor waters. Monitoring and implementation actions are properly the responsibility of those entities with authority over the land uses that generate the pollutants entering the lagoon and that possess the means to prevent polluted runoff from entering the harbors. Therefore, the LACFCD should be removed from any clean up and monitoring responsibilities in the harbor waters.	
29	Montrose Chemical Corporation of California		
29.1		Certain commenters have expressed concern that the TMDL mandates a massive remedial dredging program such as the one described in the TMDL, and constitutes a dredging order. The federal Clean Water Act ("CWA") and its implementing regulations, and the relevant state-law authorities, are clear that the TMDL is not a self-enforcing agency action, does not mandate any particular action by the regulated community including the commenters, and is not an order. It is important that the State Board clarify that the dredging in the TMDL is not being ordered or mandated.	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and changes to the Basin Plan Amendment and agrees with its responses. See response to comment 0.1 and 0.4 and Los Angeles Water Board's response to comment .3; 20.9; 33.21; 36.3; 36.7; 36.61.</p> <p>The TMDL sets forth WLAs and LAs and evaluates reasonably foreseeable methods of compliance and potential environmental effects associated with the reasonably foreseeable means of compliance. Consistent with Water Code section 13360, the Water Boards may not specify the manner of compliance. The TMDL does not mandate any particular action. See also responses 32.25, 32.27, and 32.29.</p>
29.2		Further, the TMDL is fraught with technical problems and unsupported analysis that leave the agencies with an inaccurate understanding of the compounds and the overall Harbor Waters system that the TMDL proposes to regulate, as well as the significant economic and environmental implications that may result from the adoption of the TMDL. The Regional Board's own peer reviewers noted that the TMDL was materially lacking in "scientific basis," in violation of the California Health and Safety Code. For these reasons, and the reasons further expressed in	<p>Comment noted. Responses are included below for specific comments.</p> <p>The TMDL 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</p>

No.	Author	Comment	Response
		the Montrose Responses, the State Board should remand the TMDL to the Regional Board to address the numerous technical and scientific errors included therein, and to conform the TMDL to the CWA and the California Porter-Cologne Act.	BPA and Staff Report.
29.3		<p><i>Inconsistencies with State-Wide Policies and Relevant TMDL Precedent</i> – The TMDL is contrary to state-wide policies, including the State Board’s “California Water Quality Control Plan for Enclosed Bays and Estuaries Plan – Part 1 Sediment Quality” (the “Bays and Estuaries Plan”), and to numerous other TMDLs in California and across the nation, yet does not explain these material departures.</p> <p>Staff seem to agree that any amendments (such as the TMDL) to the Regional Board’s water quality control plan (the “Basin Plan”) must comply with the California Water Control Plan for Enclosed Bays and Estuaries –Part 1 Sediment Quality (the “Bays and Estuaries Plan”). Cal. Water Code § 13240.</p> <p>Staff and commenters disagree over whether the TMDL conforms to the Bays and Estuaries Plan. The Regional Board states that the Bays and Estuaries Plan “does not provide a single number that can be used for a target and to calculate an allocation.” That is true, but it also is true that the Bays and Estuaries Plan provides the state-authorized process for determination of such a number. This process was available to the Regional Board and was required to be used to the extent the Regional Board proposes to determine a “single number.” Such is not required by the federal Clean Water Act (“CWA”), which does not require sediment or fish targets. (The TMDL could have complied with any and all U.S. EPA requirements had it simply used a water column target.)</p> <p>The TMDL must comply with state law in the setting of sediment</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.1.</p>

No.	Author	Comment	Response
		<p>and fish targets. To “fully implement” the Bays and Estuaries Plan and comply with state law on the development of a single, numeric target for sediment, the Regional Board must go through the process outlined in the Bays and Estuaries Plan. This process involves several steps, none of which were taken by the Regional Board in the development of this TMDL, including: stressor identification, studies on the chemical linkage to impairment, identification of pollutant chemicals or classes of chemicals, identifying sources, and finally, developing the numeric Sediment Management Guideline (“SMG”). See Bays and Estuaries Plan at 17-20 and 22. Development of an SMG after completing the Bays and Estuaries Plan process yields a numeric value that indicates “the level of stressor pollutant that will meet the narrative sediment quality objective.” Bays and Estuaries Plan at 19. The Regional Board Response suggests that use of the ERLs as numeric targets is acceptable because it “is consistent with previously adopted TMDLs in the Los Angeles Region.” Prior agency mistakes and actions that are in conflict with the agency’s statutory mandates cannot justify subsequent actions that repeat those mistakes. See Securities and Exchange Comm’n v. Sloan, 436 U.S. 103, 117-119 (1978) (the SEC had statutory authority to suspend trading in a stock for a 10-day period to protect the public interest. In Sloan, the SEC suspended trading in a stock for over a year, and the SEC argued that this was permissible because it had been suspending trading in stocks for periods that exceeded 10 days since 1944. Because this “long standing” agency interpretation was “inconsistent with the statutory mandate,” the Supreme Court said its “clear duty in such a situation is to reject the administrative interpretation of the statute.”); see also, California Ass’n of Psychology Providers v. Rank, 51 Cal.3d 1, 11-12 (1990) (When a regulation is challenged as being “inconsistent with the terms or intent of the authorizing statute . . . courts are the ultimate arbiters of the construction of the statute. . . . ‘Administrative regulations that alter or amend the statute or enlarge or impair its scope are void and courts not only</p>	

No.	Author	Comment	Response
		<p>may, but it is their obligation to strike down such regulations.”) (citations omitted). Like the TMDL here, the other TMDLs referenced in our comments involve impaired sediments. In those other cases, however, sediments were treated as sinks for pollutants, rather than sources – an assumption that reflects the true role of sediments in the system. For instance, the Delaware River Estuary TMDL for PCBs states that “[e]stuary sediments function as a sink or loss mechanism for PCBs through burial of PCBs that settle to the bottom of the estuary.” Delaware River Basin Commission, TMDL for PCBs for Zones 2-5 of the Tidal Delaware River at 15 (2003). The other TMDLs referenced similarly took a water column approach to the establishment of TMDLs, rather than treating the bottom sediments as a source and assigning them allocations.</p> <p>The Delaware River TMDL for PCBs differs from the Harbor Waters TMDL because it properly refused to allow pollutant sources outside of its control, like the ocean and aerial deposition, to overwhelm its modeling and allocations. In the Delaware River TMDL, “[f]or purposes of calculating the TMDLs, EPA notes that the model assumes that PCB loads from the ocean, the C&D Canal, the major tributaries, and the air are at levels that ensure that the water quality standards are achieved, rather than at the actual levels, which in every case are higher.” Delaware River Basin Commission, TMDL for PCBs for Zones 2-5 of the Tidal Delaware River at viii (2003). By not allowing these external sources to overwhelm the allocations, the Delaware River PCBs TMDL does not include a dredging project to account for aerial deposition that is in excess of the TMDL.</p> <p>These two legal approaches – recognizing that sediments are a sink rather than source, and avoiding sources like aerial deposition from overwhelming the modeling and allocations – were available to the Regional Board and would have allowed the Regional Board to develop a TMDL that accomplished the purposes of meeting water quality standards while not including</p>	

No.	Author	Comment	Response
		<p>an unjustified dredging project in the Harbor. The use of the ERL values as targets in the TMDL violates state law. The State Board rejected the use of ERLs as providing Sediment Quality Objectives, or even serving as a basis to establish such objectives. Bays and Estuaries Plan at 7-9; see also Montrose Comment Letter of Feb. 22, 2011 at 7-9, 17. The State Board's rejection of ERLs as having relevance to setting sediment objectives is well founded, and cannot be dismissed by the Regional Board, as the TMDL implicitly does. The ERLs do not reflect an adequate margin of safety for the <i>reasonable</i> protection of the beneficial uses of water (as is required here), but instead reflect "a range intended to estimate conditions in which effects would be rarely observed." Long, E.R. et al., (1995) <i>Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments</i> Environmental Management, 19(1): 81-97, at 84. The ERL authors caution that the statistics supporting the screening levels are "relatively weak." Id. at 95 ("for a few chemicals (especially mercury, nickel, total PCBs, total DDT, and p,p'-DDE) there were relatively weak relationships between their concentrations and the incidence of effects."). For these and other reasons reflected in the rulemaking for the Bays and Estuaries Plan, the State Board rejected the use of ERLs as a basis to set enforceable objectives, or to establish lower-bound thresholds to protect sediment quality. To the extent the TMDL might allow the regulated community to ignore the ERL targets and follow an SQO-based approach to compliance, such would be appropriate (assuming the SQOs themselves are lawful. They currently are the subject of challenge in State Superior Court. CalChamber et al. v. California State Water Resources Control Board, Superior Court of California, County of Sacramento, Case No. 34-2008-00006509). But the TMDL is unclear on this point, and might be applied as if the ERLs provide the basis for implementation. Such would be unlawful.</p>	

No.	Author	Comment	Response
29.4		<p><i>Impermissible Stringency</i> – The TMDL includes impermissibly low cleanup targets for the bottom sediments of the Harbor Waters that correspond to risk levels far below accepted norms.</p> <p>See Montrose Response 36.1 regarding the improper use of the ERLs and 36.4 for the improper use of fish tissue targets.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.2 and 38.7a.</p>
29.5		<p><i>Unintended Adverse Environmental Impacts</i> – It is well established that the extent of remedial dredging described in the TMDL has the potential to introduce compounds into the water that may otherwise remain safely sequestered in the Harbor Waters sediments, increase water column concentrations of mercury and other contaminants, and destroy the existing healthy benthic community, in addition to numerous other environmental impacts.</p> <p>Staff appears to claim that environmental damage will not result from the dredging described in the TMDL because a responsible party will have the choice to achieve compliance with the TMDL through either the ERLs or following an SQO-based approach. To the extent this is true (which is unclear from the terms of the TMDL), this does not negate the fact that implementation of the dredging actions described in the TMDL (which are not specific to the chosen compliance method) would create environmental problems, such as those identified in the original comment. Studies at the United Heckathorn Site and the Hudson River demonstrate that large-scale dredging often leads to recontamination and risks causing significant environmental disruption. See Letter from Paul Meyer, American Council of Engineering Companies of California, to Samuel Unger, Executive Officer, California Regional Water Quality Control Board, Proposed TMDL for Toxic Pollutants, 3 (Feb. 22, 2011).</p> <p>The Response claims that the Port of Los Angeles and the Port of</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.3.</p>

No.	Author	Comment	Response
		<p>Long Beach routinely dredge in the Harbor Waters safely and without unintended environmental consequences. Setting aside the absence of proof to this extreme assertion, these dredging projects are small compared to the dredging described in the TMDL; they are on an entirely different scale. These relatively small projects are an inadequate model for the environmental damage anticipated from implementation of the dredging described in the TMDL. The Regional Board's own model shows that levels of DDT in sediment are decreasing. Due to the exceedingly low targets for DDT in the TMDL, any dredging project likely would take a significant amount of time. Considering that natural recovery already is occurring, as demonstrated by both the RWB's own modeling and empirical data, it is arbitrary and capricious to include a costly and invasive remedy that monitored natural attenuation may achieve in a similar timeframe.</p>	
29.6		<p><i>Lack of Proven Benefits to Human Health</i> – Despite limited evidence of significant consumption of fish from the Harbor Waters, the proposed DDT fish-tissue target is more than 200 times more stringent than the Food and Drug Administration's national tolerance level for fish that may be sold in the supermarket.</p> <p>Staff's reliance on prior TMDLs that incorporated Fish Contaminant Goals ("FCGs") is misplaced. Prior agency mistakes and actions in conflict with statutory mandate cannot justify subsequent actions that repeat those mistakes. See Montrose Response 36.1</p> <p>The Regional Board Response does not address the OEHHA guidance regarding why FCGs are not appropriate as a final fish tissue target in the TMDL. OEHHA specifically provides that FCGs are intended to "provide a starting point for OEHHA to</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.4 and Los Angeles Water Board's responses to comments 36.4.</p> <p>In summary, fish tissue goals in this TMDL are based on Fish Contaminant Goals (FCGs) established by OEHHA. While, several stakeholders suggested that the Advisory Tissue Levels (ATLs) established by OEHHA would be more appropriate. ATLs are higher and are associated with a range of recommended meals per week, which balances the benefits of fish consumption with the risk incurred from the fish tissue contaminant levels. OEHHA developed FCGs, on the other hand, for agencies needing to</p>

No.	Author	Comment	Response
		<p>assist other agencies that wish to develop fish tissue-based criteria with a goal toward pollution mitigation or elimination. . . . FCGs are based solely on public health considerations without regard to economic considerations, technical feasibility, or the counterbalancing benefits of fish consumption.” 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 at iii (June 2008). The TMDL cannot lawfully use another agency’s “starting point” as the final values for fish tissue targets, at least not without including its own independent analysis as to why such would be appropriate. The TMDL contains no such analysis, but, rather, just grabs OEHHA’s FCGs as if they were tailor-made for a TMDL. This is particularly problematic since OEHHA itself said the purpose of the FCGs is for it, <i>i.e.</i>, OEHHA, to assist other agencies – not for other agencies to use without effective consult with OEHHA, which was not done here. To take into account the health benefits of eating fish, the TMDL should have incorporated the use of Advisory Tissue Levels (“ATLs”), which OEHHA uses as “one of the criteria . . . for issuing fish consumption guidelines.” <i>Id.</i> ATLs correspond to a level of no health risk to individuals that consume sport fish and (unlike FCGs) reflect the “unique health benefits associated with fish consumption.” <i>Id.</i> The ATL reported by OEHHA for DDT is <i>100 times higher</i> than the FCG used in the TMDL (<i>id.</i> at 61). The stringency in the TMDL actually is harmful to human health because it could be used as a basis to deny to people fish that pose no health risk, denying them the benefits of eating fish. The use of the FCGs in the TMDL instead of the ATLs is not only arbitrary and capricious, it violates the agency’s mandate to set health-protective standards. Because the TMDL is required to “fully implement” the Bays and Estuaries Plan, the target values for DDT in the TMDL should be based on values (if any) that pose a health risk to humans. Cal. Water Code § 13393(b) (“[t]he state board shall base the sediment quality objectives on a health risk</p>	<p>use criteria values for management decisions. These values are purely risk-based and are intended to be used to develop water quality criteria or cleanup levels. Therefore FCGs are the appropriate goals for a TMDL.</p>

No.	Author	Comment	Response
		<p>assessment if there is a potential for exposure of humans to pollutants through the food chain to edible fish, shellfish, or wildlife.”). Published studies have not shown a link between DDT and adverse impacts to human health. See Montrose Comment Letter of Feb. 22, 2011 at 10, n.44.</p> <p>Given the lack of proven link between DDT and adverse impacts to human health, any target value in the TMDL aimed at protecting against human health effects allegedly caused by DDT is inconsistent with, and violates, Water Code Section 13393(b).</p>	
29.7		<p><i>Lack of Material Benefit to the Ecosystem</i> – The TMDL offers no evidence that the current levels of the subject compounds in the sediments are placing fish or wildlife at great risk, such that the impermissibly low sediment targets set forth in the TMDL are required.</p> <p>See Montrose Response 36.1 for a discussion of why ERLs are not appropriate standards and why, as screening values, they do not correspond to any benefit to the ecosystem.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.5.</p>
29.8		<p><i>Adverse Economic Consequences With No Commensurate Benefit</i></p> <p>The only way to logically assess economic reasonableness is to discuss the benefits of the TMDL in relation to the cost of implementation. Despite potential implementation costs which could reach over \$2 billion, the TMDL provides no evidence that commensurate potential benefits will be gained.</p> <p>The origin of the \$2 billion is clearly set forth in our original comments. See Montrose Comment Letter of Feb. 22, 2011 at 8-9 (calculating an estimated dredging cost of \$2.16 billion when using the agencies cost of \$60.84/cubic yard and estimated volume of 35.5 cubic yards of material to achieve ERL compliance); see also Dr. David Sunding's Comment Letter of Feb. 22, 2011. Regional Board Response 23.9 is wholly</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 29.3; 36.6.</p>

No.	Author	Comment	Response
		<p>nonresponsive to our commentary on economics and the absence of any meaningful economic analysis to support the TMDL. Regional Board Response 23.9 suggests that the TMDL overestimated the cost to implement the dredging described in the TMDL. This position is contrary to the evidence in the record that the TMDL grossly underestimated the actual costs of the dredging it describes. See Dr. David Sunding's Comment Letter of Feb. 22, 2011; see also Dr. E. John List's Comment Letter of Feb. 22, 2011. Regional Board Response 23.9 focuses solely on values estimated by the Ports when using the Bays and Estuaries Plan to determine the amount of dredging. But, the TMDL used the ERLs to set numeric targets for sediment, so dredging volumes and costs also should be based on the ERLs. The Ports' dredging cost estimate is more than three times higher when based on the ERLs.</p> <p>See Dr. David Sunding's Comment Letter of Feb. 22, 2011 at 4-5.</p>	
29.9		<p><i>Adverse Consequences to Harbor Management</i> – The TMDL will result in significant increased costs to manage sediment in the Harbor Waters which may impact maintenance and navigational dredging projects by the ports, waterfront redevelopment, habitat restoration, and the construction of wetlands.</p> <p>The Response does not acknowledge that the Ports have never implemented remedial dredging on the scale described in the TMDL. The Ports' prior experience with routine maintenance dredging does not provide evidence that this TMDL can be implemented without serious and costly environmental and economic impacts. There is no evidence in the record which demonstrates that it would be feasible for the Ports to combine maintenance or navigational dredging projects with the remedial dredging described in the TMDL, nor does the TMDL provide any evidence that such an option would be successful in meeting the excessively low sediment targets of the TMDL.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.6; 36.18.</p>

No.	Author	Comment	Response
29.10		<p><i>Inadequate Analysis of Alternatives and Environmental Impacts</i> – Feasible and less environmentally invasive alternatives, such as monitored natural recovery, were not adequately analyzed, in violation of the California Environmental Quality Act (“CEQA”).</p> <p>Response 1.5 suggests there is no need to consider Section 13241 factors, including cost, in this TMDL because the TMDL does not establish any new water quality objectives. But the TMDL includes an implementation plan that must comply with Section 13242. It is only through an implementation plan that the Section 13241 factors can be evaluated as intended by the legislature. Where, as is the case here, implementation measures are being adopted years after Section 13241 water quality objectives are put in place, Sections 13241 and 13242 both apply, so that it can be seen whether the 13241 objectives truly are reasonably achievable, and are consistent with the other 13241 factors. In addition, because the TMDL allocations correspond to “limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water,” the TMDL targets themselves are new water quality objectives. Cal. Water Code. § 13050(h). In promulgating water quality objectives in the TMDL, the TMDL was required to analyze Section 13241 factors, including economic considerations. The Regional Board Response correctly states that <i>City of Arcadia v. State Water Resources Control Bd.</i> holds that a Section 13241 analysis is required only when water quality objectives are more stringent than what federal law requires. <i>City of Arcadia</i>, (2010) 191 Cal. App. 4th 156, 178-29. The TMDL allocations imposed here are by definition more stringent than federal law requirements, because the CWA does not contain general authority to regulate sediment (see Montrose Response 36.11). Engaging in a Section 13241 analysis here does not violate <i>City of Arcadia</i>.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 32.45, 34.48, and Los Angeles Water Board's responses to comments 36.10.</p> <p>The "project" for purposes of the alternatives analysis required by CEQA is the adoption of a TMDL – in other words, a waste load allocation (WLA) and load allocation (LA) and a program of implementation. This TMDL sets forth the WLAs and LAs and specifies the length of time to achieve compliance with the allocations, and states that the TMDL will be implemented in appropriate NPDES permits and other regulatory mechanisms. The TMDL does not adopt nor specify the means of compliance. The purpose of the TMDL is to achieve compliance with numeric and narrative water quality criteria and objectives set forth in the Basin Plan and the CTR so as to remove the impairment in the affected water bodies.</p> <p>The Substitute Environmental Documents (SED) for the TMDL set forth three alternatives – the no project alternative, the USEPA alternative and the recommended alternative that was ultimately adopted. In addition, the TMDL documents considered several alternatives to the method for establishing the TMDL, including the consideration of various ways to comply with the narrative water quality objectives. See Staff Report, Section 3. Given that the purpose of the</p>

No.	Author	Comment	Response
		<p>The Regional Board Response also incorrectly assumes that Cal. Water Code Section 13000 is merely a statement of policy that does not impose any duty on the TMDL to consider costs. Cal. Water Code Section 13001 requires that the Regional Board implement the declarations of Section 13000 in every action taken. See Cal. Water Code § 13001 (“The state board and regional boards in exercising any power granted in this division shall conform to and implement the policies of this chapter[.]”). Section 13000 requires that all activities and factors which may affect the quality of water be regulated “considering all demands being made and to be made those waters and the total values involved, beneficial and detrimental, <i>economic</i> and social, tangible and intangible.” Cal. Water Code § 13000 (emphasis added). The Regional Board Response cites City of Arcadia for the principle that a statement of legislative intent like Section 13000 cannot give rise to a mandatory duty. However, this decision holds only that a general statement of legislative intent does not impose a duty that would be enforceable through a writ of mandate. Section 13001 transforms Section 13000 into something other than a “general statement of legislative intent” because Section 13001 imposes a mandatory duty on the Regional Board to consider economics under Section 13000.</p> <p>See also Montrose Response 36.47.</p>	<p>TMDL is to establish WLAs and LAs to achieve compliance with existing water quality objectives and criteria, there are limited alternatives to consider with respect to meeting water quality objectives. The WLAs and LAs either meet the objectives or criteria or they do not. Although the Regional Board does not specify the manner of compliance in a TMDL, the TMDL did analyze many alternatives to the methods of compliance.</p>
29.11		<p><i>Absence of Proper Technical Conditions</i> – Serious technical errors in the TMDL’s data, modeling and analysis yield results that are contrary to observed, empirical data, thereby rendering the TMDL unsupported by proper technical conditions and not technically defensible.</p> <p>Staff did not respond to or acknowledge that the serious errors identified by the original comment in the TMDL’s data, modeling, and analysis result in a lack of “proper technical conditions” for a “technically defensible” TMDL. See Montrose Response 36.19</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.19; 36.40; 36.63b.</p> <p>State Board staff disagree with commenter’s statement that the TMDL’s data, modeling and</p>

No.	Author	Comment	Response
		for a discussion regarding the absence of proper technical conditions for this TMDL. See also Montrose Responses 36.40 and 36.63b.	analyses are not technically defensible.
29.12		<i>Arbitrary and Capricious Reliance on Future Agency Action</i> - It is arbitrary and capricious to rely on a future “re-opener” as justification for adopting a broken rule now. If adequate data are not available to establish a scientifically sound TMDL at the time of promulgation, the TMDL should not be adopted. By improperly deferring the requisite environmental analysis to establish a technically defensible TMDL, the adopted TMDL will result in illegal, flawed, and unjustified sediment allocations unless and until the agency chooses to re-open the TMDL (which it may not do at all).	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 36.13.
29.13		<i>Clean Water Act Consent Decree Does Not Excuse an Inadequate TMDL</i> - The deadline set forth in the Consent Decree to adopt a TMDL does not excuse promulgation of a technically infeasible and unsound TMDL. Other legally and technically defensible TMDL options, including a water column based TMDL, were available to the Regional Board.	The State Water Board disagrees. The TMDL, as adopted, is technically sound and feasible. The TMDL provides for a 20-year implementation schedule, which will be sufficient time to achieve compliance with the WLAs and LAs. In addition, because the TMDL cannot specify the manner of compliance, the responsible party can choose the most feasible manner of compliance it prefers. Dominguez Channel and the Greater Los Angeles and Long Beach Harbor are impaired by heavy metals and organic pollutants in one or more environmental media—water, sediment, or tissue. A water column based TMDL option is not a technically defensible TMDL to address impairments in water, sediment, and fish tissue.
29.14		<i>Arbitrary and Capricious Reliance on other TMDLs</i> – It is arbitrary and capricious for the Regional Board to rely on prior TMDLs as justification for its illegal and unsupportable actions in promulgating this TMDL. Prior agency mistakes and actions that	The Los Angeles Water Board's reference to other TMDLs demonstrates consistency. Otherwise, these other TMDLs are not within the scope of this action and have no legal effect or bearing on

No.	Author	Comment	Response
		are in conflict with the agency's statutory mandates cannot justify subsequent actions that repeat those mistakes.	responsible parties in this action.
29.15		<i>Insufficient Reliance on Best Available Data</i> – Use of the “best available data” does not excuse reliance on poor and unreliable data, or flawed modeling and analysis.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 19.6, 20.2, 23.6, 36.33, and 36.37.
29.16		<i>Potentially New Remediation Alternatives Must Be Fully Analyzed Under CEQA</i> – The Regional Board Responses indicate that maintenance dredging may reduce pollutant loads within bed sediments, thereby dramatically reducing the scope of the remedial dredging program described in the TMDL. To the extent the Regional Board is considering this as a remediation option (which we support), this alternative must be adequately analyzed under CEQA.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.8-20.15 The TMDL, consistent with CEQA (Public Resources Code section 21159), describes reasonably foreseeable methods of compliance. As set forth in California Water Code section 13360, the Los Angeles Water Board may not specify the manner of compliance in orders issued by the Board, responsible parties may comply in any lawful manner. The TMDL states in the Implementation Plan that the TMDL will be implemented through various NPDES permits and other orders of the Board. The SED analyzed the reasonably foreseeable options, including maintenance dredging and identified potentially significant environmental impacts and potential mitigation measures associated with the reasonably foreseeable means of compliance.
29.17		<i>Misleading SQO-Based Compliance Option</i> – References to “flexibility” in the TMDL's compliance options are unclear and may	State Water Board reviewed the Los Angeles Water Board's responses to these comments and

No.	Author	Comment	Response
		be misleading. The Regional Board should clarify the role of the Bays and Estuaries Plan to explain the extent to which the TMDL may allow the regulated community to follow a Bays and Estuaries Plan-based approach to compliance rather than an ERL-based approach to compliance.	agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.1, 36.1, 38.7a.
29.18		<p><i>Peer Review Comments Demonstrate That the TMDL Violates Health and Safety Code Section 57004</i> - California Health and Safety Code section 57004 requires an external peer review of the “scientific basis” for any rulemaking that is done to protect public health or the environment. If the peer reviewers find that the rule lacks scientific basis, the Regional Board must either revise the scientific portions of the rule or state why the Regional Board determined that the scientific portions of the proposed rule are based on sound scientific knowledge, methods, and practices.²</p> <p>As more fully explained in the supplemental materials attached hereto, the TMDL peer reviewers expressly concluded that there is no “scientific basis” for the sediment quality standards, targets, and allocations established by the TMDL. Because the Regional Board did not adequately address the errors that the peer reviewers identified as being without “scientific basis,” the TMDL is illegal and violates the terms of Health and Safety Code section 57004(d).</p> <p>² Cal. Health & Safety Code § 57004.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 25.8.</p> <p>A complete response to the peer reviewers was posted to the Los Angeles Water Boards website in April of 2011.</p> <p>The Los Angeles Water Board made numerous additions, and clarifications to the Staff Report as recommended by peer reviewers. However, the Los Angeles Water Board did not conduct additional revisions to the model because, although a model can always be expanded or improved, it was not necessary to do so to satisfy the needs of the TMDL.</p>
29.19		<p><i>No Mass Balance Supports the TMDL</i> – As identified in our February 22, 2011 comment package,³ the TMDL contains a serious mass balance calculation defect which violates generally accepted scientific principles and results in a TMDL which cannot reflect the actual assimilative capacities of the affected waterbodies. This calculation defect was the subject of several subsequent discussions between Montrose and Regional Board staff after the close of the public comment period. At the May 5,</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.2.</p>

No.	Author	Comment	Response
		<p>2011 adoption hearing, the Board directed staff to continue to work with stakeholders on this key technical issue. The Regional Board Response confirms that no mass balance calculation was performed, thereby underscoring the TMDL's lack of sound technical foundation and showing that the reliability of the sediment targets or allocations of the TMDL has not been established. Since a TMDL is itself a mass balance between assimilative capacity on the one hand, and allocation and other categories on the other, the absence of mass balance also is a legal defect, and violates the CWA and implementing regulations and policy.</p> <p>³ See "Review and Comment on Loading Estimates Related to TMDL Development for Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters," Drs. Pravi Sresthra and Charles Menzie, at 3 ("Mass balance computations for sediment and contaminants were not performed as part of the model assessment, and hence there can be no reasonable confidence that contaminant concentrations derived from model predicted deposition are correct.").</p>	
29.20		<p><i>All Relevant TMDL Documentation Was Not Made Publically Available</i> – Several commenters and peer reviewers noted that significant portions of the information and data the Regional Board used in developing the TMDLs and the associated models was not made available for public review and comment.⁴ It is arbitrary and capricious for the Regional Board to rely on materials that will only be available to the public "[o]nce the TMDL is approved," ⁵ especially where these materials relate to the questionable validity of the modeling conducted for the TMDL.</p> <p>4 & 5 See e.g. "Ports' Modeling Comment Summary and Responses" at M2.12 ("TMDL models are based on publically available code. <i>Once the TMDL is approved then EFDC and LSPC model output information will be available for additional</i></p>	<p>State Water Board disagree. TMDL and related documents are posted and updated on Regional Board website. Regional Board staff contact information for TMDL are also available on Regional Board website to provide information and answer questions regarding the TMDL.</p>

No.	Author	Comment	Response
		<i>analysis; thus commenter can explore this topic to their satisfaction.”) (emphasis added).</i>	
29.21		<p><i>The Regional Board Failed to Respond to All Material Public Comment</i> - In violation of its duties under the California Administrative Procedures Act and CEQA,⁶ the Regional Board did not provide substantive responses to numerous public comments submitted prior to the adoption of the TMDL. Included within the supplemental materials attached hereto, we have provided a table listing those Montrose comments submitted to the Regional Board that remain unaddressed and/or unanswered.</p> <p>⁶ Cal. Gov’t Code § 11346.9(a)(3) (“Every agency shall prepare and submit ... a summary of each objection or recommendation made regarding the specific adoption, amendment, or repeal proposed, together with an explanation of how the proposed action has been changed to accommodate each objection or recommendation, or the reasons for making no change.”); 23 Cal. Code Regs. § 3779; Cal. Pub. Res. Code § 21080.5(d)(2)(D); Gallegos v. State Bd. of Forestry, 76 Cal. App. 3d 945, 954 (1978).</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to Montrose comments submitted to the Regional Board and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.1-36.75.</p>
29.22		<p>Inadequate Analysis of Alternatives</p> <p>Staff acknowledges that the SED must evaluate a “reasonable range of alternatives” to the TMDL which would still attain most of the project objectives. But the Response did not recognize that the purpose of a CEQA document’s discussion of alternatives and mitigation measures is to identify ways to reduce or avoid significant environmental effects. Laurel Heights Improvement Ass’n v. Regents of Univ. of Cal. (1988) 47 Cal. 3d 376, 403. The focus must be on alternatives that can avoid or substantially lessen a project’s significant environmental effects. Cal. Pub Res Code § 21002; 14 Cal Code Regs § 15126.6(a)-(b). The alternatives discussed should be ones that offer substantial</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 29.10 and Los Angeles Water Board's responses to comments 20.8-20.14; 36.30; 36.31; 36.48.</p> <p>The examples provided by the commenter are methods of compliance. The TMDL, consistent with CEQA (Public Resources Code section 21159), evaluated reasonably foreseeable methods of compliance, including identifying ways to reduce or avoid significant environmental</p>

No.	Author	Comment	Response
		<p>environmental advantages over the proposed project. Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal. 3d 553, 566. By briefly discussing only two purported alternatives (a TMDL established by the U.S. EPA and a No Project alternative), the SED ignores numerous feasible project alternatives which would meet most of the basic project objectives <i>and</i> result in less significant environmental impacts. These feasible alternatives include, but are not limited to: (1) monitored natural recovery; (2) maintenance dredging, followed by limited remedial dredging, if necessary; and (3) a water-column based TMDL. For the two alternatives discussed in the SED, the SED does not provide any meaningful detail as required by CEQA. The Regional Board Response does not cite to any authority, under either CEQA or NEPA, which would allow the SED to not evaluate <i>any</i> environmental impacts associated with any alternative. Rather, the California Supreme Court specifically has struck down alternatives analyses strikingly similar to the SED. See Montrose Comment Letter of Feb. 22, 2011 at 33-36. Staff also acknowledges that the SED must evaluate a “no-project alternative”, which in this case would be the continuation of the existing policy. But the SED contains no discussion of the environmental impacts of the “continuation of the existing policy”, i.e. if the TMDL is not adopted. 14 Cal. Code Regs. § 15126.6(e)(3)(A). Instead, the SED simply states that “the failure to implement a Toxic Pollutants TMDL is unlawful.” At a minimum, CEQA requires the SED to “analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future[.]” 14 Cal. Code Regs. § 15126.6(e)(3)(C). The SED contains no such analysis or discussion. Monitored natural recovery is not “essentially equivalent” to a No Project alternative. U.S. EPA defines “monitored natural recovery” as “a remedy that typically uses known, ongoing, naturally occurring processes to contain, destroy, or otherwise reduce the bioavailability or toxicity of contaminants in sediment” and “generally includes site-specific</p>	<p>effects The CEQA documents, including the Staff Report (See Figure Error! No text of specified style in document.-1. Proposed Sediment Monitoring Program and Priority Assessment Flowchart, page 107) showing potential sediment implementation actions, monitoring, and priority assessment programs that control and monitor continuing sources of pollutants and allow natural attenuation to result in full cleanup. This approach is consistent with “monitored natural recovery” as described by the commenter.</p> <p>It is unclear what the commenter means by a “water-column based TMDL”. As described in the Staff Report, Section 2, the pollutants cadmium, chromium, copper, mercury, lead, zinc, chlordane, dieldrin, toxaphene, DDT, PCBs, and certain PAH compounds are causing impairment of the beneficial uses. These impairments may exist in one or more environmental media—water, sediments or tissue. The purpose of the TMDL is to reduce the presence of the pollutants in order to eliminate the impairment of the beneficial uses. The SED does, in fact, discuss the no project alternative. (See SED, Section 4.1.3 Alternative 3 – No Program Alternative, page 16-17)</p>

No.	Author	Comment	Response
		<p>cleanup levels and remedial action objectives, and monitoring to assess whether risk is being reduced as expected.” See Contaminated Sediment Remediation Guidance for Hazardous Waste Sites at 4-3, EPA (2005), available at http://www.epa.gov/superfund/health/conmedia/sediment/pdfs/guidance.pdf.</p> <p>The no project alternative described by the SED does not contemplate any monitoring, site-specific cleanup levels or remedial action objectives. The SED should acknowledge that monitored natural recovery is especially appropriate here, where the harbors are known depositional environments, where deposition is accelerated by navigational and maintenance dredging.</p>	
29.23		<p>TMDL does not comply with federal law.</p> <p>Our original comment was not intended to suggest the Regional Board has no authority to develop numeric limits for bottom sediments; as stated previously, the Regional Board may develop numeric limits for bottom sediments by following the series of steps set forth in the Bays and Estuaries Plan (which it did not do). See Montrose Response 36.1 for a discussion of the Bays and Estuaries Plan. However, this authority under the Bays and Estuaries Plan does not extend to U.S. EPA, and the TMDL was presented to the public as a joint Regional Board-U.S. EPA action. See Regional Board Res. No. R11-008 at 4 (“Given the scope and complexity of this TMDL, the Regional Board has been working closely and collaboratively with EPA Region 9 on the development of the TMDL.”); see also Notice of Availability of Draft Documents, Public Comment Period, and Public Hearing dated December 17, 2010 (“Notice is hereby given that the [Regional Board] and [U.S. EPA] Region 9 are making the following documents available for public review . . .” The notice also bears both the</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.11</p>

No.	Author	Comment	Response
		<p>seal of the State of California and the emblem of U.S. EPA.). There is no general authority under the CWA to regulate the quality of bottom sediments. This is demonstrated by (i) Congress explicitly authorizing U.S. EPA to promulgate numeric limits for bottom sediments in the Great Lakes, but not elsewhere; (ii) Congress unsuccessfully attempting to amend the CWA to include authority for U.S. EPA to set numeric limits for bottom sediments elsewhere, which would clearly be unnecessary if that authority were already in the CWA; (iii) Congress treating water and sediments as separate media throughout the CWA; and (iv) the provisions of the CWA that authorize development of water quality standards remaining silent in regards to sediments. See Montrose Comment Letter of Feb. 22, 2011 at 1-5. The Regional Board Response attempts to rebut these statutorily based points by relying on non-mandatory guidance, irrelevant case law, and law review articles and student comments. The U.S. EPA guidance referenced by the Regional Board Response is consistent with our comment that there is no general authority in the CWA to set numeric limits for bottom sediments. For instance, the Regional Board Response improperly paraphrased the EPA's Contaminated Sediment Management Strategy guidance, which actually provides that, "States can use sediment quality criteria or EPA's sediment bioassays to interpret their narrative water quality standards." This is entirely consistent with our position that the Regional Board not only can, but must, fully implement the Bays and Estuaries Plan, as this plan is California's sediment quality criteria. The EPA's Water Quality Handbook quotations also do not support the Regional Board Response's contention that the CWA provides authority to set numeric limits on bottom sediments. Section 104(n)(1) only authorizes the Administrator to <i>study</i> the effects of pollution and sedimentation on estuaries, which clearly is not authorization to set numeric limits on the quality of estuarine bottom sediments. 33 U.S.C. § 1254(n)(1). Similarly, Section 304(a) provides for the development of "criteria for water quality," not bottom sediments, and authorizes the</p>	

No.	Author	Comment	Response
		<p>Administrator to “publish information on” water quality, not bottom sediments. 33 U.S.C. § 1314(a). Plainly, these statutory provisions do not authorize the setting of numeric targets for bottom sediments. General statements in the EPA’s Water Quality Handbook regarding a risk of impairment due to sediment contamination do not authorize setting numeric limits for bottom sediments.</p> <p>The two cases cited in the Regional Board Response are irrelevant and likewise do not provide authority to set numeric limits on bottom sediments. In <i>United States v. Alcoa, Inc.</i>, the issue was whether “appropriate relief . . .to require compliance” with Section 309(b) of the CWA could include an injunction that requires sediment remediation. 98 F. Supp. 2d 1031 (N.D. Ind. 2000). Section 309(b) allows the Administrator to bring a civil action against an entity that violates a permit issued to it under sections 402 and 404 of the CWA. 33 U.S.C. § 1319. In <i>Alcoa</i>, the government alleged that the permitted entity had discharged PCBs and other contaminants in violation of its National Pollutant Discharge Elimination System (“NPDES”) permit, and that this discharge caused contamination of the sediments of the receiving water. 98 F. Supp. 2d at 1032. The government sought an injunction that would force the discharger to clean up the contamination caused by its illegal discharges, and the discharger challenged whether that relief was available under the statute. <i>Id.</i> at 1033. The court found that the Administrator’s authority to “require compliance” under Section 309(b) was “broad enough to include the mandated clean up of contaminated sediments where the sediments are contaminated as a direct result of NPDES Permit violations.” <i>Id.</i> at 1039. The TMDL is not a Section 309(b) enforcement action to enforce unlawful discharges that violate the terms of a NPDES permit. <i>Alcoa</i> does not include broad authority for EPA to regulate contaminated sediments, as the TMDL proposes to do in this case. Specifically, <i>Alcoa</i> held that “for an injunction to issue for sediment remediation under Section 309(b),</p>	

No.	Author	Comment	Response
		<p>the EPA must first establish that the sediments are contaminated with a substance that was released by the Defendant in an amount in excess of its NPDES Permit. In addition, it must show that the substance is hazardous to human health and the environment; that it will not naturally break down over time; and that it will continue to be released into the 'waters of the United States' at such a level as to contaminate the water and make it unsafe for its designated uses." Id. The record confirms that these requirements are not met here. First, the body of science does not demonstrate a link between DDT and adverse human health effects. See Response 36.4. Second, it is well understood that DDT naturally attenuates over time. See Response 36.40. Finally, because the production and sale of DDT was banned in 1972, it is no longer being introduced into the environment. Thus, the TMDL does not meet the conditions precedent set forth by the court before allowing mandated clean up of contaminated sediments. United States v. Outboard Marine Corp. also involved an order to conduct a cleanup based on illegal discharges. 549 F. Supp. 1036, 1042 (N.D. Ill. 1982). Similar to Alcoa, this case is irrelevant to a TMDL which proposes to set broad policy, rules, and standards for bottom sediments. The Regional Board Response also cites a series of law review and other articles as authority for setting numeric limits for bottom sediments under the CWA. As an initial matter, articles are not mandatory authority; they are secondary sources that do not and cannot contain statutory or regulatory directives that agencies must follow. None of the cited articles suggests that there is authority under the CWA to assign numeric limits to bottom sediments. For example, the student comment by Benjamin Benum of in the San Diego Law Review states only that CWA interpretations suggest that the beneficial uses of the water bodies are to be protected from contaminated sediments. Likewise, the Federal Register entry only states that benthic organisms should be considered and protected when considering mixing zones. Finally, the scientific paper by Weston et al. and</p>	

No.	Author	Comment	Response
		<p>the articles by Marcus, Bibler, and Wenig provide no support for the Regional Board's argument that there is general authority in the CWA to set numeric limits for bottom sediments in harbors. These sources cited by the Response do not provide general CWA authority to set numeric limits for bottom sediments. Such authority plainly is not in the CWA, nor do these sources even suggest that such authority is contained within the CWA.</p>	
29.24		<p>Draft TMDL is Arbitrary and Capricious and entirely lacking in evidentiary support.</p> <p>1. We commented that the TMDL's estimates of dredging volumes are unrealistically low, if the TMDL targets are not changed. The Regional Board Response <i>reduced</i> the estimated sediment volume proposed to be dredged, but leaves the targets unchanged. The Regional Board Response claims that the dredged sediment volume likely will be lower because the Ports already will be dredging for navigation in areas where TMDL dredging may be necessary. We encourage the Regional Board to pursue an alternative that might dramatically reduce TMDL dredging volumes by allowing harbor deepening and maintenance dredging to proceed first.</p> <p>The Regional Board Response did not provide any basis for the \$60.84 estimate per cubic yard of dredged material. The Staff Report cites one 1998 study for sediment contamination mitigation at the mouth of Ballona Creek; using a single, outdated study to predict the cost of dredging is flawed. Instead, more recent cost information from several similar sites should be used. See Dr. David Sunding's Comment Letter of Feb. 22, 2011 at 4-6 (using dredging costs at seven similar sites to arrive at an estimate of \$200 per cubic yard). The Regional Board Response did not address the comment that the TMDL costs are wholly out of proportion to the tenuous benefits (if any) of the proposed action. It is unclear if the TMDL will result in</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.1, 36.3, 36.6, 36.13.</p>

No.	Author	Comment	Response
		<p>any actual environmental benefit; the agencies previously acknowledged that (i) upstream inputs may cause recontamination of the Harbor Waters; (ii) the watersheds upstream from the harbors are known to flush contaminants into the Harbor Waters at levels that exceed draft TMDL levels; and (iii) atmospheric deposition contributes to contamination in the Harbor Waters in levels in excess of the TMDL values. Any benefit that could be achieved by the billions of dollars of remedial efforts identified in the TMDL likely will be offset, perhaps wholly, by such recontamination. Because the TMDL did not include studies which analyzed these potential recontamination sources, the TMDL is arbitrary and capricious. See also Montrose Response 36.6.</p> <p>2. See Montrose Responses 36.1.</p> <p>3. The Regional Board Response does not adequately respond to concerns that the TMDL describes dredging that may be subject to documented, systematic problems including the inability of dredging to achieve remedial objectives and the likelihood that dredging will cause significant environmental damage. The TMDL does not acknowledge the presence of viable alternatives to remedial dredging. The Regional Board Response does not provide any assurance that the effectiveness or environmental impacts of dredging were considered before promulgation of the TMDL. See also Montrose Response 36.3.</p> <p>4. The Regional Board Response claims that the comparison to the Newport Bay TMDL is “apples to oranges” because “several factors determine the mass-based TMDL amount per pollutant per water body.” But this response offers no explanation why the TMDL for the Harbor Waters, an industrial area that contains one of the largest and busiest port complexes in the world, establishes more stringent regulation of DDT and PCBs than the TMDL for</p>	

No.	Author	Comment	Response
		Newport Bay, which includes an ecological reserve and significant recreational uses. While it is true that a mass-based TMDL is based on a variety of factors, simply providing such a list does not provide evidence supporting the choice made by the Regional Board. The Response also notes that the Dominguez Channel Estuary is 150 acres, whereas the Upper Newport Bay is 370 acres. This explanation does not demonstrate a rational connection between the size of the waterbodies and the target levels, however. For example, the Regional Board Response does not explain why the TMDL for total DDT in the Dominguez Channel Estuary is <i>41 times more stringent</i> than the DDT TMDL for Upper Newport Bay, when that water body is only 2.5 times larger than the Dominguez Channel Estuary.	
29.25		The draft TMDL departs from the Bays and Estuaries Plan for establishing sediment cleanup levels – without explanation or rational basis. See Montrose Response 36.1	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.1.
29.26		The draft TMDL erroneously assumes that residual compounds are bioavailable and will not degrade. See Montrose Response 36.65.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 23.2 and Los Angeles Water Board's responses to comments 36.65.
29.27		The draft TMDL relies on inaccurate assumptions regarding contaminant inputs to the Harbor Waters. By improperly characterizing the <i>heading</i> of a portion of our comment letter as our entire comment, the Response mischaracterizes our comment and does not respond to numerous specific comments incorporated under this heading. Specifically, Regional Board Response 22.1 does not address or	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 23.6a. For sediments as source and as habitat, see also Regional Board response to comment

No.	Author	Comment	Response
		<p>respond to the comment that the TMDL improperly treats contaminated sediments as a source, instead of a sink like other TMDLs and sediment management strategies. See Montrose Comment Letter of Feb. 22, 2011 at 19. (Instead, Response 22.1 addresses a comment regarding what recent monitoring results are incorporated into the TMDL.) The TMDL is not supported by any explanation or evidence as to why the TMDL is inconsistent with this generally accepted approach. The Response also does not respond to the comment that the TMDL improperly makes assumptions regarding the replenishment of bottom sediments via atmospheric deposition. See Montrose Response 36.52.</p>	<p>23.8.</p> <p>Appendix III (pg. III-46) indicates the flux of DDT from the sediment to the Harbor waters is positive, indicating that the sediments are a significant source of DDT to the overlying water column.</p> <p>See also Regional Board response to comment 20.4.</p> <p>See also Regional Board response to comment 23.8 and 29.60 regarding air deposition.</p>
29.28		<p>The draft TMDL relies on studies that are biologically irrelevant to the Harbor Waters.</p> <p>See Montrose Response 36.63b.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 29.42 and Los Angeles Water Board's responses to comments 36.9; 36.62; 36.63.</p>
29.29		<p>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.</p> <p>The Response claims that the Implementation Plan provides "reasonable means/measures . . . to reduce pollutant loadings and address existing internal sources." But the Response mischaracterizes the legal standard which the Implementation Plan must meet; California Water Code section 13242 requires the Implementation Plan to include "a description of the nature of actions which are necessary to achieve the objectives" of the TMDL. The Implementation Plan does not meet this standard. The Implementation Plan does not explain how a responsible party is expected to comply with the allocations set forth in the TMDL which are grams per year for certain constituents. To meet these excessively low targets, a responsible party must locate,</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.18.</p>

No.	Author	Comment	Response
		<p>test and remediate these miniscule amounts, in one of the world's most active harbors, subject to natural and commercial forces. The Implementation Plan provides no means for undertaking such a physically and scientifically impossible task. Additionally, neither the Response nor the Implementation Plan explain how a responsible party plausibly can meet these allocations when the TMDL itself provides that atmospheric deposition inputs are large enough to result in chronic non-compliance with the TMDL. The absence of this information violates California Water Code section 13242.</p>	
29.30		<p>Technical Conditions to support the TMDL are not present.</p> <p>By inadequately summarizing our comment, the Response does not address the lack of "proper technical conditions" identified in our comment. Pollutants are suitable for calculation of a TMDL only if proper technical conditions are met. 33 U.S.C. § 1313(d)(1)(C) ("Each state shall establish . . . the total maximum daily load, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation."); Total Maximum Daily Loads Under the CWA, 43 Fed. Reg. 60,662 (Dec. 28, 1978) ("[a]ll pollutants, under the proper technical conditions, are suitable for the calculation of total maximum daily loads")(emphasis added). "[P]roper technical conditions' refers to the availability of the analytical methods, modeling techniques and data base necessary to develop a technically defensible TMDL. These elements will vary in their level of sophistication depending on the nature of the pollutant and characteristics of the segment in question." Id. (emphasis added).</p> <p>Our comments to the Regional Board, and the technical comments developed by experts who reviewed the TMDL, outline the many inadequacies that make the TMDL not technically defensible. See Montrose Comment Letter of Feb. 22, 2011 at 20-</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.19.</p>

No.	Author	Comment	Response
		<p>23; see also Technical Comments Attached to Montrose Comment Letter of Feb. 22, 2011. For example, several commenters noted that the Regional Board's modeling lacked proper calibration and validation and was not based upon a proper mass balance. The Response admits that neither validation nor mass balance calculations were done. See Regional Board Response to Comment 36.70 ("[d]ue to data limitations, model validation using an independent set of data could not be performed in addition to the calibration."); and Regional Board Response 36.54 ("a mass-balance computation was not performed."). The Regional Board's own neutral peer reviewer stated he had "difficulty understanding the scientific basis for some numeric targets and TMDLs"; the calibration of the models was "poor to mediocre"; and that "although an attempt was made at model validation for some of the contaminants, it was not successful." Comments of Dr. Brezonik at 1; see also Comments of Dr. Keller at 11 ("The presentation of results is seriously lacking, with diminished scientific integrity. Overall, the calibration of the EFDC model is not adequate, since it has a clear bias towards over predicting concentrations of toxic pollutants in the harbor. While this may result in a more protective TMDL, a model should not have a bias. . . .Scientific integrity requires one to report and discuss the problems with the calibration, but this is not done."). Here, the record is replete with evidence, from both stakeholders and neutral peer reviewers, that the "proper technical conditions" have not been met and the TMDL is not technically defensible.</p>	
29.31		<p>The Draft TMDLs contain proposed annual loads that are inconsistent with the Federal CWA, which requires loads be specified on daily basis.</p> <p>The TMDL includes annual – not <i>daily</i> – loads. This is contrary to the plain language of the CWA ("total maximum <i>daily</i> loads"). Friends of the Earth, Inc. v. United States EPA, 446 F.3d 140,</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.20.</p>

No.	Author	Comment	Response
		<p>142 (D.C. Cir. 2006). “Daily means daily, nothing else.” Id. In stating that daily loads are not required when there is a “sufficient rationale and/or pollutant specific considerations”, the Response mischaracterizes U.S. EPA guidance issued after Friends of the Earth. Specifically, that guidance clearly provides “that all future TMDLs and associated load allocations and wasteload allocations be expressed in terms of daily time increments.” Memorandum from Benjamin H. Grumbles, Assistant EPA Administrator to Regional EPA TMDL Officers, “Establishing TMDL ‘Daily’ Loads in Light of the Decision by the U.S. Court of Appeals for the D.C. Circuit in Friends of the Earth, Inc.v. EPA, et al., No. 05-5015 (April 25, 2006) and Implications for NPDES Permits” (Nov. 15, 2006).</p> <p>While expressing TMDLs in daily terms is mandatory, EPA also authorized TMDLs to include “alternative nondaily pollutant load expressions in order to facilitate implementation of the applicable water quality standards.” Id. Contrary to the Regional Board Response, the U.S. EPA guidance does not authorize TMDLs to present loads in other timeframes, without also expressing <i>daily</i> load and wasteload allocations. While the statute requires, and U.S. EPA guidance directs, that loads be expressed in terms of daily loads in TMDLs, courts have suggested that for some pollutants, effective regulation may require “some other periodic measure than a diurnal one” to avoid absurd results. Natural Resources Defense Council, Inc. v. Muszynski, 268 F.3d 91, 98-99 (2d Cir. 2001). When courts have allowed expression of a TMDL in terms other than daily loads, the courts also require a showing that the alternative expression of the load is needed to “best serve[] the purpose of effective regulation of pollutant levels in water bodies.” Id.; see also San Joaquin River Exchange Contractors Water Authority v. State Water Resources Control Board, 183 Cal. App. 4th 1110, 1124 (2010) (discussing Friends of the Earth and Muszynski and finding that the pollutant at issue, salt/boron, was suited for a TMDL expressed as a monthly load</p>	

No.	Author	Comment	Response
		<p>because the TMDL modeling was done at the monthly scale and those subject to the TMDL did not have the ability to monitor daily).</p> <p>Here, the Regional Board Response does not provide any discussion of why the TMDL is properly expressed as annual loads rather than daily loads. Unlike in San Joaquin River Exchange, the modeling here was done at the daily, and sometimes hourly, scale. See Basin Plan Amendment at 8 (“Ultimately the EFDC model was integrated with LSPC output – hourly for three watersheds, daily for nearshore watersheds – to model metals, PAHs, PCBs, and DDT (total) sediment concentrations in the receiving waters.”). That the TMDL is expressed in annual loads rather than daily loads is an implicit acknowledgement that the proper technical conditions for TMDL development are not present – the tiny milligram to sub-milligram loads that would result from expressing the annual loads as daily loads would demonstrate that the TMDL does not reflect the true assimilative capacity of the subject water bodies. Both U.S. EPA and Regional Board Staff were aware of this issue and did not address it; EPA even called the miniscule <i>annual</i> loads “laughable.” See Montrose Comment Letter of Feb. 22, 2011 at 12.</p> <p>The unreasonableness of these “tiny values” also was acknowledged by the Regional Board’s own peer review commenter, Dr. Patrick Brezonik, Univ. of Minnesota. Comments of Dr. Brezonik at 4. (“I wonder whether the tiny values listed in Table 6- 12 for DDT and PCB WLAs are meaningful. Could one actually make measurements to show that a discharge was in compliance with a WLA of 0.35 g/yr? In general, the numbers in the table seem unreasonably low.”)</p>	
29.32		Neither Governing statutes, nor underlying WQS provide notice that they might be applied in the TMDL, violating Due	State Water Board reviewed the Los Angeles Water Board's responses to these comments and

No.	Author	Comment	Response
		<p>Process.</p> <p>Montrose is not challenging the text of the CWA or the Porter-Cologne Act. Rather, Montrose is challenging the TMDL's <i>interpretation and implementation of the Acts</i> in this case. Agency interpretations of the Porter-Cologne Act and the CWA are subject to judicial review to determine whether agencies have met their statutory duties. Cal. Wat. Code § 13330; Northwest Env'tl. Advocates v. EPA, 537 F.3d 1006, 1014 (9th Cir. 2007).</p> <p>Section 303(d) of the CWA requires that states establish, <i>for waters within its boundaries</i>, TMDLs for pollutants impairing those waters. Section 303(d) does not suggest to persons of common intelligence that implementing agencies will establish TMDL's for <i>the sediments</i> underlying those waters. The regulatory definition of "Waters of the United States" included in 40 C.F.R. section 230.3 is limited to the traditional notion of "water" and does not include any indication that sediments are subject to regulation under the CWA. The CWA does not include adequate notice that the Regional Board could or would adopt TMDLs for sediments.</p> <p>CWA Section 303(d) authorizes a TMDL to be established at only a level necessary to implement the applicable water quality standards and a margin of safety.</p> <p>The Porter-Cologne Act allows for the regulation of bottom sediments for the "reasonable protection" of beneficial uses in particular "hot spot" areas. This language cannot be read to require that every milligram of DDT be removed from the entire Harbor Waters sediment.</p> <p>The Response suggests that due process has not been violated because the Regional Board provided notice of the TMDL rulemaking and allowed for public comment and a hearing. Due</p>	<p>agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.21.</p>

No.	Author	Comment	Response
		<p>process requires more than just notice of rulemaking and a comment period. A member of the public reading the CWA and the Porter-Cologne Act would not understand that the directives would be translated into regulations of <i>sediments</i> that require tracking less than a milligram of a pollutant in the largest and busiest port complex in the country. See Montrose Comment Letter of Feb. 22, 2011 at 25-26 and cases cited therein.</p> <p>Even the Regional Board's notice was inadequate here. The Regional Board made substantive changes to the TMDL at the 11th hour before the May 5, 2011 hearing and even during the course of the hearing. The public received no prior notice of these changes and was not able to adequately provide comments.</p>	
29.33		<p>Narrative toxicity standard is void for vagueness and violates due process, as applied in the TMDL.</p> <p>Our original comment did not state that the TMDL included a narrative toxicity standard. Rather, the comment explained that the TMDL's <i>application</i> of the Basin Plan's narrative water quality standard to the subject compounds of the TMDL yielded numerical representations of that qualitative standard. For example, for DDT, the TMDL provides that a fish tissue target for DDT of 21 ppb and various other quantitative sediment limits of DDT are "necessary for the protection of human health." See Staff Report Section 3.3. As applied by the TMDL, the narrative toxicity standard is vague and violates due process. The Response also suggests that the narrative toxicity standard is not vague because the TMDL includes specific numeric toxicity and fish-tissue targets. But, as noted above, the narrative water quality standards do not explain or provide requisite notice regarding how those standards could be translated to create excessively low numerical DDT targets that are proxies for the standard itself. See Montrose Response 36.21.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.22.</p>

No.	Author	Comment	Response
29.34		<p>Draft TMDL includes invalid water quality objectives.</p> <p>The targets contained in the TMDL are water quality objectives because they are “limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water.” Cal. Water Code § 13241. The TMDL allocations must be reviewed under the factors that apply to water quality objectives. Cal. Water Code § 13241. Reliance on <i>City of Arcadia v. State Water Resources Control Bd.</i> for the principle that compliance with California Water Code Section 13241 is not required for TMDLs is misguided. The City of Arcadia court merely held that a regional board need not consider Section 13241 factors when conducting a periodic review of a basin plan because such a review does not constitute “establishing water quality objectives.” See <i>City of Arcadia</i>, (2010) 191 Cal. App. 4th at 177-78. This holding is limited to a regional board’s periodic review of a basin plan, however, and the court’s reasoning does not extend to TMDLs. Analysis of Section 13241 factors is required when establishing “limits or levels of water quality constituents or characteristics which are established for beneficial uses of water.” Cal. Water Code § 13241. TMDL allocations correspond to those limits or levels of water quality. The City of Arcadia court was careful to note that defendants <i>did</i> comply with Section 13241 when issuing permits to plaintiffs and establishing the TMDLs for those permits. <i>Id.</i> at 178 (“defendants did comply with section 13241 in issuing the MS4 permits to plaintiffs and in establishing the TMDL’s for those permits.”) Further, the Regional Board acknowledges that Section 13242 applies to the TMDL and its implementation plan. Section 13241 and Section 13242 must be read together; Section 13241 factors have no meaning if they are not applied to a specific implementation plan. One cannot judge the economics of a water quality objective, one of the Section 13241 factors, until there is a specific plan to implement that objective. A determination of whether the program of implementation reasonably achieves</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.23.</p>

No.	Author	Comment	Response
		<p>water quality standards (including designated beneficial uses, narrative water quality objectives, and antidegradation policies) cannot be made without consideration of Section 13241 factors. City of Burbank v. State Water Resources Control Bd. (2005) 35 Cal. 4th 613 supports the application of Section 13241 factors to TMDL development. There, the California Supreme Court held that the Los Angeles Regional Board should have complied with Section 13241 when prescribing the California equivalent of NPDES permits under section 13263. Id. at 627.</p> <p>If the Court requires consideration of Section 13241 factors in prescribing a permit that incorporates the limits set in a TMDL, consideration of Section 13241 factors is logically required for implementation of the underlying TMDL. Because the TMDL includes water quality objectives, it also must be consistent with the Porter-Cologne Act. The Porter-Cologne Act requires that Regional Board policy in establishing water quality objectives be “reasonable” and balance “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” in order to “attain the highest water quality which is reasonable.” Cal. Water Code §§ 13000, 13140, 13001. The TMDL violates the Porter-Cologne Act because it is unreasonable and does not implement the balance required. The TMDL adopts a precautionary approach and sets exceedingly low sediment targets without balancing economic considerations. See Montrose Comment Letter of Feb. 22, 2011 at 27.</p> <p>Because the Regional Board did not consider Section 13241 factors in the TMDL allocations and because the TMDL allocations are inconsistent with the Porter-Cologne Act, the TMDL is illegal both procedurally and substantively.</p>	
29.35		<p>The TMDL is impossible to meet, therefore it is unlawful. See Montrose Response 36.18.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p>

No.	Author	Comment	Response
		<p>The length of the Implementation Plan is immaterial if, as here, the steps necessary to comply with the TMDL allocations are physically and scientifically impossible to achieve. A longer Implementation Plan time period would be relevant only if, during that time period, the allocation levels set by the TMDL were amended substantially by further studies and information. The TMDL lacks supporting evidence to demonstrate that such subsequent studies and information will materially amend the allocations set forth under the current version of the TMDL.</p>	<p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.18, 36.25.</p>
29.36		<p>LA RWQCB must reform the TMDL, as contained in Chapter 5.5 of Porter-Cologne.</p> <p>Staff acknowledge that the adoption of the TMDL is an action that amends the Basin Plan pursuant to Cal. Water Code §§ 13240 and 13242. However, the Response does not recognize that the authority for <i>promulgation</i> of the TMDL is uniquely found in the federal CWA. 33 U.S.C. § 1313(d) ("Each state shall establish for [designated waters] . . . the total maximum daily load, for those pollutants which the Administrator identifies under section 304(a)(2) as suitable for such calculation."). Chapter 5.5 of the Porter-Cologne Act applies "to actions required under the Federal Water Pollution Control Act," i.e. the CWA. Cal. Water Code § 13372(a). Thus, even though the Implementation Plan and SED may be state-law requirements, the TMDL is a CWA action, and the TMDL must be reformed to recognize this fact.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.26.</p>
29.37		<p>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.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.1.</p>

No.	Author	Comment	Response
29.38		<p>CEQA: SED does not comply with CEQA;</p> <p>The Regional Board has impermissibly limited its CEQA review by preparing a SED that provides an incomplete and inaccurate baseline analysis, an inadequate analysis of all project impacts and an illegally narrow range of alternatives. Because environmental review under a certified regulatory program serves as the “functional equivalent of an EIR”, the SED must provide detailed information on the all of TMDL’s potential significant effects on the environment and describe feasible mitigation measures and alternatives that could reduce the TMDL’s significant environmental impacts. Ebbetts Pass Forest Watch v. Department of Forestry & Fire Protection (2008) 43 Cal. 4th 936, 943; Katzeff v. Department of Forestry & Fire Protection (2010) 181 Cal. App. 4th 601, 608. The SED does not accurately identify or analyze the significant environmental impacts that would result from implementation of the TMDL. Further, it does not provide sufficient mitigation for impacts that it does identify, and does not consider alternatives that would effectively protect the environment, while causing less environmental impact and being cheaper to implement.</p> <p>CEQA’s broad policy goals also apply to the SED; the SED violates CEQA by not “inform[ing] the public and its responsible officials of the environmental consequences of their decisions before they are made.” Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal. 3d 553, 563; see also Env’tl. Prot. Info. Ctr. v. Johnson (1985) 170 Cal. App. 3d 604, 618 (“Nothing in section 21080.5 supplies a basis for concluding that the Legislature intended the section to stand as a blanket exemption from CEQA’s thorough statutory scheme and its salutary substantive goals.”). The SED does not provide the necessary information and analysis to enable decision makers, other regulatory agencies, and the public to understand the significant environmental impacts that may be associated with</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 29.22, and 29.39, and Los Angeles Water Board's responses to comments 39.16 and 39.20.</p>

No.	Author	Comment	Response
		implementation of the TMDL.	
29.39		<p>A. Draft SED provides and incomplete baseline analysis. RB must analyze the following environmental resources, which draft TMDL is likely to significantly Impact.</p> <p>Our original comment stated that the SED must include current air quality conditions as a requirement of CEQA, not under either state or federal regulations for TMDL development. CEQA requires a description of existing physical environmental conditions to be used as the baseline for determining whether project impacts are significant. 14 Cal. Code Regs. § 15126.2(a); County of Amador v. El Dorado County Water Agency (1999) 76 Cal. App. 4th 931, 952 (“Before the impacts of a project can be assessed and mitigation measures considered, an EIR must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined.”). Substantial evidence does not support the use of “an evaluation of available air monitoring data as a source of contributing pollutants to ambient water” as a proper baseline; such evaluation does not provide the necessary information to compare the impacts of the TMDL to the existing physical conditions of the Harbor Waters. The SED fails its function of providing information and analysis of the environmental impacts of the TMDL. Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors (2001) 87 Cal. App. 4th 99, 123-24.</p> <p>By not identifying the likely disposal sites for dredged materials, the SED impermissibly piecemeals the project into multiple, smaller projects. Under CEQA’s definition of a project, although a project may go through several approval stages, the environmental review accompanying the first discretionary approval must evaluate the impacts of the ultimate development authorized by that approval. This prevents agencies from chopping a large project into little ones, each with a minimal impact on the environment, to avoid full environmental disclosure.</p>	<p>The SED, including the Staff Report, provides a detailed baseline analysis. As described in Section 1 of the Staff Report, the waters of Dominguez Channel, Dominguez Channel estuary, Torrance Lateral Channel (sometimes referred to as Torrance Carson Channel), Los Angeles and Long Beach Harbors (including Inner and Outer Harbor, Main Channel, Consolidated Slip, Southwest Slip, Fish Harbor, Cabrillo Marina, Inner Cabrillo Beach), San Pedro Bay and Los Angeles River Estuary are impaired by heavy metals and organic pollutants. More specifically, each of these water bodies are included on the 303(d) list for one or more of the following pollutants: cadmium, chromium, copper, mercury, lead, zinc, chlordane, dieldrin, toxaphene, DDT, PCBs, and certain PAH compounds. These impairments may exist in one or more environmental media—water, sediments or tissue. Section 2 of the Staff Report provides detailed information about the impairments and Section 4 provides detailed information about the sources of impairments, including impairments caused by air deposition.</p> <p>The TMDL provides a detailed program level CEQA analysis and detailed evaluation of the reasonably foreseeable methods of compliance.</p>

No.	Author	Comment	Response
		<p>See 14 Cal. Code Regs. § 15003(h); Bozung v. LAFCO (1975) 13 Cal. 3d 263, 283; see also California Unions for Reliable Energy v. Mojave Desert Air Quality Mgmt. Dist. (2009) 178 Cal. App. 4th 1225, 1249. Piecemeal environmental review that ignores the environmental impacts of the entire TMDL, including those reasonably foreseeable dredging projects described in the TMDL, is not permitted. See Christward Ministry v. Superior Court (1986) 184 Cal. App. 3d 180, 193; City of Carmel-by-the- Sea v. Board of Supervisors (1986) 183 Cal. App. 3d 229, 251; Citizens Ass'n for Sensible Dev. v. County of Inyo (1985) 172 Cal. App. 3d 151, 167.</p>	
29.40		<p>Draft SED inadequately describes and analyzes the major impacts associated with the TMDL's remediation requirements.</p> <p>The Response provides no justification for the SED's failure to discuss or analyze the many negative environmental impacts that are associated with the large scale dredging program described in the TMDL, including those impacts which were specifically identified by the commenter. For those resource areas that the SED did address (albeit in a cursory and inadequate manner), the SED grossly underestimates the dredging that corresponds to the TMDL targets, thereby improperly narrowing the scope of the environmental impacts associated with this remedy. The SED's lack of proper CEQA analysis is not excused by the fact that this may be programmatic action. Because the remedial dredging program described in the TMDL is a reasonably foreseeable impact, the SED violates CEQA by improperly deferring analysis of those impacts to later project-specific EIRs. 14 Cal. Code Regs. § 15152(b) ("Tiering does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental impacts of the project and does not justify deferring</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.8-20.14; 36.30; 36.31; 36.48.</p> <p>The Los Angeles Water Board was required to evaluate the reasonably foreseeable means of compliance. It did not consider a large scale dredging project as reasonably foreseeable. The TMDL evaluated smaller scale dredging and environmental effects of dredging. See Staff Report section 7.8. See Response to comment 29.12.</p>

No.	Author	Comment	Response
		such analysis to later tier EIR or negative declaration.”). The SED cannot ignore the environmental impacts associated with the TMDL’s reasonably foreseeable remediation requirements. Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (2007) 40 Cal. 4th 412, 431; Stanislaus Natural Heritage Project v. County of Stanislaus (1996) 48 Cal. App. 4th 182, 199.	
29.41	36.10	<p>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:</p> <ul style="list-style-type: none"> • Monitored natural recovery should receive detailed consideration where the site conditions are present as described in EPA Superfund Document • Maintenance dredging, followed by limited remedial dredging, if necessary, • Water column based TMDL 	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 29,12 and Los Angeles Water Board's responses to comments 20.8-20.14; 36.30; 36.31; 36.48.</p>
29.42	29.sed	<p>Basis for TMDL is flawed:</p> <p>From Dr. E. John List: The Regional Board Response claims that it incorporates the “best available data and information at the time the modeling was conducted”; however, these data do not provide the critical foundational science that must support the TMDL. No reasonable scientist would rely on the values included in the TMDL, as these values appear to have no scientific basis and are subject to numerous methodological flaws and errors. For example, the Response did not provide a scientific basis that the calibration and validations that were conducted only for the wet weather are sufficient for both dry and wet weather (i.e., an annual application), even though wet-weather accounts for the majority of loading in Southern California. The model predictions (i.e., modeled values) are valid only when the model itself is correctly</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.33.</p> <p>As indicated in Appendix II, the model calibration was performed for wet weather, while the dry weather loads were calculated from statistical analyses. Specifically, dry weather flows were related to urban areas and event mean concentrations were used to represent the pollutants. A statistical methodology does not involve calibration/validation; rather standard deviations were presented to identify the potential range in loads. Therefore, the comment is not</p>

No.	Author	Comment	Response
		<p>calibrated and validated using observed values. Annual averages cannot legitimately be used to calculate existing loading rates, and no reasonable scientist would do so. Using average sediment loading rates and average sediment concentrations (Appendix III, page III-4) to generate a loading rate is wrong, does not provide a reasonable approximation of loading rate, and would not be relied upon by any reasonable scientist. As noted in “The Fallacy of Averages” Welsh et al writing in the <i>American Naturalist</i> [Vol 132 (2):1988], “[t]he fallacy of averages is perhaps the most widespread statistical error in biology.”</p> <p>The assertion that “the model is in the range of observed values and averages are likely similar” is not true and contradicts the results presented in Figure 24 of Appendix II to the Staff Report. In the figure, the modeled DDT concentrations used in the LSPC model appear to be many times larger than the detection limits for DDT in water. If these modeled concentrations actually occurred, they would have been detected in routine sampling events. However, as noted in Appendix II to the Staff Report, “few detectable levels of DDT have been observed at mass emissions stations in the Los Angeles Region.” Appendix II at 40. In other words, the model does not reliably predict DDT concentrations and grossly overestimates them. No reasonable scientist would rely on such unreliable modeling results to develop the allocations of the TMDLs.</p> <p>As the Staff points out in the Response, “new loading of DDT may not be occurring in the watershed”, “certain pollutants [e.g., DDTs] may be non-detectable in water”, and “few detectable levels of DDT have been observed at mass emissions stations in the Los Angeles Region.” Appendix II at 40. Contrary to this empirical evidence, the Response asserts that “[DDTs] are being washed into the MS4, rivers, and receiving waters during rain events.” The TMDL calculated DDT loads from the upstream watersheds under the wrong presumption that DDT concentrations on sediments within the Harbor represent DDT concentrations in the sediment carried from the upstream watersheds. On this presumption, DDT</p>	<p>entirely accurate as the calibration/validation discussed in the comment only applies to the wet weather modeling. The watershed and receiving water models were calibrated and validated using the best available data, which is consistent with TMDL requirements (see Los Angeles Water Board’s response to comment 36.33B). Calibration/validation can certainly be improved in the future with use of new, available data; however, the calibration/validation performed to data is considered as accurate as possible given the available data and information at the time of modeling. The models were run on an hourly basis; however, annual averages, rates, or concentrations were presented in the TMDL report, which is consistent with many TMDLs developed throughout the country. Staff disagrees with the commenter and believes that this process to generate a loading rate is reasonable and defensible</p> <p>Monitoring results are often influenced by the target conditions or media to collect. DDT concentrations have been measured in sediment samples within the Torrance Lateral and Dominguez Channel Estuary pathway which contributes pollutants into Consolidated Slip and LA Harbor. EPA’s Superfund program conducted two sampling events, both consisted of sediment transects down the pathway. Comparative results for 1994 and 2002 indicated that high concentrations were initially measured in Kenwood Drain in 1994, yet in 2002 the higher concentrations were measured down in lower Estuary and Consolidated Slip. No estimates of</p>

No.	Author	Comment	Response
		<p>in Harbor sediments is not a result of prior historical discharges but is due to the ongoing current discharges from upstream watersheds. If this were the case, DDT would have been detected in stormwater samples from the Los Angeles Region; it was not. Furthermore, given that the modeling that forms the basis for the TMDL concluded that upland sources of organic contaminants have essentially no impact on Harbor sediments (Appendix III at II-74), the conclusion that a Waste Load Allocation should be made to upland sources is contradictory.</p> <p>The Response claims that the TMDL acknowledged the possibility of upward transport of contaminants “in the discussion of the active sediment layer” but the EFCD modeling has not been revised to account for the redistribution of DDT within the sediment column. The diffusive flux that is alluded to in the Response is omitted from the TMDL. As noted elsewhere, giving a load allocation to the bed sediments can be appropriate only in the context of a water body TMDL analysis, which this is not. See also Montrose Response 36.39. Because of these flaws in the TMDL’s methodology and assumptions, no reasonable scientist would rely on the TMDL as having a proper scientific basis, and as such, there should be no confidence placed in the TMDL as a vehicle for making regulatory management decisions. ...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</p> <p>From Dr. E. John List: The EPA/POLA (2002) study cited here is not available to the public and has not been published, but from the context provided by Staff, the study does not appear to provide a scientific basis for the assumption that there are new influxes of DDT to the Harbor still occurring. The detection of DDT in the sediment of these</p>	<p>mass loading were available based on these one-time sampling events.</p> <p>In contrast, LA County stormwater sampling at mass emission stations have not reported any detections of DDT in water samples. One possible explanation is there is insufficient suspended sediment (and associated DDT) within those aqueous samples that are above method detection levels. We note that LA County analytical methods for DDT and PCBs within aqueous samples maybe insufficiently sensitive to record definitive measurements.</p> <p>It is worth noting that one sampling event, performed by SCCWRP and POLA in 2002, measured water samples collected over a single storm. This pollutograph—repeated water samples at one Torrance Lateral station over 24 hrs.—did contain measureable DDT concentrations. We note that SCCWRP method detection limits are two orders of magnitude lower than those reported by LA County.</p> <p>So water results are mixed, yet it is appropriate and reasonable to assert that “[DDTs] are being washed into the MS4, rivers, and receiving waters during rain events”, since both the pollutograph and the sediment transect results provide support for our presumption that Harbor sediment DDT concentrations are related to sediment carried from the upstream watersheds.</p> <p>See TMDL Staff Report, section 4.1.3. and CH2M Hill Technical Report, 2003.</p>

No.	Author	Comment	Response
		<p>water bodies does not automatically imply that the sources of the DDT in the sediment are upstream; this could be due to the historical discharge and/or redistribution of sediment from the Harbor due to tidal movement, especially as the data from the mass emission stations in Los Angeles region show few DDT levels above the detection limits. It does not appear that the Staff used these DDT data from EPA/POLA study for the modeling. No explanation has been provided as to why these critical foundational data were excluded in the TMDL development and documentation. A reasonable scientist would have used these data.</p> <p>The commenter was not making a legal argument as the Response incorrectly presumes. Rather, the comment was meant to indicate that there are no known point sources of DDT, as very little DDT was observed in instream water samples above the detection levels (i.e., the data from the mass emission stations). Appendix II at 45. There are no data with which to either calibrate or validate the model for DDT transport, making the model unreliable. This large data gap results in significant uncertainty in the values derived by the TMDL.</p> <p>We are not aware of any study that demonstrates that 100% of small size organic particles would deposit within the Harbors and 0% of these particles would flow out of the Harbors as assumed in the modeling. Neither the TMDL nor the Response cite to scientific authority to support these modeling assumptions. The TMDL and the Response do not explain how any such authority shows that the model assumptions are a reasonable approximation of, and provide a reliable fit to, conditions in the subject waters.</p>	
29.43		<p>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.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 23.8.</p>

No.	Author	Comment	Response
		<p>From Dr. E. John List: On one hand, the TMDLs assigns the atmospheric allocation of DDT and assumes all of the atmospheric deposition of DDT onto each zone settles in Harbor sediment in that zone. On the other hand, the TMDLs assume there are no sources of DDT other than the upstream watersheds and assigns current loading from the upstream watershed based on DDT concentrations in Harbor sediment. Such inconsistency in the assumptions underlying the TMDL renders the targets or values set by the TMDL uncertain and unreliable. We are unable to provide a further response because the Response refers the commenter to Regional Board Response 2.38, but there is no such response in the Regional Board's Response to Comments document.</p>	
29.44	36.36	<p>There are several more concerns regarding the modeling exercise.</p> <p>From Dr. E. John List: The available data are extremely limited for the bed sediment in the Harbor. The use of extremely limited data sets to draw conclusions about a system is inadequate under any circumstances and contrary to accepted scientific methods, especially when 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 use of average DDT concentrations in Harbor sediment as DDT concentrations in sediment deposited from runoff from the upstream watersheds is unsupported by all available science, as the upstream samples show few DDT levels above the detection limit.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 25.12 and Los Angeles Water Board's responses to comments 23.6c;40.8.</p>
29.45	36.37	<p>The Harbor modeling assumed incorrectly that DDT concentrations are uniform with depth within the sediment column.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles</p>

No.	Author	Comment	Response
		<p>From Dr. E. John List: As noted on p.29 of Appendix I to the Staff Report, “[within the EFDC model] . . . contaminant concentrations are assumed uniform over the depth of the sediment bed at each horizontal location.” According to the Staff Report, the simulation was conducted for wet and dry weather conditions and with and without upland sources. The result of these studies showed that upland sources had essentially no impact on the concentrations of organic contaminants (Appendix III); based on this study, assigning a load allocation to these sources is irrelevant.</p>	Water Board's responses to comments 36.37.
29.46	36.38	<p>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.</p> <p>From Dr. E. John List: The Response that the TMDL does not ignore the modeling results appears to have no basis; if the modeling results were considered, a net flux out of the system would have been identified. The allocations of the TMDL were derived using a combination of watershed modeling (using the LSPC model) and hydrodynamic modeling of the Harbor (using the EFDC model). The receiving water model that Staff refer to in the Response appears to be the EFDC model. As Staff point out, the EFDC model (i.e., the receiving water model) does consider tidal influences, wind, etc. and the modeled results demonstrate that the majority of “sediment” that enters the Harbor would not deposit in the Harbor. However, critical errors occurred when the outcome of the modeling results were used to calculate the allocations for pollutants (e.g., DDT). Specifically, the allocation calculations did not consider the transport of sediment and associated pollutants out of the sediments and out of the Harbor, and the TMDL requires the loads of sediment and associated pollutants out of the Harbor to be reduced to zero. The EFDC modeling in fact showed that for organic contaminants the net flux of contaminant is out of the sediments (e.g., see Figures 8 and 9,</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.38.</p>

No.	Author	Comment	Response
		Appendix III). Had the TMDL considered these modeling results, there would have been no need for an allocation that effectively stops all sediment transport into the Harbor because the net flux for organic contaminants is out of the sediments, and therefore out of the Harbor. The failure to consider the observed flux of contaminants out of the Harbor is not scientifically acceptable.	
29.47	36.39	<p>These erroneously low allocations for DDT are due to several incorrect assumptions.</p> <p>From Dr. E. John List:</p> <p>1) DDT in the bed sediments is already present in the Harbor and cannot be regarded as a load to the Harbor sediments. The response would be appropriate if a TMDL were being developed for the water column, but it is not. It is a sediment TMDL and generally accepted scientific principles mandate that the sediment cannot be a load to itself.</p> <p>2) Staff's "conservative assumption" results in a DDT load allocation under which atmospheric deposition alone exceeds the loading capacities calculated for DDT in all but one of the water bodies regulated by the TMDL. Under this unsupported assumption, even if all other inputs are reduced to near zero, the TMDL sediment targets would continue to be exceeded and perpetual sediment management may be required to comply with the TMDL.</p> <p>3) The EFDC model does account for the transport out of the Harbor but errors occurred when the EFDC modeled results were used to calculate the allocations for DDT. The allocation calculations did not consider the transport of organic contaminants out of the sediments and out of the Harbor. 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</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 23.6a; 36.39.</p>

No.	Author	Comment	Response
		<p>through the Harbor and does not deposit in Harbor sediment as shown in the EFDC modeled results. See also Montrose Response 36.38.</p> <p>The EFDC modeling shows decaying concentrations of organic contaminants in the Harbor sediments (e.g., Figure 8, Appendix III). General acceptable principles of science do not allow a load allocation to be assigned to the bed sediments when the TMDL is directed at the sediment itself and not the water column.</p>	
29.48		<p>DDT (and DDE) Biodegradation and natural attenuation:</p> <ul style="list-style-type: none"> • 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 <p>From Dr. E. John List:</p> <p>The Regional Board response does not respond to or address the original comment regarding the impact of biodegradation of DDT not being addressed in the TMDL. No reasonable scientist would not consider these generally accepted scientific studies referenced in the original comment which demonstrate that natural attenuation of DDT in the Harbor Waters is a reasonable remediation option. DDNU and DDMU are not regulated as toxic or hazardous substances.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 0.4 and Los Angeles Water Board's responses to comments 36.40; 36.68.</p>
29.49		<p>Harm will be caused by invasive remedies such as dredging and capping.</p> <p>From Dr. E. John List:</p> <p>Our comment that harm will be caused by invasive remedies is not speculation but rather is based on recent EPA remediation projects where dredging led to increased concentrations of contaminants in downstream sites. See Environmental Defense Sciences Comment Letter of Feb. 22, 2011 at 8. As shown in</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.4 and Los Angeles Water Board's responses to comments 36.3; 36.41.</p> <p>See the Basin Plan Amendment p. 29; TMDL Report p. 99 for information on sediment dredging</p>

No.	Author	Comment	Response
		<p>Figure 2 of the comment letter by Environmental Defense Science (p. 9), sediment concentrations of DDT in the Harbor exceed the TMDL target of 1.58 ug/kg dry weight over almost the entire area of the Harbor. This implies that all of the Harbor would require continuous rounds of remediation to meet stated TMDL targets for DDT in bedded sediment. It is also unclear how the TMDL allocations can be successfully implemented as deposition of DDT alone, as stated in the TMDL, will cause continuous or repeated exceedances.</p>	<p>decision processes.</p>
29.50		<p>Use of [DDT] ERL is inappropriate and directly contradicts SQO Policy.</p> <p>From Dr. E. John List: --As stated by Long and Morgan (1990), "these guidelines [i.e., ERLs and ERMs] were not intended for use in regulatory decisions or any other similar applications." Instead, as specified by Long et al. (1995), ERL was designed to be informal, screening level tools that could be used to evaluate areas that might need further investigation. --As stated by Staff in Regional Board Response 20.1, the reason the Bight 08 study data were not used in developing the TMDL, is that the Bight 08 study data have not been finalized for all three lines of evidence yet. --By citing the 303(d) Listing Policy, the Staff appears to consider 7% (2 of 28) of samples/stations from the Harbor sufficient to determine the entire area of the Harbor as exceeding the TMDLs. This reinforces our worry that no matter how little of the Harbor area is assessed as exceeding the TMDLs, the entire Harbor area will be deemed to be impaired.</p> <p>Use of the ERL for DDT as a target is not appropriate; as stated by Long and Morgan (1990), "these guidelines [i.e., ERLs and ERMs] were not intended for use in regulatory decisions or any other similar applications." Instead, as specified by Long et al. (1995), ERLs were designed to be informal, screening-level tools</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 20.1</p> <p>Once Bight 08 results for all three lines of evidence are finalized, then they can and will be included in SQO assessment as well as other analyses of sediment quality conditions.</p> <p>Apparently the commenter simply disagrees with the 303(d) Listing Policy, however State and Regional Water Quality staff and assessors are bound to this Policy.</p>

No.	Author	Comment	Response
		<p>that could be used to evaluate areas that might need further investigation.</p> <p>According to Regional Board Response 36.3, Staff appear to prefer the SQO Policy to the ERLs. This again supports that the ERLs are not appropriate and should be excluded in the TMDLs.</p>	<p>Commenter has misconstrued the Regional Board's response at 36.3.</p>
29.51		<p>It would be appropriate if the TMDL allows a responsible party to demonstrate compliance with the TMDL through implementation of the SQO Policy. The TMDL should be amended to clearly state as such, and confirm that achievement of the ERLs is not the compliance method.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.1; 36.1; 38.7a.</p> <p>The Regional Board BPA (pg. 35, Compliance with Allocations and Attainment of TMDL targets) states clearly that TMDL attainment can be evaluated via either achieving sediment concentrations at TMDL target levels or via SQO sediment triad/multiple lines of evidence.</p>
29.52		<p>Economic impact of Draft TMDL is grossly underestimated.</p> <p>From Dr. E. John List:</p> <p>If a responsible party has the option to demonstrate compliance with the TMDL through either the ERLs or the SQO Policy (as asserted by Staff), the cost estimates under the TMDL should have been conducted based on both the ERL targets as well as on the SQO Policy. The attempt to address the presumed DDT issue in Harbor sediment via the TMDLs resulted in multiple missteps. DDT has no significant ongoing contribution from upstream watersheds, which has been demonstrated by routine monitoring data from the mass emission stations which show few DDT levels above the detection limit. Appendix II at 40. This implies there is no significant ongoing discharge of DDT from the upstream watersheds. The fundamental basis of a sediment</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.44.</p>

No.	Author	Comment	Response
		TMDL is the control of the ongoing loading to the sediment. With no ongoing loading of DDT to a sediment, no reasonable scientist would develop load allocations for DDT. In addition, if the net flux is out of the sediments (as the TMDL modeling has shown is the case for organic contaminants), then the whole concept of a sediment TMDL is inapposite and not scientifically supported. This finding, in fact, demonstrates that the sediment TMDL is not a suitable regulatory mechanism for addressing the supposed impairment of the Harbor sediments by organic pollutants, for the which current inputs are <i>de minimus</i> .	
29.53		<p>TMDL contains several major errors in approach and interpretation which lead to unsupportable TMDLs and consequently unrealistic allocations for DDT in nine designated waterbodies</p> <p>See Montrose Responses 36.56 and 36.1 for discussions of sediment standards and the ERLs.</p> <p>See Montrose Response 36.65 for a discussion of bioavailability.</p> <p>See Montrose Responses 36.39, 36.52, 36.64, and 36.73 for discussions of sediment management and the likelihood of the TMDL requiring perpetual sediment management.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.3 and Los Angeles Water Board's responses to comments 38.7a; 20.1; 20.3; 20.4.</p>
29.54		<p>-DDT TMDL assumes the bioavailable concentration of DDT is conservative and does not change over time.</p> <p>From Dr. Charles E. Menzie et al.: The Response acknowledges that fish concentrations for DDT will track with the overall decline of DDT in the watershed. This will include air concentrations, inputs from runoff, and presence in surficial sediments. The evidence clearly shows that this decline continues. Although the Response acknowledges that this decline is occurring, the TMDL does not factor this ongoing process into the evaluation of loadings; such failure is not scientifically</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.46.</p> <p>Commenter accepts that staff have acknowledged DDT is changing over time. Other scientists have described the estimated half-life of DDT isomers in sediment to be approximately 20 yrs. It is important to note the DDT TMDL applies to total</p>

No.	Author	Comment	Response
		<p>defensible.</p> <p>The presumption made in the TMDL – that future conditions will be the same as present and past conditions - is not supported by science. Based on this unsupported presumption of “constancy”, the TMDL assumes that human intervention is necessary to reduce concentrations. This assumption is not scientifically appropriate for two reasons: 1) natural processes are reducing the loads, as the Response clearly acknowledges; and 2) there are technical errors in the TMDL in the representation of the linkages between source miss of DDT and other contaminants and the tissue levels of these chemicals. No reasonable scientist would make these assumptions.</p> <p>The Response concerning lipid-normalized values is inconsistent with the generally accepted value of these transformations. Use of lipid normalized data is a key approach that is used throughout the nation for both TMDL and Superfund-type assessments and remedies. Lipid-normalized values can easily be transformed back into tissue levels. The TMDL should also reflect that the models that are used to predict body burdens depend on the use of lipid-normalized values. If the TMDL applied the appropriate food web models to the Harbor, it would appropriately be using lipid-normalized values, which would comply with accepted scientific practice. The TMDL does not provide a rational basis for its departure from generally accepted practice.</p>	<p>DDT, therefore when DDT degrades it will convert to DDE, a related isomer and more toxic bioaccumulative compound, so the commenter’s purported goal of recognizing DDT degradation merely concerns conversion from one bioavailable chemical to another with a half-life of about 20 yrs. As previously responded, although natural processes may have reduced the loads, it has not decreased them below impairment levels. Therefore active pollutant load reduction (i.e., attaining WLAs) is required and will be partially achieved by natural degradation.</p> <p>Coincidentally, 20 yrs. is similar to the implementation timeframe for the TMDL.</p> <p>If future studies (e.g., SQO Indirect Effects approach which is still draft in progress) are performed within the greater Harbor waters, then lipid-normalized values can be included in the food web model.</p>
29.55		<p>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.”</p> <p>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.” development. See EPA, “Guidance for Developing TMDLs in California,” Jan. 7, 2000 (“Allocations</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.47.</p>

No.	Author	Comment	Response
		<p>may be based on a variety of technical, economic, and political factors.”). These Acts require an actual substantive consideration of the economic costs relative to the benefits of the TMDL standards, yet the TMDL did not to include any substantive economic review Specifically: 1) the TMDL does not consider or even calculate the benefits of the proposed action; 2) the TMDL does not describe the Implementation Plan in enough detail to permit an adequate calculation of costs, did not use best available information to calculate expected costs, and contains calculation errors; 3) the TMDL does not to consider alternatives that would be more cost effective; and 4) the TMDL does not discuss the benefits of the TMDL in relation to the costs of implementation, which is the generally accepted way to assess economic reasonableness. See also Montrose Comment Letter of Feb. 22, 2011 at 8-12. The absence of these factors in the TMDL demonstrates that it did not use economic considerations to arrive at a reasonable and balanced draft TMDL and further demonstrates why the TMDL is arbitrary and capricious.</p> <p>From Dr. David L. Sunding:</p> <p>The Response mischaracterizes the comment. The comment does not assert that the TMDL is required to include a cost-benefit analysis, nor that the Regional Board is bound to adopt actions that pass a cost-benefit test. Rather, the comment asserted that actions that produce benefits that are orders of magnitude below costs are inherently unreasonable. The Response does not measure, or even analyze, the incremental benefits of the TMDL, that is, the level of economic welfare that would be achieved by implementing the TMDL as compared to the level of welfare assuming no action. Rather, the analysis underpinning the TMDL assumes that hypothetical, extreme behaviors must be protected, without any evidence that anyone actually engages in these behaviors. This approach fails to produce a result in which benefits are in reasonable relation to the costs of implementation.</p>	

No.	Author	Comment	Response
29.56	36.10	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. See Montrose Response 36.10 .	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.10.
29.57		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. See Montrose Response 36.11 for a discussion of how this action was presented as a joint Regional Board/EPA action, making these Executive Orders applicable.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.11, 36.49. Neither the Clean Water Act nor the California Water Code require the Los Angeles Water Board to conduct a cost benefit analysis prior to adoption of a TMDL. Water Code section 13241 requires consideration of certain factors, including "economic considerations" in adopting water quality objectives. The TMDL does not include the adoption of water quality objectives. The Los Angeles Water Board's adoption and the State Water Board's approval of the TMDL is not being conducted jointly with USEPA. USEPA joined in the notice so that the notice of the TMDL constitutes notice for purposes of the Clean Water Act, but USEPA must independently approve the TMDL before it takes effect.
29.58		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 California to demonstrate the cost of dredging ranges from \$120 - 1,320 per cubic yd.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 23.9; 36.44; 40.15.

No.	Author	Comment	Response
		<p>From Dr. David L. Sunding: The Response is nonresponsive to the comment, but instead merely affirmed the TMDL's reliance on a single hypothetical assessment of dredging costs at one site in Southern California. There is by now a lengthy record of actual dredging costs associated with cleanup projects at similar sites around the United States. The record cited in the original comment clearly shows that dredging costs are well above the levels cited in the 13-year old Moffat & Michols feasibility study of Ballona Creek and Marina del Rey.</p>	
29.59		<p>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.</p> <p>From Dr. David L. Sunding: The RecFin data cited in the original comment support the conclusion that the incremental benefits of the TMDL are likely to be small. The RecFin data do indeed show evidence of four fish species listed on the OEHHA fish consumption advisory being caught and presumably consumed at sites within the LA Harbor. However, these fish species are not the primary targets of anglers at these locations, and collectively account for a relatively small fraction of total catch at LA Harbor sites. The available data do not support the high levels of exposure assumed in the TMDL analysis. There is no evidence that the TMDL will result in significant benefits that justify potentially large expenditures of resources to implement the TMDL.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.51.</p> <p>State Water Board disagrees with commenter's assertion that TMDL benefits are likely to be small. One fish species within the OEHHA fish advisory is white croaker, which is designated as DO NOT EAT fish within the geographical red zone that includes Los Angeles and Long Beach Harbor waters. Furthermore the RecFin data shows the white croaker, ranging from 8 to 29% of fish recorded as caught (and presumably consumed) by anglers in these waters. Based on the RecFin data, which may not be entirely representative of what anglers are catching and eating, then one in three fish are contaminated to DO NOT EAT levels. There will be significant benefits to attaining the applicable water quality standards for these waters and restoring beneficial uses for humans and wildlife. Also, RecFin is a database for recreational</p>

No.	Author	Comment	Response
			<p>fishers, but <u>it does not include valid information for subsistence fishers in the LA region</u>. Because this source, by itself, to be inadequate for evaluating consumption rates for subsistence fishers, the Montrose Settlement Restoration Program (the Natural Resource Trustees) and EPA decided to conduct a new study to further assess and update information on recreational and subsistence angling in Southern California coastal waters.</p> <p><i>See A Survey on Recreational and Subsistence Fishing in Southern California coastal waters.</i></p> <p>Prepared By: CIC Research & Stratus Consulting for The Natural Resource Trustees/ Environmental Protection Agency, June 2004.</p> <p>Current information (2011) can be found at: http://www.pvsfish.org/images/files/EPA%20Consumption%20Study%20pres.pdf</p>
29.60		<p>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.</p> <p>From Dr. Charles Menzie et al.: The Response acknowledges the key fallacy regarding air deposition in the TMDL – that the inputs from aerial deposition exceed the TMDLs for all but one water body. But the Response does not recognize the problem this causes as the TMDL is implemented. Without a reduction in the aerial deposition, there will be no way to comply with the TMDL because the aerial deposition will always lead to exceedances. Staff indicates that there is likely a problem due to improper DDT flux estimates. We agree. If it were really true that the air deposition rate was larger than the proposed DDT TMDL, then water column and sediment</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.3 and Los Angeles Water Board's responses to comments 19.1; 23.7; 23.8; 36.52; 36.64.</p> <p>The Regional Board has already determined the Dominguez Channel Estuary and Consolidated Slip as toxic hot spots and therefore worthy of contaminated sediment remediation and reducing pollutant loading into those waters. Thus TMDL implementation is justified and should begin prior to or during any additional special studies.</p>

No.	Author	Comment	Response
		<p>concentrations would increase over time, since if degradation is neglected, the situation would be all “input” and no “output.” We commend Staff for its willingness to undertake a DDT flux study. However, because this study is critical to understanding the system and allocations, no TMDL implementation should occur for DDT until scientifically sound studies are completed and there is a proper scientific underpinning for any management decisions.</p>	
29.61		<p>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.</p> <p>From Dr. Charles Menzie et al.: Based on the information provided in Appendix II of the Staff Report (describing the LSPC Watershed Model Development), no reasonable scientist would rely on the values calculated through this modeling effort. It is unclear how the values were arrived because critical foundational information was not made available that would allow a proper assessment of the modeling effort. Specifically, Appendix II of the Staff Report referenced models developed for Los Angeles River (“LAR”) (Tetra Tech, Inc., 2004) and San Gabriel River (“SGR”) (Tetra Tech, Inc. 2005a), and stated that these models were used to calculate TMDLs (cited in references LARWQCB, 2005a, 2005c, and 2006; USEPA, 2007). Appendix II also refers to pollutant loadings from the DC Los Angeles Harbor being estimated in a separate study performed by SCCWRP (SCCWRP, unpublished results). But Appendix II did not provide any specifics on how these models were developed, calibrated and validated; instead only a statement referring to</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.53.</p> <p>Commenter neglects to recognize and understand that all of the referenced model reports....dating back to LA River and San Gabriel River used to calculate TMDLs for those Rivers....were and are publicly available documents. Therefore such specifics on how those River models were developed are already available to the commenter.</p>

No.	Author	Comment	Response
		<p>“previously calibrated LSPC models of the LAR and SGR watersheds” was included. The lack of sufficient information regarding these supporting studies represents a significant data gap which results in material uncertainty in the modeling underlying the TMDL. No reasonable scientist would rely on these modeling results in the absence of specific information regarding how the model was developed, calibrated, and validated, which is lacking here.</p> <p>For example, the report indicates that the LAR and SGR LSPC models were extended to cover the entire modeling period at issue here, but no specifics were provided with respect to the history of inflows and corresponding loadings or assessment of model performance. Likewise, development of the LSPC model for the nearshore watersheds was based on initial assignment of the hydrological parameters from the LAR watershed model. The report indicates that these parameters were refined as part of the model calibration, but there was no mention of which parameters were refined. For wet weather conditions, model calibration and validation plots were presented at three locations (one location for calibration and two for validation). Several inadequacies were observed: (i) for hydrology, the peaks and timing of the inflows did not correspond to the measured values; (ii) the simulated suspended sediment concentrations were higher than measured concentrations at two locations and lower at one location (with differences of up to an order of magnitude); (iii) the simulated total copper, lead, and zinc concentrations did not correspond to measured values (with differences of up to an order of magnitude at the Maritime Museum Station); and (iv) DDT loadings were not modeled <i>per se</i>, but were based on Bight 03 sediment-associated DDT concentration data and sediment loadings estimated from the LSPC model. Given the inadequate calibration of the LSPC model for the nearshore areas, the reliability of the loadings to the EFDC model has not been demonstrated.</p> <p>See also Montrose Response 36.19 for a discussion of how TMDLs require the “proper technical conditions” and how those</p>	

No.	Author	Comment	Response
		conditions are lacking in this TMDL. Adequate modeling is one of the factors specifically required by EPA in establishing “proper technical conditions.”	
29.62		<p>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 correct.</p> <p>A TMDL is a regulatory construct that is based on mass balance principles. The assimilative capacity, on the one hand, is distributed on the other among various allocations and other categories. It is unlawful to allocate more capacity than the subject water body can assimilate. There must be equivalency between assimilative capacity and the sum of the allocations and other categories. This equivalency, required by law, is a mass balance concept. Thus, the absence of a valid mass balance upon which to base a TMDL renders the TMDL invalid. The result is not a TMDL at all because a TMDL is the equivalency. Staff confirms that a mass balance calculation was not performed for the TMDL.</p> <p>From Dr. Charles Menzie et al.: A mass balance of the sediment and contaminants in the system for a specific simulation period is a critical foundational component of any TMDL and would have provided a proper assessment of model performance. In the absence of a mass balance computation, the Response alludes to the comparison between model results and data to demonstrate model fit. However, the calibration results do not substantiate that model calibration was successful (e.g., comparisons of bottom salinity, suspended sediment concentrations, total copper, total lead, total zinc, total DDT, and total PAH). Differences between model results and data vary by up to a factor of four for all variables with the model generally over predicting. The sediment deposition and</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.2 and Los Angeles Water Board's responses to comments 36.54.</p>

No.	Author	Comment	Response
		<p>concentrations derived from the model are unreliable and not supported by sound science.</p> <p>See also Montrose Response 36.19 for a discussion regarding how the “proper technical conditions” are lacking in this TMDL. Mass balance is a key component of any adequate modeling.</p>	
29.63		<p>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.</p> <p>From Dr. Charles Menzie et al.: Staff appear to admit that there are key limitations with the modeling as applied to site-specific conditions. In light of these recognized deficiencies, the TMDL should be qualified with the limitations of the approach as indicated in the Response. A map of the bed elevation changes at the end of simulation would have been useful to assess potential areas of high deposition.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.55. Limitations to the modeling are not “key.” While there is continually new data that can be considered (particularly in the case of the Greater Harbor Waters where there is extensive monitoring), and it is always possible to add to or improve a complex model, there is no compelling need to do so at this time; the model developed provides a reasonable and sufficient understanding of the functioning of the watersheds, including pollutant loading, and of the Greater Harbor Waters and has generated meaningful allocations.</p>
29.64		<p>These TMDLs inappropriately use Effects Range Low sediment quality screening levels; instead of the SQO Direct Effects.</p> <p>From Dr. Charles Menzie et al.: The Response regarding using ERL screening levels as management objectives for sediments rests on the argument that because these values were used in the past, they should use be used now. This does not address the technical reasons why the TMDL should not use ERLs for management decisions. There is no discussion of the known uncertainties inherent in these</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 23.2 and Los Angeles Water Board's responses to comments 20.1; 36.1.</p> <p>Also, the TMDLs clearly state the ERLs are <u>not</u> clean-up levels. See Basin Plan Amendment p. 5 and p. 29; Staff Report p. 99.</p>

No.	Author	Comment	Response
		<p>screening values. Those recognized uncertainties are the reason why the State Board proceeded to develop a technical approach for evaluating SQOs for the assessment of benthic organisms. The SQO methodology was published in 2009 in the Bays and Estuaries Plan.</p> <p>Staff indicates that while the work necessary to develop SQOs will be performed at some future date, it is appropriate to currently use the screening levels to make the major management decisions set forth in the TMDL and to use the SQOs to judge compliance. No reasonable scientist would rely on a highly uncertain method – impermissibly low screening levels – to support critical management decisions, while relegating the more certain method – the 2009 SQO methodology – to compliance monitoring. Because the State has recognized the need for a method to replace screening levels, it should be evident that, if ERLs are not reliable for assessment, they are not reliable for management. Management decisions that are based on uncertain methods such as the use of ERLs will yield highly uncertain outcomes that lack scientific basis. The Response included an observation that the Upper Newport Bay (Santa Ana 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. The TMDL for Upper Newport Bay underwent review by an independent scientific panel, and that panel pointed out the same problems with the process that we and others have pointed out for this TMDL process for LA Harbor. The Response argues that TMDLs require numeric values and that the SQOs do not deliver those numeric values. However, the ERLs are based on the same types of information used to develop site-specific SQOs so this presumed limitation is not correct. The Bays and Estuaries Plan sets forth the process that is to be used to develop numeric values, the Sediment Management Guides, and this process was not followed here. As indicated by many commenters, there are alternative sediment values developed for DDT in Southern California that have been</p>	

No.	Author	Comment	Response
		<p>ignored. The TMDL should include a sensitivity analysis using other sediment values as a means of addressing the uncertainty in the TMDL process. Instead of ignoring available knowledge, engaging in a sensitivity analysis would reflect a standard of care related to considering uncertainties that is appropriate for supporting a management decision such as the TMDL . By failing to consider available data and choosing instead to adopt ERLs, the TMDL does not demonstrate how conservative the chosen value is. The negative ramifications of basing a decision on a value that appears “protective” in one instance is that it can result in unneeded ecological, socioeconomic, and economic costs for other parts of the system. The TMDL did not consider any of these costs as part of the management decision. The selection of an ERL as a clean-up value is also contrary to the stated purpose of screening levels. The scientists that developed these values have cautioned against their use as clean-up numbers. U.S. EPA is on record cautioning against the use of these values. Therefore, the TMDL is counter to the cautions of the scientists and national environmental policies.</p>	
29.65		<p>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.</p> <p>Staff agree that “Possibly Impacted” can meet the protective condition if additional studies are carried out. It therefore seems prudent to wait until those additional studies are carried out before adopting an approach that may not be correct. These additional studies can be done for a tiny fraction of the costs of the TMDL’s recommended management, and not doing these studies before implementing the TMDL may require that unnecessary actions be taken.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.56b 20.1 and Appendix III.</p>

No.	Author	Comment	Response
29.66		<p>There are two factors of uncertainty associated with indirect effects TMDLs.</p> <p>From Dr. Charles Menzie et al.: We agree with the statement by the SFEI quoted in the Response and it is the reason why the TMDL's calculations are erroneous – these areas of uncertainty were not considered. No reasonable scientist would claim the types of relationships between sediments and the water column and fish that the TMDL assumes without having considered all of the information and potential uncertainty. In this regard, the TMDL is incorrect and not supported by the science.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.2; 30.7; 36.58.</p> <p>The TMDL is sufficient and is based on best available data at time of TMDL development. Results of future studies will help improve hydrodynamic and water quality modeling and will support application to food web models (e.g., SQO Indirect Effects approach which is in progress). Such enhancements will be incorporated when the TMDL is reconsidered.</p>
29.67		<p>Uncertainties in deriving target levels and TMDLs have not been considered.</p> <p>From Dr. Charles Menzie et al.: It appears that our comment on addressing uncertainty was misunderstood. The Response indicates that because there is a lot of uncertainty, "conservative" values were selected. That is not the scientifically accepted method for addressing uncertainty. EPA has considerable guidance on how to consider and evaluate uncertainty from a mathematical standpoint that reflects the best practices and the standard of care of the engineering community. For example, a common method for engineering, including wastewater management, is to perform appropriate sensitivity analyses. There are no such analyses in the TMDL. Reasonable scientists would select a sensitivity analysis as the generally accepted method to address the uncertainty reflected in the TMDL's modeling. The TMDL also ignores available knowledge regarding alternative</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 36.59.</p> <p>Clearly the commenter disagrees with the approach to evaluating uncertainty hence the difference in opinion.</p>

No.	Author	Comment	Response
		target levels. By ignoring such information, the only consideration that the TMDL gives to uncertainty is to ignore it and to attempt to select bounding target values that are at the extreme ranges. The TMDL should include sensitivity analyses with other legitimate and possibly more appropriate target values to understand the implications of selecting alternative values. This would allow the degree of uncertainties in the TMDL analyses to be understood and would enable an assessment of tradeoffs among presumed environmental benefits and other ecological and socioeconomic costs. Such an analysis is feasible and would help identify areas where alternative management decisions could make sense and where data are needed before management decisions can be reached.	TMDL target section includes a discussion of alternate values. There is no requirement with TMDL regulations to perform further uncertainty or sensitivity analyses based on applying various target values. It would be appropriate to utilize alternate sediment quality guidelines to help prioritize potential sediment remediation actions. We believe the Ports are doing this as part of their Water Resources Action Plan (WRAP) analyses.
29.68		<p>"Risk Zones" for sediment provide a means of incorporating uncertainty.</p> <p>From Dr. Charles Menzie et al.: The Response seems to indicate that other parties are proposing to incorporate a prioritized system for sediment actions in the future, as a consideration of the degree of risk associated with sediments. But that presumption is not reflected in any of the technical work carried out for the TMDL. As noted above, the TMDL appears to favor sediment remediation as a solution for waste load management. The TMDL is silent on the matter of what will happen to sediments in the future, what SQOs may indicate when that work is finally performed, and how alternative strategies might be implemented. Alternative strategies involving Monitored Natural Recovery that have been adopted as part of the TMDL approach for San Francisco Bay and the Delaware River are not even mentioned in the TMDL. Such approaches would be appropriate for risk zones where risks are low, but there is no allowance for such consideration in the TMDL document.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.60.</p> <p>Also, the TMDL Implementation Plan, Figure 7.1 at pg. 106 shows decision flowchart to evaluate sediment remediation activities based on risk based decision criteria. This flow chart includes attenuation with continued monitoring, or "Monitored Natural Recovery" TMDL implementation is designed to describe the various options for pollutant load reductions not dictate <u>methods</u> that must be performed.</p>
29.69		Implementation Plan of TMDL does not consider appropriate	State Water Board reviewed the Los Angeles

No.	Author	Comment	Response
		<p>guidance on sediment remedies.</p> <p>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. TMDL does not cite any alternatives to dredging; e.g., replacement, capping, or restoration following dredging.</p> <p>From Dr. Charles Menzie et al.: Staff appears to concur with our comment regarding maintenance dredging, but that concurrence is not reflected in the TMDL. If indeed there is a mass load decrease associated with maintenance dredging, the TMDL should take that into account as part of the loadings analysis. This necessary work has not been performed despite the recognition that this would be an important aspect of the evaluation.</p>	<p>Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.61.</p> <p>TMDL and Basin Plan Amendment do recognize various sediment remedies - navigational, capital or maintenance or dredging or capping activities. See BPA, p. 29.</p> <p>The TMDL also describes that sediment remediation or dredging activities are reviewed in different regulatory process. Those other regulatory processes are more appropriate venues for discussion of sediment remediation alternatives. See TMDL p. 99.</p>
29.70	36.62	<p>From Dr. Charles Menzie et al.: The issue of biological targets is irrelevant to the TMDL process. The information and associated analysis on biological targets in the TMDL are incomplete, do not consider the available observations on relevant populations, and should be removed from the TMDL document as they are not being used to inform TMDL-related management decisions.</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 29.72 and Los Angeles Water Board's responses to comments 36.9; 36.62.</p>
29.71	36.63a	<p>From Dr. Charles Menzie et al.: It appears that our comment on considerations in developing wildlife tissue values was misunderstood. Our comment concerns the use of a deliberate process for deriving tissue residue values ("TRVs") as well as other toxicity benchmarks. EPA has developed Quality Assurance procedures that consider the relevancy of the studies and the reliability of the studies. These</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.63a.</p> <p>Approaches used by EPA's Office of Solid Waste</p>

No.	Author	Comment	Response
		are aspects of selecting and using studies that apply to any effort to develop ecological target levels, not just the development of ecological soil screening levels. Our comment was that the TMDL did not consider relevancy or reliability in its efforts to identify and present values for wildlife tissues. No reasonable scientists would fail to consider the relevance and reliability of studies before using them to represent a system.	Management are different from those utilized by EPA's Office of Water. Furthermore, staff remind the commenter the TMDL concerns wet sediment levels and the specific biological species residing in and/or consuming prey therein, not ecological <u>soil</u> levels.
29.72 29.bio	Montrose; C. Menzie (36.63b)	From Dr. Charles Menzie et al.: The Response appears to agree that these [biological] values should not be used to make management decisions, but does not address why the values are necessary to include in the TMDL, especially where their relevancy and reliability is questionable in the Harbor system. Reasonable scientists would consider whether studies based on other systems were relevant to the system they were characterizing before incorporating those studies into a TMDL, but that was not done here. Likewise, the Response does not provide an explanation of why studies of birds from Texas and harbor seals from Europe are relevant to the Harbor or TMDL.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.9, 36.62. Los Angeles Water Board changed the bird egg target to address Foster's Terns, since this species is present in greater Los Angeles and Long Beach Harbor habitat. The TMDL cites Barron et al. (2003) for protective levels in harbor seals since this species is present in both Europe and greater Los Angeles and Long Beach Harbor waters. In the absence of site-specific information for seals in Harbor waters, it is reasonable to utilize studies of similar organisms in similar habitat to provide useful biological information. Staff do not agree with commenter that such values should not be used to make management decisions, and it is noteworthy that we defined Foster's Tern egg levels and harbor seal blood levels as TMDL goals (not targets to set allocations).
29.73	36.64	From Dr. Charles Menzie et al.:	The State Water Board reviewed the Los Angeles

No.	Author	Comment	Response
		<p>The Response references a “multi-media flux study,” but that study does not appear to be a part of the TMDL materials. The only reference to a flux study in the submitted materials occurs in Appendix III of the Tetra Tech report, a presentation given by K. Schiff on 9/17/09 to Harbor Toxics TMDLs Technical Advisory Group.</p> <p>The 9/17/09 presentation includes the statement that a SCCWRP technical report is being drafted for organics. However, no such report or other document can be found at the SCCWRP website or in the TMDL backup materials. Without the calculation basis of the flux study, we cannot evaluate estimates of the flux from sediments to the water column or the water→ air flux for DDT. In the 9/17/09 presentation the flux at Los Angeles Harbor (LAH) is given as what appears to be 29 mg/m2/day, the Wilmington site dry deposition rate. Therefore, this flux estimate either does not include volatilization, the water →air component, or volatilization is insignificant compared to deposition. If the former is the case, there is no scientific basis in the submitted materials for the response: “The air deposition portion of this DDT study concluded there is more absorption (from air to water) than volatilization (from air to water) (sic).” If the latter is the case, we would like to see the calculation basis so that we can determine if it is scientifically based.</p> <p>In our comments, “resuspension” referred to resuspension from the air collecting apparatus not resuspension of bottom sediments as the response assumed. The air collecting apparatus had a sticky surface unlike real surfaces where resuspension into the air is an issue. This feature of the measurement overestimates deposition. During wet deposition DDT on air-borne particulates would be washed out but new particulates would not be suspended from wet surface soils during and for some time after precipitation. Thus the response that neglecting periods of rainfall makes the estimate conservative is likely untrue and unreliable.</p>	<p>Water Board's responses to these comments and agrees with its responses. See response to comment 0.3 and Los Angeles Water Board's responses to comments 17.4; 19.1; 23.8; 30.9; 36.2; 36.64; 40.14.</p> <p>The multi-media flux study results were only used for an air-water flux value for DDT. Air-water flux values associated with other contaminants were obtained from additional published studies (as described in Appendix III.7). Water-sediment flux was represented in the receiving water model using partitioning data from the Ports 2006 dataset.</p> <p>For metals air deposition, several studies were available with diverse geographical locations and the Los Angeles Water Board was deliberate in separating coastal results from inland sites.; whereas for DDT we had only one site. monitoring studies are performed, it would be prudent to locate the sample collection site closer to areas where land meets sea.</p> <p>Yes the dry deposition study did rely on a ‘sticky plate’ to collect the air monitoring samples. Whereas there are limitations to this type of measurement, including concerns that resuspension of air deposited materials, this is mechanism used in this preliminary study. Staff carefully considered the results of the study as well as limitations associated with sample location and collection techniques. Yes we have assumed that air deposition rate is constant. We considered it appropriate to include these results</p>

No.	Author	Comment	Response
		<p>The only way to determine how representative the Wilmington site is for DDT deposition would be to collect data elsewhere as well. Reasonable scientists would not rely on only one monitoring point of questionable relevancy to the system they were studying to make conclusions about that system. Meteorological convention is to cite the direction the wind is blowing from. The predominant annual wind direction at Los Angeles is from the offshore area to onshore. http://www.epa.gov/ttn/naaqs/ozone/areas/wind.htm). This means the wind blows from the Pacific toward the shore. Rather than three miles inland, like the Wilmington location, more representative locations for TMDL purposes would be adjacent to the water bodies of principal interest. Note that for metals, six coastal locations were used to characterize deposition at the Inner Harbor, Outer Harbor, Fish Harbor, Cabrillo Marina, Inner Cabrillo Beach, and San Pedro Bay. Our comment that the TMDL presumes that air deposition remains constant in time was not responded to. This is a critical issue because natural degradation is occurring, as observed in the actual data collected from the Harbor. With the timeframe for implementation of the TMDL, this natural degradation will be given time to occur.</p> <p>36.65</p> <p>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 magnitude lower than two Southern California Bight studies (Chapman 1996; Fuchsman, et al. 2010) 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 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.</p>	<p>within the TMDL source assessment, otherwise this w If commenter wishes to review the calculations then he may contact Ken Schiff at Southern California Coastal Water Research Project SCCWRP.</p>

No.	Author	Comment	Response
29.74	36.65	<p>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 magnitude lower than two Southern California Bight studies (Chapman 1996; Fuchsman, et al. 2010)</p> <p>From Dr. Charles Menzie et al.: Rather than address the technical comment and the available knowledge that has been presented in our comment, the Response only refers to the protective nature of the screening levels. The TMDL should include a sensitivity analysis that considers the relevant knowledge, rather than adopting a position of ignoring available information and presuming that knowledge does not exist. See Montrose Response 36.59.</p> <p>Generally accepted scientific principles requires that the sensitivity analysis should be done now, not six years from now as suggested in the Response. If it is performed correctly, this analysis would shed light on the value of alternative management strategies and may reduce the uncertainties associated with the values that the TMDL incorporates.</p> <p>The argument that these values have been used in the past does not improve upon the reliability of values that may be wrong and that are highly uncertain. It is the unreliability of these values that led to the development of SQOs for benthic invertebrates and that are the basis for developing SQOs for protection of human health. See Montrose Response 36.1 for a discussion of past errors and mistakes and regulations that repeat those same errors.</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 29.42 and Los Angeles Water Board's responses to comments 36.1; 36.59.</p> <p>Sensitivity analyses on dry weather conditions and long term loads were performed during TMDL development, which were considered relevant to understand the conditions impacting watershed loading to the receiving waters. Sensitivity analyses were not performed based on uncertainties associated with development of the sediment target levels. The selection of the target levels has been described and justified; therefore, sensitivity analyses surrounding these values are not considered necessary.</p>
29.75	36.66	<p>Assumptions for these TMDLs are different from those made for other TMDLs in California and in other states.</p> <p>From Dr. Charles Menzie et al.: The Response references prior TMDLs in the Los Angeles region as justification for the excessively low TMDL targets established</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.3 and Los Angeles Water Board's responses to comments 36.68.</p>

No.	Author	Comment	Response
		<p>herein. As we have discussed, these TMDLs all reflect a flawed process that has been repeated in the present case. No reasonable scientist would repeat errors in the future in order to be consistent with errors made in the past, as this is not sound science or environmental policy. We have pointed out that an independent scientific panel was convened to evaluate this process for the Newport Harbor TMDL and reported several serious criticisms of the process that have been repeated in this TMDL.</p> <p>The Response makes reference to the PCB value developed for San Francisco Bay but that value was developed using an appropriate model, specific to the Bay. A similar approach has not been used here. In addition, the Response does not point out that the TMDL for San Francisco Bay does not contemplate relying on dredging as a waste load management tool. Instead, the San Francisco Bay TMDL approach, like others in the nation, relies on the control of inputs – not the removal of in-place sediments. The in-place sediments are presumed to recover via MNR, a process that the TMDL does not even consider simply because it is assumed that it will not work. The TMDL lacks any calculations or analyses to support that assumption.</p> <p>Our comment on the false precision in the TMDL was misunderstood. False precision occurs when a value is given to more significant digits than is warranted given the uncertainties in the evaluation. For example, a value such as 1.59 ug/kg dry weight implies knowledge that the target can be known to these three significant digits, and thus is very precise. But, this is not the case in the TMDL, and the presentation of this value creates a false sense of precision for the readers. It implies that uncertainties have been dealt with, when in reality, the actual values could be orders of magnitude different than those presented in the TMDL document. By using this false precision, the TMDL essentially masks uncertainties by using values that</p>	<p>Commenter appears to be presenting his opinion about “flawed process”; State Water Board disagrees.</p> <p>See Response to comment 29.81 below regarding discussion about sediment PCB value and S.F. Bay model.</p> <p>Given maintenance dredging does occur with the Los Angeles and Long Beach Harbors—both within the Port’s Inner and Outer waters as well as the LA River Estuary—and that such an action does remove pollutant loads from that specific waterbody, we feel it is appropriate to include that option within the possible options for contaminant management. The Staff Report does include monitored natural recovery (MNR) during implementation.</p> <p>While model estimates do contain some level of uncertainty, State Water Board staff find it is reasonable to give calculated values with as many as 7 digits as a means of showing our work/calculated answer. Final allocations values have three significant figures, consistent with TMDL sediment targets.</p>

No.	Author	Comment	Response
		appear to be calculated through some precise formula without identifying the uncertainties in those values.	
29.76		<p>From Dr. Charles Menzie et al.: The Response suggests that a variety of alternatives may be implemented, but that is not reflected in the TMDL document or Responses as demonstrated by Response 36.68 that natural recovery is allegedly not resolving fish tissue concerns on the PV Shelf. LA Harbor is not the PV Shelf and no analysis of whether MNR could have a role in LA Harbor has been performed. Instead, the TMDL document calls out sediment remediation without considering the appropriate upstream or in-harbor alternatives. In order for the TMDL document to adopt a balanced approach for considering alternatives to environmental dredging, it should consider and analyze alternative methods of compliance. By analyzing alternative methods of compliance, this TMDL document would be in line with other TMDL approaches being adopted throughout the nation. The work needed to make these assessments should be completed and the TMDL should be revised to reflect that work. Simply stating that things may be considered at a future unspecified date is not an adequate level of analysis given the import and potential ecological, socioeconomic, and economic impacts of the implied management decisions.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 29.77 and Los Angeles Water Board's responses to comments 36.68.</p>
29.77		<p>DDT contaminant concentrations will decline over time, making MNR a viable alternative.</p> <p>From Dr. Charles Menzie et al.: The Response (36.69) appears to dismiss the available data. Further, the Response seems to suggest that LA Harbor and the processes within it (e.g., deposition) are the same as the processes on the PV Shelf. These are different systems from an oceanographic and geological standpoint, and a reasonable scientist would not treat them the same without scientific support.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 29.54 and Los Angeles Water Board's responses to comments 36.68.</p> <p>Also, the 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").</p>

No.	Author	Comment	Response
			<p>We do not suggest that Los Angeles and Long Beach Harbor processes are the same as on the PV Shelf. Freshwater riverine and estuarine dynamics are present and highly influential within the Los Angeles and Long Beach Harbor system; this has been included within the LSPC and EFDC models for the TMDL.</p>
29.78		<p>There are insufficient data to calibrate and validate the EFDC model. Without these two essential elements, the model is untrustworthy.</p> <p>From Dr. Charles Menzie et al.: Reasonable scientists rely upon modeling results only if there is good fit between the model results and data during the calibration step and subsequent validation of the calibrated model. Here, the Response admits that proper calibration and validation were not done. Model validation could have been performed by simulating the 2006-2007 periods. Based on the information presented in the report, the model is not adequately calibrated with respect to bottom salinity, suspended sediment concentrations, or contaminants, as described below.</p> <p>Bottom Salinity: The model over predicts the bottom salinity at most of the 20 stations used in the comparison. Also, it is unclear why the salinity data from the other stations were not used. These concerns make these results unreliable.</p> <p>Suspended Sediment Concentration: A comparison plot shows the time history of model predicted suspended sediment concentrations and a single observed suspended sediment concentration. The temporal variation of the modeled suspended sediment concentrations during the dry period (May-October 2005) is not reflected in the one observed value. Subsequently, comparing the model-computed average values with observed</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.70 and 36.71, among others.</p> <p>The process used in the TMDL linkage analysis and subsequent calculations is consistent with many other TMDLs throughout the country. TMDLs are required to be based on the best available data given that it is not always possible or feasible to perform years of data collection prior to TMDL development (while conditions in a water body may continue to worsen). The 2006-2007 data became available well into the overall TMDL process; therefore, they could not be incorporated into the analyses in a cost-effective manner.</p> <p>Appendix I summarizes the salinity results as well as the reason the other stations were not used (they essentially showed no variability in salinity).</p> <p>As stated in previous responses and in Appendix I, given that the model period and the observed data do not overlap temporally for the suspended sediment and contaminant concentration</p>

No.	Author	Comment	Response
		<p>values does not provide an adequate assessment of model performance for calibration purposes and is not reliable. The report indicates that dry season concentrations should be similar and as such modeled results of dry-period averages for 2005 were compared with 2006 and 2007 data. Differences between model results and data vary by up to a factor of four with the model generally over predicting, demonstrating that these model results are not reliable.</p> <p>Contaminants: Comparisons were made between model results and observed data of total copper, total lead, total zinc, total DDT, and total PAH. Here again, the dry period (May-October 2005) averaged concentrations were compared with data collected in 2005 and 2006. As noted, differences between model results and data vary by up to a factor of four.</p>	<p>comparisons, the results are not expected to match. These results were simply shown to demonstrate the range and provide relative comparisons based on the available data.</p>
29.79	36.72	<p>The LSPC and EFDC models do not realistically simulate prototype conditions given the inadequate calibration and lack of validation. Reasonable scientists would not rely on models that do not realistically simulate the conditions meant to be modeled.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.70; 36.71.</p> <p>Previous wet weather watershed modeling and TMDL efforts have led to the development of a regional watershed modeling approach to simulate hydrology, sediment and metals transport in the Los Angeles Region. This approach was used to estimate loadings from the nearshore watersheds, as well as the Los Angeles River, San Gabriel River, and Dominguez Channel drainage areas. The modeling approach assumes that metals loading can be dynamically</p>

No.	Author	Comment	Response
			<p>simulated based on hydrology and sediment transported from land uses in a watershed. The potency wash off factors (POTFW) used in the wet weather modeling analysis were originally developed by the Southern California Coastal Water Research Project (SCCWRP).</p> <p>For the nearshore watersheds, limited data were available to determine model parameters associated with the Port Activities land use – this category was unique to the nearshore watersheds and these activities are not found in the Los Angeles River, San Gabriel River, and Dominguez Channel watersheds. Data available for this calibration/validation process were extremely limited for a few locations and were not robust enough to conduct calibration and validation at each site using data from different date ranges. Given the limited quantity of the data available for the Port Activities land use, further calibration and validation could not be performed without adjusting some parameter values previously calibrated in the LAR watershed outside of the recommended range. Overall, there were not enough data to justify refinement of the calibrated and validated parameter values associated with the regional modeling approach.</p> <p>Documentation of this calibration process for Port Activities is provided in Appendix II and documentation associated with the regional modeling approach for the other land uses is provided in other documents (referenced in Appendix II: Ackerman et al., 2005a; SCCWRP, 2004; Tetra Tech, Inc., 2004 and 2005a).</p>
29.80	36.73	From Dr. Charles Menzie et al.:	The State Water Board reviewed the Los Angeles

No.	Author	Comment	Response
		<p>Response 20.4 does not address this comment. The concern is that air deposition for DDT is greater than the TMDL target for eight of the nine water bodies (e.g., in the Dominguez Channel Estuary, the TMDL target for DDT is 3.9 g/yr, whereas air deposition is 6.01 g/yr). This implies that bed sediments in this water body will always need to be remediated to meet TMDL targets. The air deposition values for DDT are based on data collected at only one station (SCAQMD Wilmington Station in 2006). Reasonable scientists would not rely on this single measurement of DDT.</p>	<p>Water Board's responses to these comments and agrees with its responses. See responses to comments 29.1, 29.57, and 29.69, and Los Angeles Water Board's responses to comments 19.1, 20.4, 23.8, 36.52, and 36.64.</p>
29.81		<p>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.</p> <p>From Dr. Charles Menzie et al.: Our comment is not in reference to the EFDC model, but relates to the predictive tool Biota to Sediment Accumulation Factor (BSAF). The BSAF was incorrectly used to establish a one-to-one correspondence and presumed causal relationship between tissue levels in fish and contaminants in sediments. The uncertainty associated with the BSAF approach is also not mentioned. The TMDL does not use a food web model as claimed. Instead the TMDL adopts a non-site-specific bioaccumulation factor (BAF) which is an incorrect representation of how to relate fish concentrations to sediment concentrations. Specifically, the concept that fish concentrations are 100% due to sediment concentrations is wrong and without scientific basis.</p> <p>Extending this error to calculations of waste load allocations is also wrong because it relies upon a concept that is incorrect – 100% of the fish tissue concentration is not due to sediment concentrations. The TMDL is not supported by any analysis on this point and therefore lacks requisite foundation and validity.</p>	<p>The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 0.3 and Los Angeles Water Board's responses to comments 19.1.</p> <p>For the PCB TMDL, the Los Angeles Water Board relied on the S.F. Bay food web model to obtain the appropriate PCBs sediment target related to desired fish tissue target. This food web model was developed by Dr. Frank Gobas et al. and this model is similar to those being developed to support the SQO Indirect Effects sediment quality plan. The Gobas model was reviewed and published in highly-regarded scientific journal. In lieu of no similar site- specific study of PCBs and food web dynamics within the greater Los Angeles and Long Beach Harbor waters, the results of this model were applied because it was a West Coast estuary with some common biological species.</p> <p>For the DDT TMDL, staff relied on draft Indirect</p>

No.	Author	Comment	Response
			<p>Effect study in Newport Bay completed by SFEI and SCCWRP. (note: SCCWRP and SFEI are partnering as part of the technical team to develop recommendations for the forthcoming SQO Indirect Effects sediment quality plan. SFEI and SCCWRP are consulting with Mr. Gobas on this project .) The Newport Bay study is one of two case studies selected to demonstrate the framework applied to chlorinated organic contaminants. The case studies examined empirical data and a preliminary steady-state food web model to calculated bioaccumulation factors for pesticides such as DDT. Thus this study and the food web approach therein is also reasonably consistent with the forthcoming SQO Indirect Effects sediment quality plan.</p> <p>While it is preferable to utilize a site-specific study of bioaccumulation per pollutant and organisms within the waters of concern, it is appropriate and reasonable to utilize a similar study in similar waters to develop TMDLs. As noted in the TMDL and within other responses, either site-specific food web dynamic model can be developed or a site-specific BSAF study can be completed in the future.</p> <p>The term “BSAF” is used to identify the sediment value derived from fish tissue via the food web model approach. The commenter has inaccurately characterized this as “one to one correspondence...between tissue levels in fish and contaminants in sediments”.</p>
		Montrose Supplemental Legal Points based on Peer Review	
29.82	Exhibit B-1-A	THE PEER REVIEW ANALYSIS VIOLATES THE CALIFORNIA HEALTH AND SAFETY CODE	The State Water Board reviewed the Los Angeles Water Board's responses to these comments and

No.	Author	Comment	Response
		<p>A. Peer Review Requirements California Health and Safety Code Section 57004(d) requires an external peer review of the “scientific basis” for any rulemaking that is done to protect public health or the environment. If the peer reviewers find that a rule lacks scientific basis, the Regional Board must either revise the scientific portions of the rule or state why the Regional Board determined that the scientific portions of the proposed rule are based on sound scientific knowledge, methods, and practices.¹ Scientific basis is defined to mean “those foundations of a rule that are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment.”² The statute also requires that the peer reviewers be separated from the process of developing the rule, assuring their independence and unbiased review.³</p>	<p>agrees with its responses. See response to comment 0.1, 25.8 and 29.18 and Los Angeles Water Board’s responses to comments 20.2 In addition, the Los Angeles Water Board followed the State Water Board’s Peer Review Guidelines including those steps taken to ensure independence and lack of conflict of interest or bias. As required, the peer reviewers were independent and unbiased, and entirely separated from the Los Angeles Water Board’s adoption process.</p>
29.83	B-1-B	<p>B. The Peer Reviewers Found There Is No Scientific Basis For The TMDL</p> <p>As recognized by the Regional Board, a TMDL is a rule that requires peer review under California Health and Safety Code Section 57004(d) because it is adopted ostensibly to protect public health or the environment. Accordingly, the Regional Board was required to comply with the requirements of section 57004(d) of the California Health and Safety Code.</p> <p>The Regional Board procured the services of Dr. Patrick L. Brezonik, Professor Emeritus of the University of Minnesota, and Dr. Arturo J. Keller of the University of California, Santa Barbara to review the “scientific basis” of the TMDL.⁴ The peer reviewers provided written reports to the Regional Board that contained their analysis of the TMDL. Similar to other qualified experts who looked at the TMDL, the peer reviewers found the TMDL to be materially lacking in “scientific basis.” ¹. Report of Dr. Brezonik⁵</p> <p>After reviewing those materials provided to him by the Regional</p>	<p>The peer reviewers affirmed the scientific validity and soundness of many of the foundational aspects of the TMDL, including the selection of numeric targets, scientific methods employed, and approaches to implementation and measuring attainment of the TMDL, among others. Among the reviewers positive findings:</p> <p>The sediment concentration Numeric Targets are based on the sediment quality guidelines of Long and MacDonald (1995 and 2000). The use of the Effects Range Low and Threshold Effects Concentrations is scientifically valid...</p> <p>... The use of Fish Contamination Goals (FCGs) for fish tissue Numeric Targets (Table 3-8) is scientifically valid...</p> <p>The Numeric Targets for tissue residues are</p>

No.	Author	Comment	Response
		<p>Board, Dr. Brezonik concluded that he generally “lack[ed] confidence” in the modeling and numerous other technical details of the TMDL. Dr. Brezonik supports this conclusion by pointing to “critical” issues with the models, stating that “although an attempt was made at model validation for some of the contaminants, it was not successful.”⁶ “Just because one conducts a validation exercise does not mean that a model has been validated.”⁷ Dr. Brezonik identified that the calibration and validation of the modeling failed because of a “paucity of data” and because the model was not “sufficiently defined and refined to simulate the behavior of the pollutants in this system.”⁸</p> <p>Dr. Brezonik also stated that the TMDL report was so poorly written and “difficult to follow and understand” that he was “not able to provide a firm conclusion about the validity of the final results.”⁹ (In this regard, and as we have commented elsewhere, the TMDL violates due process and CEQA.) Dr. Brezonik also identified the large uncertainties involved with the loading capacity and TMDL allocations and noted that these uncertainties were not properly considered.¹⁰ Dr. Brezonik asked whether the “tiny values” in the TMDL for DDT and PCBs were even “meaningful”:¹¹ Could one actually make measurements to show that a discharge was in compliance with a WLA of 0.35 g/yr? In general, the numbers in the table seem unreasonably low.¹² Dr. Brezonik additionally commented on the high costs necessary to implement the TMDL and stated that considering these high costs, the “science behind the analyses leading to the TMDLs (and thus the necessity for implementing BMPs and sediment remediation) needs to be sound and the results need to be reliable. I conclude that unfortunately the TMDL document does not meet this standard.”¹³ Dr. Brezonik also pointed to the “uncertainty and vagueness” in the implementation plan for the TMDL.¹⁴ Dr. Brezonik was asked to respond to the following question: “Taken as a whole, is the scientific portion of the proposed rule based on sound scientific knowledge, methods and practices?”¹⁵ After acknowledging that the Regional Board had at</p>	<p>based on scientific knowledge.</p> <p>The air deposition estimates are explained in Appendix III Section 6. Those follow scientifically sound methods.</p> <p>The use of concentration-based limits, applied as daily average limits, for minor or temporary sources (e.g. construction), is a scientifically sound approach.</p> <p>The proposal by staff to achieve the Direct Effects TMDL either by meeting the final sediment allocations or by demonstrating the desired qualitative condition via multiple lines of evidence is a scientifically sound approach,...</p> <p>...staff considered the ERLs in some cases and the BSAFs in other cases. The most protective value was used, which is scientifically sound.</p> <p>The narrative for the implementation plan is generally scientifically sound. The proposed phase approach, where some more immediate actions are taken along with a more detailed monitoring program, makes sense.</p> <p>The numeric targets were based largely on state and federal water quality standards and criteria. These standards and criteria were developed over many years based on the best scientific information available... This approach seems reasonable.</p> <p>Peer reviewers did express criticisms of the</p>

No.	Author	Comment	Response
		<p>least some knowledge about the system and that the models used in the study are generally accepted, Dr. Brezonik stated: The application of sound scientific practices was not always followed, however. Examples of instances where there was a lapse of sound scientific practices range from small statistical issues, such as using regression analysis when the basic assumptions inherent in the method were not present in the data . . . to much larger issues like the continued use of the EFDC model to determine transport and fate of pollutants in the system in spite of the fact that the calibrations and validations showed that the model did not come close to matching the observed values.¹⁶</p> <p>In light of these technical deficiencies, Dr. Brezonik concluded “that the TMDL report does not provide a sufficient scientific basis for the proposed plan and allocations.”¹⁷</p> <p>2. Report of Dr. Keller</p> <p>Like Dr. Brezonik, Dr. Keller also had serious concerns about the lack of “scientific basis” for the TMDL. Dr. Keller took specific issue with the calculation of initial concentrations for the modeling, stating: How can one use data from 2006, past the simulation period, to determine the initial concentrations in 2002? There is no scientific basis for doing this, since the only method for back calculating the concentrations from 2006 to 2002 is the model that is being calibrated. The authors have a serious problem with circular logic.¹⁸</p> <p>Dr. Keller states that the presentation of the modeling results is “seriously lacking, with diminished scientific integrity” and suggests that the models have a “clear bias towards over-predicting concentrations of toxic pollutants in the harbor.”¹⁹</p> <p>“Clearly, the EFDC model as implemented does not adequately simulate the concentration of these pollutants.”²⁰ Noting that the TMDL reports make no reference to the issues the Regional Board encountered when calibrating the model, Dr. Keller states, “Scientific integrity requires one to report and discuss the</p>	<p>modeling.</p> <p>In response to Dr. Brezonik and Dr. Keller's comments on the model, the Los Angeles Water Board re-reviewed the models and determined that the model simulations of hydrodynamics, sediment transport, and contaminant transport and fate have been calibrated using all available data and are suitable for TMDL development. Although the model does not always precisely predict individual observations, the sensitivity analysis proves that it responds reasonably well to changes in load reductions and is therefore considered appropriate for analyzing various load reduction scenarios and implementation alternatives. The model provides a rigorous and scientifically sound framework for estimating contaminant responses with respect to the major sources in the watershed, including land-based loadings, net flux of legacy contaminants from the sediment bed, and open boundary driven (i.e., ocean) loads.</p> <p>Reviewer comment</p> <p>The LSPC and EFDC models do much better at simulating the movement of water itself than they do in modeling/predicting the transport and fate of non-conservative substances (e.g. pollutants) in the water. When models like EFDC are used to simulate the environmental behavior of non-conservative chemicals or biological components, they become inherently empirical, meaning that the accuracy of their simulations depends strongly on the availability of a robust set of calibration data.</p>

No.	Author	Comment	Response
		<p>problems with the calibration, but this is not done.”²¹ Dr. Keller also disagrees with the level of precision reported in the TMDL. Dr. Keller stated that there is no scientific basis for the level of precision used and suggested that “the authors could take a look at a few lab reports to understand the actual precision of such data.”²² Further, Dr. Keller identified a lack of transparency in describing how the allocations were set, calling the description “quite vague,” and stating that the “lack of transparency is not appropriate for building credibility.”²³ Given Dr. Keller’s uncertainties about the modeling, he stated that “these sediment concentrations may not reflect the actual values.”²⁴</p> <p>Dr. Keller also identified the same critical concern that our expert, Dr. John List, recognized regarding allocations for the bed sediments and mass balance. Regarding bed sediments and the allocations assigned to them, Dr. Keller states: There is no explanation of how the Load Allocation for “Bed Sediments” was done. Are these based on the total sediment deposition rates presented in Appendix III, multiplied by the pollutant concentration calculated in the EFDC? Or the pollutant concentration calculated by the corresponding LSPC models? Given this lack of information, the scientific validity of these estimates cannot be determined. In any case, the total sediment deposition rates in Appendix III have considerable uncertainty and may be in error, based on the relatively poor calibration results; they are certainly not known to 5, 6, or 7 significant digits as presented in the table in the appendix. There is also considerable uncertainty in either of the models with respect to pollutant concentrations, so again the estimated LA for these bed sediments has considerable uncertainty.²⁵</p> <p>Dr. Keller concludes that “Given the large uncertainties in the source terms and modeling results, ... a full revision of the TMDL and allocation calculations should be done before beginning Phase II.”²⁶</p> <p>Phase II is the implementation of site-specific cleanup actions</p>	<p><u>Response:</u> EFDC is a multidimensional hydrodynamic and water quality model that has been used by USEPA for TMDL development in river, lake, estuary and coastal regions throughout the United States. The model has three primary components (hydrodynamics, sediment-toxic transport and fate, and water quality) integrated into a single model. The water quality component of EFDC simulates conservative and non-conservative pollutants using well-understood physical and chemical processes. The EFDC model simulates transport and fate in both the water column and sediment bed. Water column transport includes advection, diffusion, and settling for sediment and sediment-adsorbed contaminants. The sediment bed is represented by multiple layers with internal transport of contaminants by pore water advection and diffusion. Thus, the environmental behavior of non-conservative pollutants has been considered in the model and it is not an empirical model. All model parameters regarding these chemical and biological processes have been carefully calibrated by field data collected in this study.</p> <p>Reviewer comment</p> <p>The calibration exercises showed that the model results were not quite as good for modeled versus measured salinity, due to the fact that many of the stations do not show substantial variations over time in salinity.</p> <p><u>Response:</u> At the 20 stations that do show salinity variations substantial enough for comparison, the</p>

No.	Author	Comment	Response
		required under the TMDL's Implementation Plan.	<p>model predicted and measured salinities agree reasonably well. This is shown in Figure 14 and Figure 15 of Appendix I, which present the predicted salinities and measured salinities over the bottom and surface layers of the receiving water for the four sampling events from December 2004 to March 2005. In addition, time series plots of model-predicted salinities were compared with observed data at 20 stations in Figure A-1 through A-20 of Appendix A. These plots show that the model reasonably predicts the receiving water's general response to high freshwater inflows.</p> <p>Reviewer comment Modeled trends generally did not accurately fit observed values for concentrations or loads of the three heavy metals (Cu, Pb, Zn) either in the subwatersheds used to calibrate the model or in the subwatersheds used for model validation.</p> <p><u>Response:</u> For the LSPC Model, which was used to predict watershed loading, only the "Port activities" land use required model calibration and validation. All other land uses were parameterized using the regional modeling approach, which is an approach that has been previously calibrated and validated for use in several existing TMDLs in the region. For the "Port activities" land use, the best available data for calibration and validation were from one storm at three different locations. Using these data, the Forest and Pier A subwatersheds were used for calibration, which both consisted of 100% "Port activities" land use. Model fits were reasonable at these two locations as the model generally captured the range of observed data</p>

No.	Author	Comment	Response
			<p>during this single storm. The Maritime Museum subwatershed was used for model validation. This watershed has more diverse land uses, which were largely parameterized with the regional modeling parameters. For this subwatershed and specific storm event, the model did not perform as well; however, the available data were so limited that these results did not justify re-calibration of the regional modeling parameters, which were used for many other TMDLs in the Region.</p> <p>Reviewer comment The model itself simply may not be sufficiently defined and refined to simulate the behavior of the pollutants in this system. The equations describing the behavior of metals in the model are not described in any detail in the TMDL document or modeling appendices. The use of a single (average) value of partition coefficient Kp in the modeling effort is inappropriate and may account for much discrepancy between modeled and observed concentrations and loads.</p> <p><u>Response:</u> The equilibrium partitioning approach is accepted by US EPA for TMDL development. The EFDC model supports three-phase equilibrium partitioning into free dissolved, adsorbed to dissolved organic carbon, and particulate adsorbed, with further particulate phase options based on sediment size class, fraction of organic carbon and particulate organic carbon in the water and sediment system. The detailed descriptions of these behaviors of metals in the model were presented in Section 7.3 of Appendix I. The equilibrium partition coefficients</p>

No.	Author	Comment	Response
			<p>used in the model were based on functions of bed sediment concentration and corresponding average estimates based on a field study conducted in Fall 2006, which collected both sediment and contaminant data at approximately 60 sediment bed and overlying water sites. These values used in the model are within the literature range summarized by USEPA (2005). In addition, the model calibration and sensitivity simulations for equilibrium partition coefficients were performed and presented in Appendix E of Appendix I.</p> <p>Reviewer comment The calibration/validation exercise failed because there was a paucity of data that could be used for calibration and validation purposes. It was concluded that the TMDL report does not provide a sufficient scientific basis for the proposed plan and allocations.</p> <p><u>Response:</u> For both the LSPC model for watersheds and the EFDC model for receiving waters, the modeling was based on the best available data for both model input and calibration. The model predictions were generally in the range of observations and had similar averages, especially when considering results over the entire ten-year simulation period (1995-2005) for the watershed modeling or the four-year simulation period (2002- 2005) for the receiving water modeling. Ultimately, annual average values were used to represent sediment deposition and existing sediment concentrations for the TMDL calculations and allocations. Given</p>

No.	Author	Comment	Response
			<p>that the model-predicted results are in the range of observed values and the averages are likely similar, the model is being appropriately used to determine loading estimates, allocation scenarios, and implementation alternatives.</p> <p>In summary, the model used for this study is based on hydrodynamic, sediment transport, and contaminant transport and fate simulations that has been calibrated using all available data and demonstrated to be suitable for use in TMDL development. Although the model does not always precisely predict individual observations, it has been illustrated and proved to respond reasonably to load reductions and is therefore considered appropriate for load reduction scenarios and implementation alternatives. The model provides a rigorous and scientific sound framework for contaminant response surface development with respect to the major sources including land-based loadings, net flux of legacy contaminants for the sediment bed, and open boundary driven loads.</p> <p>Dr. Brezonic's quote "that the TMDL report does not provide a sufficient scientific basis for the proposed plan and allocations" concerned his "<i>Evaluation of implementation plan and allocations</i>" and the dependence of part of his evaluation on the EFDC model. Dr. Brezonic also commented that "<u>the report does provide a sound general approach to implementation that involves five broad processes...</u>"</p>
29.84	B-1-C	C. The Adoption Of The TMDL Violated Health And Safety Code	The State Water Board disagrees. The Los

No.	Author	Comment	Response
		<p>Section 57004(d) In light of both Dr. Keller's and Dr. Brezonik's concerns regarding the lack of "scientific basis" for the TMDL, adoption of the TMDL required satisfaction of the conditions of California Health and Safety Code Section 57004(d). Because the Regional Board did not meet these conditions, its adoption of the TMDL violated Health and Safety Code Section 57004(d).</p> <p><i>1. TMDL Materials Were Not "Submitted" To The Reviewers As Required By The Health And Safety Code</i> The statute requires the Regional Board to "submit[] the scientific portions of the proposed rule" and supporting materials "to the external scientific peer review entity for its evaluation."²⁷ Both Drs. Brezonik and Keller noted significant issues with the materials the Regional Board gave them to review, calling into question whether the required materials were actually "submitted" to the peer reviewers as required by statute. Dr. Keller indicated that "a number of important documents were not made available for the review," thereby complicating his review.²⁸ These "large data gaps . . . result[ed] in significant uncertainty in the determination of the TMDLs."²⁹ The Regional Board did not respond to Dr. Keller's concerns.³⁰ Dr. Keller also identified that no data was presented in the TMDL.³¹ The Regional Board's reference to materials being available on its website does not satisfy the requirement that these materials be "submitted" to the peer reviewer.³² Drs. Brezonik and Keller also both noted that the materials they reviewed were unreadable or incomplete. Because this hindered the reviewers' ability to analyze the scientific basis for the TMDL, these submissions did not satisfy the submission requirements under section 57004(d). As such, the Regional Board's subsequent adoption of the TMDL is invalid.</p> <p><i>2. The Regional Board Responses Did Not Adequately Address The Areas The Peer Reviewers Identified As Being Without</i></p>	<p>Angeles Water Board submitted all required materials to the peer reviewers and followed the State Board guidance for peer review.</p>

No.	Author	Comment	Response
		<p><i>“Scientific Basis”</i></p> <p>California Health and Safety Code Section 57004(d) requires the Regional Board to revise the TMDL to address areas where the peer reviewers identified a lack of “scientific basis,” or to provide a response as to why, contrary to the peer reviewer’s opinion, the TMDL contains a proper “scientific basis.” Here, Drs. Brezonik and Keller both identified several areas of the TMDL that lacked “scientific basis”; yet, the Regional Board Responses did not meet either condition of California Health and Safety Code Section 57004(d). Illustrative examples of where the Regional Board Responses did not revise the TMDL or adequately respond to the peer reviewer’s comments include:</p> <p>--Comment 2.17 from page 4 of Dr. Brezonik’s peer review report relates to the “tiny values” in the TMDL for DDT and PCBs and whether these values were actually measurable. The Response to these serious concerns about the lack of scientific basis for the “tiny values” stated only that “[a] TMDL is required to calculate the appropriate allocation.”³³ This does not constitute a statement of disagreement or provide the necessary scientific basis for these values.</p> <p>--Dr. Keller’s comment labeled 1.24 from page 7 of his peer review report states that the “lack of transparency in the TMDL document with regards to the relatively poor calibration of the model is not acceptable scientific practice.” The Regional Board responded to Dr. Keller’s comment by simply restating the language in the TMDL that Dr. Keller identified as lacking a scientific basis.³⁴</p> <p>(The Regional Board makes similar restatements throughout its Responses.) Restatement of the facts and processes the peer reviewer previously reviewed does not satisfy the statutory requirement that the Regional Board explain the scientific basis of its actions.</p> <p>--The Responses do not directly respond to Dr. Brezonik’s statement on page 5 of his report that he “must conclude that the TMDL report does not provide a sufficient scientific basis for the</p>	

No.	Author	Comment	Response
		<p>proposed plan and allocations.”³⁵ Instead, the Regional Board referred back to an earlier response to one of Dr. Keller’s comments, comment 1.37.³⁶ This Response merely restates what actions the Regional Board took in developing the TMDL; the Response does not fulfill the statutory requirements by explaining the <i>scientific basis</i> of the TMDL. The Response does state that “a factor of 2 difference [sic] between predictions and observations is considered good and has been accepted in a number of major contaminated sediment modeling studies.”³⁷ However, the Response also acknowledges that “[m]ost of these studies have not been published due to the proprietary nature and/or ongoing litigation.”³⁸ By referencing material that cannot be part of the record and was not provided to the peer reviewers or the public for their review, the Response does not explain the scientific basis of the TMDL.</p> <p>Because the Regional Board Responses did not address those areas identified by the peer reviewers as lacking “scientific basis” or alternatively respond substantively to those concerns, the adoption of the TMDL by the Regional Board violated the California Health and Safety Code.</p>	
29.85	B-II	<p>MONTROSE HAS CONTINUED TO WORK WITH THE REGIONAL BOARD ON MASS BALANCE ISSUES SINCE THE ADOPTION OF THE TMDL</p> <p>In our February 22, 2011 comment package, we identified a serious mass balance calculation defect in the TMDL which the Responses now admit exists.³⁹ This is a critical error in a TMDL because a TMDL is itself a mass balance between assimilative capacity on the one hand, and allocation and other categories on the other. Without a proper mass balance, the TMDL and the assigned allocations cannot reflect the actual assimilative capacity of the water bodies at issue. Because of the critical nature of the mass balance issue to TMDL development, the Regional Board received staff’s commitment to work with</p>	<p>State Water Board reviewed the Los Angeles Water Board’s responses to these comments and agrees with its responses. See response to comment 0.2 and Los Angeles Water Board’s responses to comments 19.1.</p>

No.	Author	Comment	Response
		<p>interested stakeholders after adoption on this issue. At the May 5, 2011 hearing, Board Member Charles Stringer requested assurance from staff that the mass balance (among other technical issues) would continue to be worked on: "On the mass balancing issue and I think the other technical issues that came up today, I'm not even going to pretend that I can weigh in on that in any meaningful way on that sort of thing, but I want to be assured that those conversations are going to continue with the technical experts who have spent time making comments today. To the extent that there's – I mean, the disagreements may last in perpetuity, but to the extent that further clarifications can be added and further edification from these conversations, I would hope that those conversations will continue."40</p> <p>Montrose actually communicated with Regional Board Staff after the close of the formal comment period and before the May 5 hearing to address this issue, and then also after the adoption hearing. Below is a summary of the discussions on this issue:41</p> <p>--On April 8, 2011, Latham & Watkins, LLP ("Latham"), on behalf of Montrose, sent a letter addressed to Samuel Unger, Executive Officer of the Los Angeles Regional Board, following up on a meeting between Latham and Regional Board Staff on March 16, 2011. In this letter, Latham expanded upon the original comment by Dr. Charles Menzie (now labeled Comment 36.54 in the Responses), that a mass balance calculation had not been performed for the TMDL. A copy of this letter is attached hereto as Exhibit D-1.</p> <p>-- In the April 8, 2011 letter, Latham provided a summary of calculations performed by Dr. John List that demonstrated the serious nature of the mass balance issue. Staff identified an error in Latham's presentation of Dr. List's calculations. In the text and footnotes, Latham reported concentrations in "milligrams per kilogram (mg/kg)," when the appropriate units were "micrograms per kilogram (ug/kg or µg/kg)." Notwithstanding the typo, the calculations included in the Latham letter demonstrated the mass</p>	

No.	Author	Comment	Response
		<p>balance defect using TMDL data for two adjacent water bodies, the Dominguez Channel Estuary and Consolidated Slip. These calculations showed that sediment from the same source, the Dominguez Channel Watershed, allegedly has a DDT concentration of 19.34 ug/kg when deposited sediment in the Dominguez Channel Estuary but then increases to 133.33 ug/kg when deposited in the Consolidated Slip. This violates mass balance principles.</p> <p>--On April 15, 2011, Dr. List spoke with Executive Officer Unger on the phone to discuss the typo in the April 8, 2011 letter discussed above.</p> <p>--On May 2, 2011, Dr. List wrote Executive Officer Unger a letter correcting the typo in the April 8, 2011 letter and providing additional reasons why the TMDL did not comply with mass balance principles. A copy of this letter is attached hereto as Exhibit D-2.</p> <p>--On May 5, 2011, Dr. List presented slides on the mass balance point to the Regional Board at the adoption hearing. A copy of these slides is attached hereto as Exhibit D-3.</p> <p>--Pursuant to assurances from staff provided at the hearing to Board Member Stringer, Dr. List and his colleague, Dr. Susan Paulsen, met with Executive Officer Unger and Thanloan Nguyen on June 13, 2011 to further discuss the mass balance issues. The critical mass balance errors identified by Drs. Menzie and List have not been addressed in the TMDL and thus remain a part of the TMDL the State Board is considering in this proceeding. Submitted herewith as Exhibit C is an additional explanatory document from Dr. List which demonstrates the crucial issues that must be addressed in the TMDL a result of the mass balance defect.</p>	
29.86	B-III	<p>THE RESPONSES DO NOT PROVIDE A VALID EXCUSE FOR ADOPTING A BROKEN TMDL</p> <p><i>A. Reliance On A "Re-Opener" Does Not Justify Adoption Of A Broken Rule</i></p> <p>The Regional Board Responses state repeatedly that the TMDL</p>	<p>The State Water Board disagrees. The TMDL, as adopted by the Los Angeles Water Board is technically sound and feasible. The TMDL includes detailed narrative and numeric targets, assigns appropriate WLAs and LAs to point and</p>

No.	Author	Comment	Response
		<p>will be reexamined after a re-opener, suggesting that the TMDL was envisioned as an “adaptive TMDL.” An adaptive TMDL is a TMDL that utilizes a post-development implementation concept to revise numerical standards when more advanced data is available in the future.⁴² Adaptive TMDLs must, however, meet the basic requirements for TMDLs at the time of adoption.⁴³ Although adaptive TMDLs can be revised in the future, this fact does not remove the responsibility to adopt a feasible TMDL that is based on sound data and complies with the legal requirements of the CWA and the Porter-Cologne Act. As explained in <i>NRDC v. Fox</i>, the CWA “does not allow for incremental achievement of water quality standards through successive approval of TMDLs that fall short of the required standard.”⁴⁴ In <i>Fox</i>, EPA attempted to justify approval of a TMDL that did not meet CWA requirements by contending that the state simply had not yet developed the criteria for establishing a TMDL that complied with the requirements in the CWA. The court dismissed this approach as only a “token effort” to comply with CWA Section 303(d).⁴⁵ Similar to this “token effort” referenced in <i>Fox</i>, the TMDL’s reliance on an adaptive approach does not excuse the TMDL from complying with the legal requirements of the CWA and the Porter-Cologne Act.</p> <p><i>B. The Deadline Imposed By The Heal The Bay Consent Decree Does Not Excuse Adoption Of A Broken Rule When Other Legal TMDL Options Were Available</i></p> <p>The Responses repeatedly reference the consent decree entered into in <i>Heal the Bay, Inc. v. Browner</i>⁴⁶ (the “Heal the Bay Consent Decree”), and the March 24, 2012 deadline established thereunder for development of the TMDL. The Responses rely on the <i>Heal the Bay Consent Decree</i> as the basis for why the TMDL did not take certain necessary steps which would have resulted in a technically defensible TMDL.⁴⁷ But a judicial deadline does not provide justification for a TMDL that does not comply with statutory mandates. Consent decrees must be consistent with</p>	<p>non-point sources, and incorporates a flexible 20-year implementation schedule to address a total of 79 impairments in different media: water column, sediment, and fish tissue. Due to its scope and complexity, this TMDL recognizes that as work continues to understand these impaired waters and the associated chemical, physical and biological processes, the targets, allocations, and the flow threshold for wet-weather conditions and the implementation actions to reach those targets and allocations may need to be adjusted. The TMDL identifies a number of special studies that could be undertaken early in the implementation period and provides a clear opportunity for reconsideration of the TMDL to incorporate the findings of these studies after five years of implementation. The TMDL, as it is adopted, complies with the Clean Water Act.</p> <p>Regarding the consent decree, see response 29.13.</p>

No.	Author	Comment	Response
		<p>state and federal statutes or else they are void as against public policy.⁴⁸ While the Heal the Bay Consent Decree requires TMDL adoption by a specific date, it cannot allow for the adoption of TMDLs that are inconsistent with state and federal statutes and therefore against public policy. The Responses that claim that certain decisions were appropriate given the time pressures of the Heal the Bay Consent Decree deadline do not excuse the TMDL from meeting the requirements of the CWA and the Porter-Cologne Act, especially when alternative TMDLs that comply with those state and federal statutory mandates were available to the Regional Board and could have otherwise been adopted.</p> <p>Use Of The “Best Available Data” Does Not Remedy Errors Made During Development Of The TMDL</p> <p>The Responses claim frequently that the “best available data” were used to develop the TMDL.⁴⁹ But even the best available data cannot save models and methods that contain fundamental flaws and errors, as identified here by both peer reviewers and other experts. While no court has interpreted what the “best available data” entails in the TMDL context, an analogous standard was discussed by the U.S. Supreme Court in <i>Bennett v. Spear</i>.⁵⁰ There, the Court was interpreting the Endangered Species Act’s (“ESA”) requirement that agencies use the “best scientific and commercial data available” when undergoing a consultation to determine if an agency action is likely to jeopardize an endangered species.⁵¹ The Court held: The obvious purpose of the requirement that each agency ‘use the best scientific and commercial data available’ is to ensure that the ESA not be implemented haphazardly, on the basis of speculation or surmise. While this no doubt serves to advance the ESA’s overall goal of species preservation, we think it readily apparent that another objective (if not indeed the primary one) is to avoid needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental</p>	

No.	Author	Comment	Response
		<p>objectives.⁵² Similar to the ESA provision in Bennett, TMDLs and other scientific rules also need to make use of the “best available data” to avoid being “implemented haphazardly, on the basis of speculation or surmise,” and therefore avoid “needless economic dislocation” between the rule and the benefits achieved by the rule. Here, as identified by numerous expert and peer review comments, the TMDL is based in part on unfounded and unreliable data analyses and modeling, which may lead to economic inequalities between the TMDL and the benefits achieved by it, if any. For example, the Responses admit that no mass balance calculations were performed and the models used were not properly validated or calibrated.⁵³ Given these technical deficiencies, expert and peer reviewers have called the model unreliable and without scientific basis. The allocations and targets derived under this unreliable modeling have in turn led to the TMDL describing unnecessary and expensive remedial actions without demonstrating the benefit that would come from these actions. The Responses’ reliance on the use of the “best available data” cannot remedy the problems that have been identified with the TMDL.</p>	
	Exhibit E	MONTROSE COMMENTS NOT ADDRESSED BY THE REGIONAL BOARD RESPONSES	
29.87	A-1	<p>Technical Conditions to support the draft TMDL are not present. See items immediately below:</p> <ul style="list-style-type: none"> • <i>ERL Values As Cleanup Standards</i> • <i>Degradation Not Considered</i> • <i>Inflated Bioaccumulation from Sediment to Fish</i> 	<p>The State Water Board disagrees. The comments were addressed by the Los Angeles Water Board. See response to comment 29.64, 29.54, and Los Angeles Water Board's responses to comments 20.1, 20.3, 36.1, 36.40, and 36.68.</p> <ul style="list-style-type: none"> • ERL values were used to establish the numeric targets for marine sediment for the greater Los Angeles and Long Beach Harbor waters. ERLs are set as the sediment quality thresholds for the calculation of loading capacity and allocations. ERL values are not used as

No.	Author	Comment	Response
			<p>cleanup standard. Also see Los Angeles Water Board's response to comment 20.1</p> <ul style="list-style-type: none"> • Biodegradation and natural attenuation were included in the Proposed Sediment Monitoring Program and Priority Assessment Flowchart in the Staff Report (page Proposed Sediment Monitoring Program and Priority Assessment Flowchart). Also see Los Angeles Water Board's responses to comments 36.40 <p>Fish tissue levels of listed bioaccumulative compounds are above desired numeric targets. State Water Board found that the TMDLs are appropriately designed to reduce contaminated sediment levels, which will result in lower corresponding pollutant levels in fish tissue. These sediment allocations have been derived to support lowering fish tissue levels using biota-sediment accumulation factors (BSAFs) or ERLs. Also see Los Angeles Water Board's response to comment 20.3.</p>
29.88	A-2	The narrative standard does not provide notice that it corresponds to various numerical proxies for DDT, such as the proposed fish-tissue target of 21 ppb.	<p>State Water Board disagrees. The BPA and Staff Report clearly described that fish tissue targets for DDT and PCBs are selected from “Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene”, which are 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 to protect humans from consumption of contaminated fish or other aquatic organisms (OEHHA 2008). Use of fish tissue</p>

No.	Author	Comment	Response
			<p>targets is appropriate to account for uncertainty in the relationship between pollutant loadings and beneficial use effects (USEPA, 2002) 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). Thus, use of Fish Contaminant Goals (FCGs) provides an effective method for accurately quantifying achievement of the water quality objectives/standards (Table 3-8). Associated sediment targets are not provided for Dieldrin and PAHs because the relationship between sediment and fish tissue is not sufficiently well established to determine an associated sediment target.</p>
29.89	A-3	<p>The narrative standard provides no notice that it will be adjudged to be violated on the basis of highly theoretical assumptions as to fish consumption and DDT exposure.</p>	<p>State Water Board disagrees. As identified in the BPA, this TMDL recognizes that as work to understand these waters and the chemical, physical and biological processes, continues, the targets, allocations, and the flow threshold for wet-weather conditions and the implementation actions to reach those targets and allocations may need to be adjusted. Optional special studies, which could result in changes to these TMDLs, include but are not limited to: studies to further refine the site specific link between sediment pollutant concentrations, depth of bed sediment contamination and fish tissue concentrations; foraging ranges of targeted fish; additional data to refine watershed and hydrodynamic models, including that collected pursuant to this TMDL;</p>

No.	Author	Comment	Response
			<p>additional data on contaminant contributions of the Los Angeles River or San Gabriel River to Greater Harbor waters; stressor identifications; and additional diazinon data.</p> <p>Also see BPA, Implementation table, Task 10:</p> <p>“Regional Board will reconsider targets, WLAs, and LAs based on new policies, data or special studies.”</p>
29.90	B-4	The methodologies used to calculate the sediment target and sediment load allocations lack a credible scientific basis.	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.33.</p>
29.91	B-5	The approach taken for the sediment target directly contradicts California's Sediment Quality Objectives Policy (SQO Policy), which has been approved by USEPA.	<p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.33, 36.42, 38.7a.</p>
29.92	B-6	The Draft TMDL assumes that the atmospheric fallout of DDT to the Harbor does reach the sediments, but offers no evidence for this assumption.	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.52.</p>
29.93	B-7	Evaluating sediment impairment based on a single line of evidence is not appropriate.	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.1.</p>
29.94	B-8	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	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p>

No.	Author	Comment	Response
		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.	See response to comment 0.4 and Los Angeles Water Board's responses to comments 9.3; 20.9; 33.21; 36.3; 36.7; 36.61.
29.95	C-9	A sediment guideline (i.e., the ERL) is used as a <i>de facto</i> numerical sediment quality standard, when even the authors of this guideline warn against using it for such purposes. According to Long et al. (1995), the ERL is a guideline and is not intended to be used as a sediment quality standard. The authors clearly state that ERL and ERM values should not be used as sediment quality criteria or standards. These guidelines are just one piece of information to be used in determining the potential of sediments to contain harmful levels of a toxic chemical. The guidelines fail to address the bioavailability of the chemical-of-concern and the coavailability of other toxic substances. This leads to many false positives for sediments that exceed these guidelines.	See response to comment 0.1 and Los Angeles Water Board's response to comment 36.65 for bioavailability information.
29.96	C-10	ERL is akin to an no-observable-adverse-effects-concentration (NOAEC) and, therefore, produces overly-protective TMDLs.	See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.1 and 36.65 for bioavailability information.
29.97	C-11	ERL is inaccurate because it is not experimentally-derived. When used as a sediment quality standard, the ERL is not accurate because it is not based on cause-and effect experimental data and fails to consider bioavailability. The USEPA calculates water quality criteria based on the results of controlled laboratory tests (USEPA 1985), not on an analysis of uncontrolled field observations, as is the case for the ERL. A similar level of rigor should be applied to setting sediment quality standards as is used in setting water quality criteria. Therefore, an accurate sediment quality standard for DDT should be based on the results of controlled experiments which identify the minimum concentration of biologically-available DDT in sediments that causes adverse	See response to comment 0.1 and Los Angeles Water Board's response to comment 20.1, 36.65 for bioavailability information.

No.	Author	Comment	Response
		impacts to aquatic organisms. In addition, there must be an accepted procedure for quantifying the concentration of DDT in a sediment sample that is biologically available. The ERL considers neither; it is not based on cause-and effect experimental data and it does not account for, or provide a procedure for quantifying bioavailability.	
29.98	C-12	Using the same sediment quality standard for both effect endpoints is incorrect.	
29.99	C-13	The Sediment Quality Standard proposed by the Agencies for the protection of human consumers from eating DDT-contaminated fish tissue is inappropriate. The Agencies used the wrong "maximum safe" tissue concentration. OEHHA concludes that the proper "maximum safe concentration" for DDT in fish tissue is 100x higher or 2100 ug DDT/kg fish tissue (assuming one meal of 8 oz of fish, once a week - i.e., the same regime as used in calculating the FCG). The ERL is not an appropriate <i>de facto</i> sediment quality standard for those waterbodies that have been designated as impaired solely due to elevated fish tissue concentrations of DDT. An appropriate standard for this endpoint would be based on the identification of a maximum safe tissue concentration considering potential impacts and benefits to human consumers and then converting this to a maximum safe sediment concentration of DDT considering food chain uptake from sediment to fish tissue (i.e., the BSAF).	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.2.
29.100	C-14	Bioavailability of DDT in sediments is not addressed - The major reason that numerical sediment quality standards have not been promulgated by USEPA, or any other regulatory agency, for DDT and other organic chemicals is the heterogeneity of sediments with regard to how contaminants are bound and what proportion is bioavailable. In this TMDL process, the Agencies have selected a <i>de facto</i> numerical sediment quality standard that does not consider the bioavailability of DDT in the sediments present in the	See response to comment 0.1 and Los Angeles Water Board's response to comment 36.65 for bioavailability information.

No.	Author	Comment	Response
		waterbodies of concern. Since, as discussed above, the bioavailability of DDT in sediments can vary greatly, the proposed TMDLs are certainly inaccurate.	
29.101	D-15	This decreasing trend in the bioavailable concentrations of DDT in the sediments was not considered by the Agencies in the development of the TMDLs for DDT in the nine waterbodies of concern.	See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.15, 36.46.
29.102	E-16	The report does not acknowledge the potential employment impacts of the proposed TMDL, or the effect of the cleanup plan on competitiveness of California businesses.	The SED evaluates public services, growth, and other economic related impacts. See SED at section 6, paragraph 14 and section 7.
29.103	E-17	The report also mischaracterizes the actual costs of impounding and treating stormwater to the levels required by the TMDL.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 1.5, 23.9.
29.104	E-18	The Regional Board failed to consider the "economic considerations" of the TMDL as required by Water Code Section 13241.	See response to comment 0.1 and 29.57 and Los Angeles Water Board's responses to comments 1.5, 23.9.
29.105	E-19	U.S. EPA has published guidelines for the preparation of TMDLs in California. In particular, the EPA states that the State may consider a mix of allocation criteria (see Technical Support Document for Water Quality Based Permit Decisions (EPA, 1991) for more information). These criteria include technical and engineering feasibility, cost or relative cost, economic impacts/benefits, cost effectiveness and fairness/equity. Based on the Staff Report, there is no evidence that staff considered any of these factors in developing the TMDL.	See response to comment 0.1 and Los Angeles Water Board's responses to comments 39.4. State Board staff note the TMDLs in California guidance indicates that States <u>may</u> consider but are not obligated to consider all criteria for determining allocations.
29.106	E-20	The analysis of pollutant loadings contained in the report shows that staff has concluded that air deposition of pollutants is a major	See response to comment 0.3 and Los Angeles Water Board's responses to comments 23.7, 23.8,

No.	Author	Comment	Response
		<p>contributor to water quality degradation. This observation calls into question the wisdom of a policy to require dredging since DDT and other contaminants removed by dredging will simply be redeposited by air. Similarly, the Staff Report does not treat pollutant loading from the San Gabriel and Los Angeles Rivers, but rather calls for a series of “special studies” to analyze the impact of these inflows. As with air deposition, the likely influx of pollutants from an external source raises the potential that the area may be recontaminated after dredging has been completed. Such an outcome would be inefficient in the sense that tremendous resources would have been expended on dredging and other remediation activities as a result of the TMDL, but ongoing deposition would prevent its water quality targets from being attained.</p>	36.52.
29.107	F-21	<p>Estimation of the waterbody assimilative capacity and the pollution from all sources to the waterbody are weak.</p>	<p>See response to comment 29.112 and Los Angeles Water Board's response to comment 23.6.</p>
29.108	F-22	<p>USEPA guidance, and the California plan for how to evaluate the direct effects of contaminants in sediments and developing an approach for assessing indirect effects of those contaminants on food webs were ignored in the TMDL process.</p>	<p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 17.3; 20.1; 36.1; 38.7a..</p>
29.109	F-23	<p>Virtually all ecological impairments of The System are based on chemical measurements and an implicit assumption that these measurements are linked directly with harms to the environment or human health. The TMDL document considers none of the available information on biotic conditions in The System or adjacent areas. These have been intensely studied and could provide insights into the existence of or degree of impairment. But virtually all biological and ecological information is left out of the TMDL process. For example, the effects of DDT on wildlife species have been studied for decades. And, the recovery of species has been documented as exposures declined. But none</p>	<p>See response to comment 0.1 and Los Angeles Water Board's response to comment 36.62 for information on continued adverse effects on birds, specifically California Condor, an endangered species.</p>

No.	Author	Comment	Response
		of this technical information is considered in the TMDL process. As a result, the process is technically incomplete and simplistic. By avoiding the consideration of hard information and facts about biological conditions and actual dynamics of The System, the process is reduced to algebra with chemical measurements, without reference to what is happening in The System.	
29.110	F-24	With the exception of very limited discussion of deposition, the TMDL document does not conduct any technical analysis of assimilative capacity.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.52.
29.111	F-25	Because chemical behavior in The System is premised on erroneous representations about the behavior of contaminants in sediments, the inevitable conclusion reached within the TMDL document is that rather than the sediments providing long-term sinks for contaminants they instead are sources requiring remediation.	See response to comment 29.27 and Los Angeles Water Board's responses to comments 23.6a and 23.8.
29.112	F-26	Water concentrations of many contaminants are already below target levels, fish tissues are approaching or are already within target levels, and there is evidence for long-term declines in chemicals such as DDT. These dynamic processes relate to assimilative capacity and are not dealt with within the TMDL document. The document instead conveys a perspective that contaminants cannot be assimilated. Therefore, this important technical consideration is absent from the TMDL document.	See response to comment 0.1 and Los Angeles Water Board's responses to comments 35.46. State Water Board staff disagree with comment that the TMDL document conveys a perspective that contaminants cannot be assimilated.
29.113	F-27	The TMDL document erroneously establishes a one-to-one correspondence and presumed causal relationship between tissue levels for fish and contaminants in sediments. However, the predictive tool used - a Biota to Sediment Accumulation Factor (BAF) - is merely a ratio between concentrations in two compartments of a complex marine system. However, the TMDL	See response to comment 0.2; 25.8 and Los Angeles Water Board's responses to comments 23.6.

No.	Author	Comment	Response
		<p>document presumes this ratio reflects a cause and effect relationship. This erroneous perception is opposite of what Part 2 of the California Sediment Quality Objective plan (SQOs for indirect effects) is attempting to address. Instead, there is recognition in the Part 2 SQO process that fish can accumulate contaminants from water and from other locations. The old and potentially wrong way of assessing linkage between sediments and fish is exactly what has been done for the TMDL process. The uncertainty associated with the BAF approach is not mentioned. However, the work for Newport Bay on which the TMDL process relies shows that water is perhaps the greatest source of bioaccumulative compounds. This observation should at the very least have informed the TMDL process that there is not a proportional causal relationship between sediments and fish tissues.</p>	
29.114	F-28	<p>The load calculated for The System and used as a basis for allocation is actually much lower than the actual solids/sediment load entering The System. By artificially constraining the actual load to The System, the TMDL process has also set an artificially low TMDL for contaminants entering The System.</p>	<p>The State Water Board disagrees that the calculated load is much lower than the actual solids/sediment entering the receiving waters.</p> <p>See also response to comment 0.2 and Los Angeles Water Board's response to comment 23.6a(iv).</p>
29.115	G-29	<p>Some of the data used for the calibration is data from 2006, which is outside the period of simulation (2002-2005). Differences between model and data vary by up to a factor of four. Model validation of sediment and contaminants was not carried out to assess model performance. Appendix B of Appendix I described model performance measures, however, for the sediment and contaminant transport calibration effort, these quantitative measures were not utilized. Given the deficiency in model calibration, the results of the sediment and contaminant transport models need closer scrutiny.</p>	<p>Observed measurements obtained in 2006 after the simulation period were incorporated into the model to support calibration in two cases (i.e., where TSS data were otherwise not available or for dry weather conditions). These comparisons were considered relevant because they evaluated dry weather conditions during which watershed inflows are generally the same. Given that these comparisons are not based on the exact same time period, it is reasonable for the modeled results and the observed measurements to be</p>

No.	Author	Comment	Response
			within a factor of four.
29.116	H-30	A large and operational urban port is a very different type of environment for benthic invertebrates than is an undisturbed coastal embayment. This difference is a factor that should be considered for assessment and risk management. In light of this difference, the TMDL report is very restrictive with respect to evidence for judging effects on benthic invertebrates. This is reflected in the target individual lines of evidence station scores specified for the biological Lines of Evidence (LOEs). The report identifies that the benthic community should resemble either "reference" or "low disturbance" (p. 47). These are the lowest two of four possible benthic LOE categories. The target toxicity LOE score is "nontoxic" (p. 49). This is the lowest of four possible toxicity LOE categories. Considering the uncertainty associated with factors influencing benthic invertebrates in a large operating urban harbor, it may be more appropriate to consider a range of biological states and/or degrees of toxicity. This would allow for a valid consideration of a range of goals and associated range of interventions.	See response to comment 29.68 and Los Angeles Water Board's responses to comments 20.1.
29.117	I-31	The TMDL document is silent on the anticipated efficacy and the limitations of dredging. For example, the 2007 NRC report on this matter states that dredging has encountered systematic difficulties in achieving specified cleanup levels and that this phenomenon is associated with residual contamination due either to dredge operations or to exposure of contaminated sediments deeper in the sediment column. This is a critically important concern for management in Port of Los Angeles and Port of Long Beach sediments. The natural recovery processes, e.g., covering of contaminated sediments with cleaner sediments over time, tends to reduce surface sediment concentrations of contaminants. Concentration reduction (unlike mass reduction) means lower risk levels. Applying dredge technologies to such sediments without	See response to comment 0.3 and 0.4 and Los Angeles Water Board's responses to comments 9.3; 20.9; 33.21; 36.3; 36.7; 36.61.

No.	Author	Comment	Response
		accounting for the natural recovery processes already operating might well exacerbate, rather than reduce, risks. The 2007 NRC report also concludes that contaminant re-suspension during dredge operations is inevitable and should be considered in the risk assessment process on which technology selection is based.	
29.118	I-32	Habitat modification and turbidity caused by the dredging may impact sensitive species, including juvenile fish. Land uses would be impacted because stormwater treatment and staging areas for dredging will occupy significant land. And, the designation of dredged material as "waste" will impede the beneficial re-use of that material in habitat restoration and redevelopment projects.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.8-20.14; 36.30; 36.31; 36.48.
29.119	J-33	Many marine birds and mammals live in the coastal region of Southern California, and the effects of contaminants such as DDT have been examined for decades. It is surprising, therefore, that Table 3-9 is introduced into the TMDL process, inasmuch as it does not include any information for California. There is no discussion in the document concerning impairments to marine birds and mammals in the area that would warrant specific consideration of a TMDL. Table 3-9 provides single values, with no discussion of ranges of sensitivities among species or relevance to the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters.	See response to comment 0.1 and Los Angeles Water Board's response to comment 36.62 for bird information.
29.120	M-34	The TMDL development approach for The System adopts a philosophy that is almost opposite of that used elsewhere in the United States. For The System, the Los Angeles Water Board presumes that the sediment is a source that should be managed under the TMDL program rather than serving as a sink that provides the system with long-term assimilative capacity. Sediments are typically viewed as a sink rather than the source of the load.	See response to comment 29.27 and Los Angeles Water Board's responses to comments 23.6a and 23.8.
29.121	M-35	A number of TMDLs elsewhere in the United States distinguish	See response to comment 29.27 and Los Angeles

No.	Author	Comment	Response
		between surface water quality goals and sediment contamination. For these cases, target levels and associated TMDLs are water concentrations - not sediment concentrations - although both water and sediments may contribute; however sediments are generally assumed to be a sink.	Water Board's responses to comments 23.6a and 23.8.
29.122	N-36	The TMDL report relies on a set of screening values to establish sediment targets for contaminants. Uncertainty is dealt with by selecting lower-bound values in most cases. In other words, there is very high confidence that exposures to lower target concentrations will not pose a risk. However, the report provides no information on the levels at which effects might occur.	See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.1.
29.123	P-37	The relationship between concentrations of nickel, mercury, total PCBs, and total DDT and adverse effects is at most, weak and therefore, the Regional Board's use of the ERL will not result in expected gains in sediment quality.	<p>See response to comment 0.1 and Los Angeles Water Board's response to comment 20.1; 20.3; 20.4.</p> <p>State Water Board disagrees with commenter's assertion that use of ERL will not result in expected gains in sediment quality. TMDLs have evaluated sediment chemistry target levels to address both benthic organisms and bioaccumulation via the more protective value. For DDT and mercury this is the ERL value. For PCBs is it the bioaccumulation value. Nickel is not pollutant of concern in the subject TMDL.</p>
29.124	P-38	The presence of unmeasured or unknown contaminants will lead to large uncertainties in sediment toxicity, thereby substantially limiting the usefulness of the ERL as a sediment target.	<p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.1.</p> <p>Application of SQO direct effects as part of compliance takes into account the potential for unknown contaminants that might contribute to sediment toxicity.</p>

No.	Author	Comment	Response
30	Port of Long Beach		
30.0		<p>Port(s) are active stakeholders in TMDL:</p> <ul style="list-style-type: none"> -in cooperation with POLA, both Ports have spent \$3M in connection with TMDL, including monitoring data, hydrodynamic model, historical information, technical support and responding to Water Board and EPA staff; -conducting extensive fish studies in Harbor waters, building on EPA Superfund-led study, will be helpful for defining parameters that affect fish tissue aspects of TMDL; -continue to demonstrate efforts for safe sequestration of contaminated sediments, including agreement to accept 1.3M cubic yards of such material from throughout the region to be reused in Middle Harbor landfill -have adopted and now implementing the Water Resources Action Plan, which is a voluntary proactive effort to put in motion the programs, BMPs, and other measures to help meet TMDL; -is encouraged to see SQO Part I incorporated into the TMDL's Implementation Plan and Sediment Monitoring program. 	<p>State Water Board and the Los Angeles Water Board appreciate the significant resources and continued efforts by Ports of Long Beach and Los Angeles to support TMDL development as well as to initiate implementation via WRAP and management of contaminated sediments.</p>
30.1		<p>The TMDL Is Not Scientifically Sound</p> <p>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 C.F.R. 130.7(d) and 40 C.F.R. 130.2 (i) and (f).)</p> <p>The model results used to develop the Waste Load Allocations</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 29.83 and Los Angeles Water Board's response to comment 20.2.</p> <p>As previously responded, the TMDL provides <u>estimates</u> of air deposition load directly onto waterbody surface area based on available air monitoring data in the Los Angeles area. For metals air deposition, there were several studies with diverse geographical locations and staff</p>

No.	Author	Comment	Response
		<p>(WLAs) and Load Allocations (LAs) lack scientific credibility. As documented in the Port's original technical comments, the two Peer Reviews, and other stakeholders' technical comments, the model results, and therefore the WLAs and LAs derived from it, lack scientific credibility and should not be relied upon for this TMDL. Dr. Keller, the second peer reviewer selected by the Board to review this TMDL, states "[i]nsofar as I lack confidence in the results of the EFDC model used to generate the proposed implementation plan and allocations, I must conclude that the TMDL report does not provide sufficient scientific basis for the proposed plan and allocations." (Response to Peer Review Comments, Response 2.22 at p. 64.)</p> <p>The Port has been involved throughout the development of the TMDL and has questioned the basis and methodologies used to establish existing loads, total maximum daily loads, WLAs, and LAs during stakeholder meetings, workshops, and formal comments. Consistent with our commitment to this TMDL, the Port thoroughly reviewed the Draft TMDL and related documents when they were released for public review in mid-December 2010. The Port submitted extensive comments on the draft documents to the Regional Board on February 22, 2011. Unfortunately, our significant comments have not been adequately addressed in the final TMDL documentation. The Regional Board's written response to our technical comments, many of which were echoed by peer reviewers Dr. Brezonik and Dr. Keller, has either: (1) not addressed the issue raised, or (2) dismissed the comment outright. Similarly, the peer reviews conducted by Dr. Brezonik and Dr. Keller, which are highly critical of the scientific validity of this TMDL, were largely dismissed in the Regional Board's Response to Comments.</p> <p>In one particularly telling example, the Port commented that "for certain pollutants such as DDT, air deposition loading to the water surface alone exceeds the loading capacities...The allocation</p>	<p>deliberately separated inland results to apply to Dominguez Channel watershed and for coastal results to apply to the greater LA-LB Harbor waters. For organic pollutants, we had only one site in Wilmington with three measurements by SCCWRP between Sept. 19 and Oct. 26, 2006. Without these air monitoring results, even if only limited data, air deposition for organic pollutants (e.g., PAHs and DDT) would be completely absent from the source assessment and inappropriately excluded from allocations. Also, we note the commenters do not provide, nor cite any additional data regarding DDT air deposition within the Dominguez Channel watershed or LA coastal region.</p> <p>The Los Angeles Water Board carefully considered the results of the SCCWRP study as well as the limitations associated with sample location and collection techniques; thus our description of 'preliminary' direct deposition results. Like any monitoring effort, there are realistic limitations based on site location and collection of samples in the field. The dry deposition study did rely on a 'sticky plate' to collect the air monitoring samples. Some commenters find objection with this sample collection technique based on concerns that it does not adequately represent potential resuspension of (air) deposited materials back into the air. This preliminary study assumed that once organic pollutants sorbed onto the water surface, they became entrained into the water column. (The exception is PCBs which showed more flux from water into air than vice versa; this</p>

No.	Author	Comment	Response
		<p>assigned to bed sediment 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.” (Regional Board Responses to All Comments “Comment Responses” at p. 107.) The Regional Board’s response was: “...Staff acknowledges the DDT TMDL is smaller than the air deposition load for certain water bodies; 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.” (Id.) This response does not clarify how zero or negative allocations in the sediments should be interpreted regarding short-term and long-term compliance with the TMDL.</p> <p>In fact, the comment response from the Regional Board states, “[t]he negative values indicate that the contaminated bed sediment load must be reduced.” (Comment Response at p. 107.) The fact that the negative allocations are measured on an annual basis inescapably indicates continual remediation. Source control efforts and hotspot and targeted dredging will not ever, regardless of how effective they are, reach a “zero” allocation in the bed sediment if ongoing air deposition exceeds the target. The uncertainty in the calculations of WLAs and LAs that have led to the creation of the negative allocations conclusively indicates a TMDL that utterly fails to set achievable source control and remediation targets. Nevertheless, as the Regional Board does time and time again in their comment responses regarding the TMDL, it incorrectly states that the deficiency can be corrected in the future. (Comment Response at p. 107.)</p> <p>The Port does not expect a perfect TMDL that does not require future revision and correction, but the law mandates that there is a point where a TMDL is so lacking in a proper scientific basis that it cannot be implemented into the Water Quality Control Plan:</p>	<p>characteristic of PCBs has been shown in other air monitoring studies; e.g., San Francisco Bay.) Another comment was the Wilmington air monitoring site is three miles inland and should have been closer to the coast; e.g., San Pedro or on land areas jutting out into Outer Harbor. These issues and others can be addressed in future special air monitoring results studies as described in the TMDL Implementation Plan (BPA, pp. 34-35).</p> <p>State Water Board has several additional responses to the specific comment implying that restoration of bedded sediment—presumably via continuous dredging—will be futile since recontamination will occur via air deposition alone. The Los Angeles Water Board did not imply, nor require continuous dredging since we recognize that dredging typically occurs on an intermittent basis and under site-specific conditions. Nonetheless, it is appropriate to acknowledge within the TMDL and Implementation Plan that active dredging has occurred and will continue in future years as part of the Ports’ operations, Army Corps of Engineers navigational activities and possibly Los Angeles Water Board orders (e.g., to address sediment hotspots). Such efforts remove contaminated sediments and thereby reduce pollutant loads within sediments as well as fluxes into the water column.</p> <p>Multi-media flux study results show the sediments’ diffusive flux into water is the <u>dominant</u> mode of DDT into water column. The air deposition portion of this flux study concluded there is more absorption (from air to water) than volatilization.</p>

No.	Author	Comment	Response
		<p>Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). (40 C.F.R. 130.7(c).) As the Port demonstrates in this letter and the attached materials, this TMDL lacks a proper scientific basis in several regards. Furthermore, the Port believes that our original concerns as to the validity of the methodologies and data used to establish the TMDL, as well as the concerns of Dr. Brezonik and Dr. Keller, remain largely unanswered. These legitimate concerns must be adequately addressed before the Basin Plan is amended.</p> <p>The Port is concerned that the TMDL process is being driven by the deadline imposed by the terms of the consent decree between Heal the Bay et al. and EPA. (Heal the Bay v. Jackson, No. 98-cv-4825 (Stipulation to Modify Consent Decree and Order Thereon at p. 3 (Sept. 1, 2010).) While efforts have been underway on this TMDL for some time, sufficient analysis has not yet been completed to fully understand the complex system affected by this regulatory effort. It is the Port's opinion that the rush to finalize the TMDL to meet the consent decree deadline has resulted in the identification of targets that are based on unsound science, unclear expectations for achieving compliance, and an inadequate analysis of the potential effects of implementing this TMDL. These failures have ultimately compromised the development process and led to the adoption of a deficient TMDL that promises to do more harm than good.</p>	<p>Based on these results, efforts to reduce pollutant loads into the water column should initially focus on sediment remediation to make significant water (and sediment) quality improvements. If future special study results reveal lower air deposition rates (for any TMDL pollutant), then this would imply that efforts to reduce loading from air would be less fruitful than other implementation options. If special study results demonstrate that aerial transport from dusty land areas into surface waters is relatively significant, then stakeholders might consider capping dusty land areas or other means of minimizing <u>pollutant</u> transport via air deposition into the saline receiving waters.</p> <p>As noted in the Implementation Plan, a variety of implementation strategies are described within Phases I, II and III. These strategies include watershed-wide implementation actions and additional BMPs to reduce upstream inputs. And the plan includes pollutant control via sediment management and planned site-remedial actions. Past and present dredging projects have proceeded apparently without unintended consequences. For example, the Port of Los Angeles and Army Corps <i>Channel Deepening</i> project, which is nearly complete, has removed large quantities of sediments (and some contaminants) from Inner and Outer Harbor waters. The Port of Long Beach IR site 7 and Berth 240 are scheduled to take place in 2012 and will safely remove an additional 1.3M cubic yards of contaminated sediments. As indicated in the Implementation Plan, Dominguez Channel estuary, Consolidated Slip and Fish Harbor are</p>

No.	Author	Comment	Response
			<p>still characterized as ‘sediment toxic hotspots’ and remain as the highest priority locations for reducing pollutant loads from existing contaminated sediments. One added benefit of sediment remediation actions, in comparison to single pollutant efforts, is that a wide variety of toxic pollutants, including metals, PAHs, PCBs, legacy and current use pesticides will be removed from the waterbody.</p> <p>See also Los Angeles Water Board’s responses to comments (9.3; 20.9; 33.21; 36.3; 36.7; 36.61) and SWRCB response 29.60.</p>
30.2		<p>The TMDL Employs Measurements, Targets, And Methods That Are Overly Conservative, Not Achievable, And Potentially Harmful</p> <p>The targets in the final TMDL adopted by the Regional Board 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 within the Harbor. Data over the last 10 years has demonstrated improvement in Harbor conditions compared to older data over the past 20 years, such that the latest data indicates conditions in the Harbor are better than they were 20 years ago.</p> <p>Further, the Port is greatly concerned that the TMDL provides targets, LAs and 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 storm water treatment systems, and the removal of sediments</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 20.1.</p>

No.	Author	Comment	Response
		<p>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.</p>	
30.3		<p>The Board Should Use SQOs And Not ERLs As The Targets The final TMDL adopted by the Regional Board does not address the problem associated with the use of Effects Range Low (ERL) to establish water quality targets for sediment. Despite many commenters' well-placed criticism of this unnecessarily strict standard, the Regional Board continues to insist that the use of ERL as the source of targets is justified and advisable. (Basin Plan Amendment at p. 4 ("The marine sediment quality guidelines of Effect Range Low (ERL) . . . were used to establish the numeric targets for marine sediment for the greater Los Angeles and Long Beach Harbor waters").) The new basin plan amendment, on the other hand, does state that "[ERL-derived targets] are not intended to be used as 'clean up standards' for navigational, capital or maintenance 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." (Basin Plan Amendment at p.5, emphasis added.) It also says "the categories designed in the SQO Part 1 as Unimpacted and Likely Unimpacted by the interpretation and integration of multiple lines of evidence shall be considered as the protective narrative objective for sediment toxicity and benthic community effects." (Id.) Accordingly, the Regional Board seems to state that ERL-derived numeric objectives are both a standard and not a standard. It remains entirely unclear whether, how, and when the sediment quality measurements derived from ERLs will apply, and whether or not they will constitute enforceable standards. Replacing the words "not necessarily" with "not intended" does not correct this</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 23.2 and Los Angeles Water Board's response to comment 20.1.</p>

No.	Author	Comment	Response
		<p>problem. (Change Sheet at p.1.) Despite the Regional Board's apparent "intention," ERL remains the basis for the determination of numerical targets in the TMDL and, as even the Regional Board admits, how much dredging will have to be conducted remains a huge question mark. (Comment Responses at p. 108 ("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").)</p> <p>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 ERL 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.)</p> <p>SQOs and not ERLs 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 Board on August 25, 2009. SQOs are based on three lines of evidence, specifically: sediment chemistry, sediment toxicity, and benthic community condition. (Final Staff Report at p. 37.) 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</p>	

No.	Author	Comment	Response
		<p>that can impact sediment quality, and provide the basis for appropriate remediation activities." (State Board Resolution No. 2008-0070 at ¶ 14.)</p> <p>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 114.) 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.</p> <p>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 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.</p>	

No.	Author	Comment	Response
		<p>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.</p> <p>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 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.)</p> <p>In the TMDL, the Board relies on the 303(d) listing policy, which states that the ERM values, not ERL values as an acceptable method of determining sediment impairment when toxicity is present. 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</p>	

No.	Author	Comment	Response
		<p>"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 it 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.</p> <p>An examination of the comparison between the estimated volumes in cubic yards 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. (Staff Report at p. 125.) Adoption of the sediment targets would, in fact, result in the dredging of an additional 25,000,000 cubic yards of sediments that currently support healthy marine communities in the harbor, whereas SQO would require dredging certain "hot spots" that are far more likely to result in an improved marine habitat. (See Attachment 9.)</p> <p>Language added to the Basin Plan Amendment states that, for the sediment management plan, "Prioritized sites shall include known hot spots, including but not limited to Consolidated Slip and Fish Harbor. For these prioritized sites, the sediment management plan shall include concrete actions and milestones. . . to remediate these priority areas and shall demonstrate that actions to address prioritized hot spots will be initiated and completed as early as possible during the 20-year TMDL implementation period." (Basin Plan Amendment at p.31.) Though this language suggests added concern about hot spots, it does not specify that these will be the only places where dredging</p>	

No.	Author	Comment	Response
		<p>will occur. Depending on the effect of the ERL-derived limits, it is still entirely possible that the entire harbor will have to be dredged. Just because hot spots are to be considered a “priority” does not mean other locations will not be required to be dredged in the future, especially of hot spot-only dredging does not achieve the TMDL’s unnecessarily strict, potentially destructive numeric targets. (See Comment Responses at p. 33.)</p> <p>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. In fact, compared to ERLs that do not consider area-specific conditions at all, SQOs are the best scientifically sound currently available way to meet this requirement. Given these facts, the use of ERLs rather than SQOs simply cannot be justified in this instance.</p> <p>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 (i.e., LAs and WLAs), 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.</p>	
30.4		<p>In Lieu Of Using SQOs, The TMDL Should, In Accordance With State Policy, Use ERM And Not ERL</p> <p>The State Board has identified Effect Range Median (ERM), not ERL, as the appropriate measure to list and delist water segments within the State. While ERL corresponds with 10th percentile values indicative of the concentration below which adverse effects rarely occur, ERM corresponds with the 50th</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 23.2 and Los Angeles Water Board's response to comment 20.1.</p>

No.	Author	Comment	Response
		<p>percentile values indicative of the concentration above which adverse effects are more likely to occur.</p> <p>The 303(d) listing guidelines, the Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (SWRCB 2004a) presents the policy for listing and delisting water segments, as well as guidance with which to implement these policies. Although the guidance provides the user several numeric guidelines to evaluate marine, estuarine or freshwater sediments, with respect to the use of ERLs versus ERMs, the guidance is clear:</p> <p>"Only those sediment guidelines that are predictive of sediment toxicity shall be used (i.e., those guidelines that have been shown in published studies to be predictive of sediment toxicity in 50 percent or more of the samples analyzed)." (SWRCB 2004a at p.20.)</p> <p>The description above, "...predictive of sediment toxicity in 50 percent or more of the samples..." correlates directly with the derivation of the ERM values as described by Long et al. (1995) and not ERLs. The Regional Board offered no clear justification for using ERL rather than ERM. (See Comment Response at pp. 30-36.) Accordingly, the State Board should, in the alternative to using SQO as outlined above, require the Regional Board to use ERM rather than ERL in the TMDL.</p>	<p>ERLs were selected to protect beneficial uses of benthic organisms living within sediments of TMDL waters. Since TMDLs are developed to attain applicable water quality standards, it is appropriate to select sediment chemistry values that will minimize adverse effects to the benthos. Commenter's suggestion of setting sediment chemistry target levels at ERMs implies the prediction of sediment toxicity at or more than 50% of the time, which is hardly protecting the beneficial uses.</p> <p>Whereas the 303(d) Listing Policy applies ERM or equivalent sediment chemistry values to assess impairment, TMDL targets are purposely selected to be more protective and thereby <u>restore</u> beneficial uses of impaired waters.</p>
30.5		<p>The Interim Sediment Targets Are Flawed And Must Be Revised</p> <p>Like the final targets, the interim sediment targets in the TMDL are based on chemistry alone. In response to this fact, the Regional Board has stated that the interim sediment targets are based on the current sediment values. (Comment Responses at pp. 35-36.) This is of little comfort to the Port as it is tantamount to the Regional Board justifying its faulty interim targets by citing to the TMDL's faulty sediment values. The Regional Board</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.1 and 21.5.</p>

No.	Author	Comment	Response
		<p>additionally pointed out that the Basin Plan Amendment has been modified to allow for compliance with interim sediment allocations by compliance with SQOs. (Comment Responses at p. 36.)</p> <p>While the Port believes this latter modification is a step in the right direction, it does not fix the problems with the interim sediment targets themselves. The interim sediment targets still: (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. Adding a separate, more reasonable basis for demonstrating compliance does not fix the real problem with the interim targets. Accordingly, 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.</p>	
30.6		<p>Methodologies Used To Create The TMDL Are Flawed And Not Based On Accurate Or Current Data</p> <p>A TMDL may only be established when the pollutant at issue is “suitable for calculation,” which occurs when enough is known about the pollutant within the actual water-body environment such that a load allocation can be established at a level “necessary to result in attainment of all applicable water quality standards.” (33 USC § 1313(d)(1)(C); 40 C.F.R. § 130.7(c)(1) (emphasis added); see also, 43 Fed. Reg. 60662.) By utilizing ERL to formulate its targets, the Regional Board has shown it lacks a sufficient basis to calculate load allocations necessary to achieve water quality objectives in the Harbor. Not knowing enough to create appropriate targets, the Regional Board has decided the best</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 20.2.</p>

No.	Author	Comment	Response
		<p>tactic is to err on the side of extreme caution by using an unjustifiably strict standard, a fact which is ironically poised to cause more environmental damage than good by potentially mandating a massive, highly destructive dredging operation in the Harbor.</p> <p>The Regional Board did not address the Port's comment that the TMDL does not take into account the fact that the latest data indicates that conditions in the Harbor are better now than they were 20 years ago and that the TMDL does not factor in the actual conditions present in the Harbor. The Board's responses to these comments only state that: (1) ERL is not meant to estimate conditions in the Harbor, but to present an ideal goal for levels of sediment contaminants; (2) the TMDL allows for site-specific studies that can be conducted to develop new targets; (3) though there have been improvements, the Harbor still does not meet water quality standards allegedly determined under the SQO; and, most disturbingly, that (4) ERLs are a valid method for attaining compliance with water quality objectives. (Comment Responses at p. 31-33.) These responses do not address the Port's concerns. The Regional Board's attempt to explain that it does not have to consider site-specific conditions in devising the TMDL's enforceable targets is noteworthy as it is not only contrary to law, it is affirmatively bad policy. (33 USC § 1313(d)(1)(C); 40 C.F.R. § 130.7(d) and 40 C.F.R. §§ 130.2 (c)(1), (i), (f).) Furthermore, the possibility of fixing the flawed TMDL in the future is no justification for adopting it now, especially given the fact that this same faulty methodology has been used to calculate interim targets.</p> <p>EPA's Guidance for Developing TMDL's in California clearly establishes that the Regional Board's apparent lack of concern about addressing the actual conditions in and sources of contamination in the Harbor is improper and states:</p>	

No.	Author	Comment	Response
		<p>“An understanding of pollutant loading sources and the amounts and timing of pollutant discharges is vital to the development of effective TMDLs. The TMDL document must provide estimates of the amounts of pollutants entering the receiving water of concern or, in some cases, the amount of pollutant that is bioavailable based on historic loadings stored in the aquatic environment. These pollutant sources or causes of the problem need to be documented based on studies, literature reviews or other sources of information. Because the source analysis provides the key basis for determining the levels of pollutant reductions needed to meet water quality standards, and the allowable assimilative capacity, TMDL, wasteload allocations, and load allocations, quantified source analyses are required.”</p> <p>(EPA Region 9, Guidance for Developing TMDLs in California (Jan 7, 2000) (2000 EPA Guidance) at 4.)</p> <p>The TMDL fails to accurately summarize the current condition of the Harbor, and instead is developed from inaccurate and outdated information. (Comment Table 2, Items 1 through 24.)</p> <p>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 1A.)</p> <p>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 corrected, prior to issuing the final Basin Plan Amendment. 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,</p>	

No.	Author	Comment	Response
		<p>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).</p> <p>A TMDL must describe the relationship between numeric targets and identified pollutant sources, and estimate total assimilative capacity (loading capacity) of the water body for the pollutant of concern. (40 C.F.R. 130.7(d) and 40 C.F.R. 130.2 (i) and (f).) The TMDL fails completely in this regard as the linkage analyses were not sufficient to support LAs 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 PV Shelf, there is evidence that the fish tissue impairments could be the result of sources outside of the harbor waters. In response, the Regional Board points out that they perceive the negative allocation as a zero allocation. (Comment Responses at 38.) This response, however, completely glosses over the methodological errors that led to the development of the negative allocation to begin with. Furthermore, the Regional Board suggests it chose ERL was chosen over a biota-sediment accumulation factor ("BASF") for</p>	

No.	Author	Comment	Response
		<p>determining DDT and PCB allocations because it is “more protective of wildlife.” (Comment Responses at 38.) This, again, indicated strongly that the target was developed not as one “necessary” to attain water quality standards, it is rather a low-ball figure developed in light of the fact that the pollutants in the Harbor were not “suitable for calculation.” (33 USC § 1313(d)(1)(C); 40 C.F.R. § 130.7(c)(1); see also, 43 Fed. Reg. 60662.)</p> <p>Finally, the conclusions and data contained in the TMDL were not properly subjected to scientific peer review. For 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 Regional 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.</p>	
30.7		<p>Targets Regarding Fish Tissue Are Not Environmentally Sound And Require Significant Revision</p> <p>The Regional Board has kept fish tissue targets based on the OEHHA guidance document in the Final Basin Plan Amendment, despite the well-placed comments of the Port and other commenters. (See Basin Plan Amendment at p. 5 and Comment Responses at p. 39.) The TMDL revisions have not altered the numerical standards that will be applied regarding fish tissue targets. (Compare Draft Basin Plan Amendment at p.5 with Basin Plan Amendment at p. 5.)</p> <p>Nevertheless, it remains the case that the Fish Contaminant</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 0.4 and Los Angeles Water Board's responses to comments 20.3; 18.75; 36.58 19.7; 31.2.</p> <p>In addition, the State Water Board notes the Basin Plan Amendment for the TMDL shows commitment to incorporate new data, special study results and prioritized assessment of contaminated sediment management. See pp. 30-</p>

No.	Author	Comment	Response
		<p>Goals (FCGs) used in the TMDL were not intended to be used as numeric targets. (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.)</p> <p>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</p>	<p>31.</p>

No.	Author	Comment	Response
		<p>pollution mitigation or elimination." (OEHHA 2008, p. 1.)</p> <p>The Regional Board's response to the Port's comments regarding the FCGs contends that the OEHHA document does not prevent it from using FCGs as screening values or numeric targets. (Comment Responses at p. 39.) This statement is inaccurate as the full quote above demonstrates that on page one, as throughout the OEHHA document, OEHHA is clear that the FCGs are provided as a starting point for further development—with the assistance of OEHHA—of site-specific criteria and should not be used as an end point, as they were applied in the TMDL. The Regional Board further tries to explain its actions by pointing out that FCGs have been used in other TMDLs in Southern California. (Comment Responses at pp.39-40.) Just because this mistake has been made in the past, however, does not support making it in this TMDL. The Regional Board should not be allowed to justify its present failure by pointing out it has engaged in identical failures in the past.</p> <p>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. As stated, EPA Region 9's Guidance for Developing TMDLs in California states that "[t]he TMDL document must describe the relationship between numeric target(s) and identified pollutant sources." (2000 EPA Guidance at p. 4.) However, no relationship between sediment bio-accumulative—i.e., PCBs and DDTs—concentrations and the fish tissue numeric target have been demonstrated.</p> <p>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</p>	

No.	Author	Comment	Response
		<p>(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 study in Newport Bay. Accordingly, the required link between the sediment and fish tissue targets is wholly absent from the TMDL.</p> <p>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. This is improper under 40 C.F.R. §§ 130.7(d) and 40 C.F.R. §§ 130.2 (i) and (f). 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 than the ERL value" (Staff Report at p. 91; Comment Responses at p. 38.) This justification clearly implies an arbitrary selection of the lowest published value regardless of applicability.</p> <p>For the bioaccumulatives (PCBs and DDTs, primarily), because the currently proposed TMDL uses non-site specific numerical targets for sediments to address fish tissue impairments, the TMDL overrides the SQO Part 1 approach, and all sediment remedial actions, associated environmental impacts, and costs will likely be driven by the sediment PCB and DDT targets of 3.2 ppb and 1.9 ppb respectively. As local data (e.g. fish movement,</p>	

No.	Author	Comment	Response
		<p>tissue concentrations) is not considered for fish tissue, and compliance is only determined by meeting a numerical target where a specific linkage to fish tissue impairments in the San Pedro Bay has not been established, this approach will most likely result in significant harm to areas within the Harbor waters currently exhibiting a healthy benthic community, without any clear indication whatsoever that fish tissue will be improved.</p> <p>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 a 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.</p> <p>Complying with the current sediment targets for fish tissue would require dredging every inch of the two harbors, resulting in an estimated 38 million cubic yards of dredged sediments, totaling over 2.6 million truck trips through nearby neighborhoods, significant air, noise, traffic and human health impacts, the destruction of marine habitat, and cost upwards of \$9 billion dollars. The magnitude of this remediation would be 10 times greater than the largest sediment remediation ever conducted, and this does not even consider the remediation which would be required for eastern San Pedro Bay. That is why it is imperative</p>	

No.	Author	Comment	Response
		<p>that the full SQO process be incorporated into this TMDL, and the current, inappropriate targets be revised.</p> <p>For the reasons summarized above and detailed in the documents submitted herewith, 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 Port supports changes that allow for the incorporation of Phase II SQOs once completed.</p>	
30.8		<p>The TMDL Fails To Demonstrate Necessary Linkages</p> <p>The TMDL must describe the relationship between numeric targets and identified pollutant sources, and estimate total assimilative loading capacity of the water body for the pollutant of concern. (2000 EPA Guidance at 4; 40 C.F.R. § 130.7(d); and 40 C.F.R. §§ 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.</p> <ul style="list-style-type: none"> i. The linkage between sediment numeric targets and pollutant sources needs to be demonstrated. ii. The linkage between existing sediment bed sources and sediment bed concentrations needs to be demonstrated. iii. The linkage between water column concentrations (e.g., California Toxic Rule (CTR) and sediment concentrations (i.e., benthic impairment)) needs to be demonstrated. iv. The site-specific linkage between fish tissue targets and sediment numeric targets needs to be demonstrated. <p>The Regional Board failed to address these problems in the final adopted TMDL. On Page 43 and 44 of the Regional Board's responses to all comments, the Regional Board defends its</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 20.4.</p>

No.	Author	Comment	Response
		linkage analysis and makes the claim that language has been added to the staff report to address these concerns. (See Comment Responses at pp. 43-44 and Linkage Memorandum in Comment Package.) The added language, which can be found at pages 58-59 of the Final Staff Report, consists of nothing more than a few simple, non-site specific diagrams and the same justification for the linkage analysis as it was in the Draft Staff Report. (Staff Report at pp. 58-59.) These diagrams do not constitute an adequate demonstration of the above mentioned linkages, which must be established for the Harbor itself.	
30.9		<p>The TMDL Should State That Sediment Targets Are Not Intended To Be Remedial Action Goals, Cleanup Levels, Or Levels To Which Individual Dredging Projects Will Be Held</p> <p>The Port is very encouraged to see SQO Part 1 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 cleanup actions or dredging cleanup goals will not be issued based on the sediment targets. The TMDL must clearly state that the numerical sediment targets are not remedial action goals, cleanup levels, or levels to which individual dredging projects will be held. Again, merely stating that such standards are “not intended” to constitute such enforceable standards is inadequate.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 6.11.</p>
30.10		<p>Compliance For NPDES Measured At The Point Of Discharge Is Inappropriate</p> <p>Until appropriate linkages between contaminants and specific water body impairments are completed, compliance for NPDES permits measured at the point of discharge is inappropriate.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 20.6.</p>

No.	Author	Comment	Response
		<p>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 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. As the data demonstrates, there are no water column CTR exceedances in the Harbor. Therefore, there is no evidence that establishes a link between achieving the TMDL water column targets for these sources and addressing the impairments.</p> <p>The Regional Board's response is essentially that it has created the TMDL with the best data currently available and that "each water body-pollutant combination is required to be addressed through TMDL development." (Comment Responses at p. 46.) Yet again, the Regional Board's response is to restate the problem and then offer as a solution the possibility that the TMDL can be fixed in the future. Claiming to remedy the problem in the future offers no justification for adopting a wholly deficient TMDL now.</p> <p>The Port requests that the language provided in the Recommended Rewrites 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.</p>	
30.11		<p>Fish Tissue Targets Should Not Be Included In The TMDL Until Site-Specific Linkages Have Been Established</p> <p>The assessment of indirect impacts of sediment contamination via bioaccumulation is currently under development by the State</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles</p>

No.	Author	Comment	Response
		<p>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 TMDL is uncertain, and thus it is not possible to allocate the necessary load reductions for bed sediments.</p> <p>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 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 2 evaluation or similar approach.</p> <p>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.</p> <p>As stated above, instead of waiting to develop more appropriate targets using the SQO Part 2 methodology, the Regional Board continues to insist on including fish tissue targets based on the OEHHA guidance document, through changes to the Basin Plan Amendment regarding demonstrating compliance through SQO-based standards. (See Basin Plan Amendment at p. 5 and Comment Responses at p. 39.)</p> <p>In response to the Port's comments regarding the use of more appropriate and advanced fish tissue targets through the use of</p>	<p>Water Board's response to comment 20.3.</p>

No.	Author	Comment	Response
		<p>SQO Part 2, the Regional Board states “See Response to Comment 20.3.” (Comment Responses at p. 46.) This comment response, discussed above, amounts to the Regional Board stating that the OEHHA document does not prevent it from using FCGs as screening values or numeric targets. (Comment Responses at p. 39.) As stated above, this is an inaccurate argument given that the OEHHA document affirmatively states that FCGs are only meant to be a starting point toward the development of site-specific numeric targets. (2008 OEHHA at p. 1.)</p>	
30.12		<p>The State Board Should Remand The TMDL To The Regional Board To Incorporate Palos Verdes Shelf Fish Tissue Numbers</p> <p>The PV Shelf adjacent to the Harbor and the Consolidated Slip inside the Harbor are part of the “Montrose NPL Site.” The Montrose NPL Site is a Superfund Site that was listed for drastic exceedances of PCBs and DDT coming from industrial operations in the City of Los Angeles. (United States v. Montrose Chemical Corporation, No. CV 90-03122 (C.D. Cal. 1999) (August 19, 1999 Amended Consent Decree at pp. 24-25).) Regarding fish tissue, the cleanup goals for the targets identified in the TMDL are 20 times more stringent than those for Montrose NPL site, which includes the PV Shelf. This outcome is not scientifically defensible given the fact that there is presently inadequate data as to (1) the movement patterns of fish between the PV Shelf and the Harbor; and (2) the origin of PCB and DDT in fish. Given the fact that the Montrose consent decree dealt specifically with these contaminants existing primarily in the PV Shelf and the Dominguez Channel, it stands to reason that the locus of exposure is in the PV Shelf and the Dominguez Channel and not the Harbor. Thus, it is entirely possible that a fish with tissues that have become contaminated by pollution from the Montrose Superfund Site could swim into the Harbor and cause a violation for the Port, despite the fact that the same fish would not violate</p>	<p>A TMDL for both PCBs and DDT is presently under development by USEPA which will identify the appropriate targets for sediments and fish in the Palos Verde Shelf and the Santa Monica Bay.</p> <p>The adopted Basin Plan Amendment has sufficient flexibility to select or modify the most appropriate species for compliance monitoring. State Water Board and Los Angeles Water Board understand that the movement of fish to and from the Palos Verde Shelf is under study, and indeed, the adopted Basin Plan Amendment includes “foraging ranges of targeted fish” as a special study which could result in changes to the TMDL. The adopted Basin Plan Amendment specifically adds “Completion of studies to further refine the site specific link between sediment pollutant concentrations and fish tissue pollutant concentrations and evaluate the range and habitat of specific fish populations will be used to evaluate changes in TMDL targets, WLAs and LAs, and to guide future implementation actions”. See Basin Plan Amendment, Attachment A, p. 34.</p>

No.	Author	Comment	Response
		<p>the targets set by the Consent Decree for the PV Shelf. This is an absurd result.</p> <p>Further, there is no rational scientific basis to conclude that meeting the TMDL sediment targets for fish tissues within San Pedro Bay would result meeting the TMDL fish tissue targets in the Harbor, given the other local sources of contamination. This discrepancy between the two targets is inappropriate given the proximity of these sites. There are grave environmental and economic ramifications associated with attempting to achieve these targets. The TMDL should be consistent with the targets provided for the PV Shelf.</p>	
30.13		<p>The TMDL Is Structurally And Conceptually Flawed, To Such An Extent That It Is Unachievable, Will Not Result In The Restoration Or Protection Of Beneficial Uses, And Cannot Be Fixed Through Special Studies, Better Data, Or Further Model Development</p> <p>The goal of this TMDL is to restore and protect beneficial uses through both sediment remediation of legacy contamination and pollutant load reduction/source control from ongoing pollution sources. While both sediment remediation and pollutant load reduction/source control approaches have been used in previous TMDLs, this has been accomplished through separate evaluations. This TMDL, unlike any other TMDLs to-date, makes the irreparable error of attempting to combine both sediment remediation and pollutant load reduction approaches into a single TMDL objective. This combined method results in a fundamentally flawed TMDL, as detailed below.</p> <p>Typically, TMDLs are applied to the water column to determine acceptable loads to the water body. However, TMDL calculations have also been applied to in-place sediments through two possible methods depending upon the desired outcome of the TMDL: (1) protection of sediments through control of ongoing sources or (2) remediation of legacy contaminated sediments.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 36.33, 40.4, 40.5, 40.7.</p>

No.	Author	Comment	Response
		<p>Though TMDLs are not proper regulatory mechanisms for remediating legacy pollutants, water boards may have nonetheless done so in past TMDLs without legal challenge. For instance, the Machado Lake Pesticides and PCBs TMDL separates the source control and remediation approaches into two separate calculations.</p> <p>In the sediment protection or source control approach, in-place sediments are identified as the receiving body, which receives pollutants from other sources (e.g. storm drain discharges). Then, the TMDL is set as the maximum amount of pollutants that the sediments can receive from all sources, while still meeting the water quality objectives. The allowable pollutant loads defined by TMDL to the sediments are then divided amongst all pollutant sources, identified as Load Allocations (LAs) and Waste Load Allocations (WLAs). Each pollutant source must meet their individual allocation to limit the amount of pollutants making it into the receiving body (i.e. sediments). Thus, the sediments are being protected by controlling the amount of pollutants that are being inputted into the sediments from all of the sources.</p> <p>In the legally incorrect legacy contamination or remediation approach, sediments are identified as an on-going source of pollutants to a separate receiving body, typically the water column. Then, the maximum total amount of pollutants that the receiving body can receive from all sources, while still meeting the water quality objectives, is determined (i.e. the TMDL). Allocations are assigned to all of the pollutant loads, including the sediments, to limit the amount of pollutants that is allowed to pass into the receiving body. Remedial action (e.g., dredging, capping, assisted natural recovery) of the in-place sediments can then be taken to reduce the pollutant load from the sediments to the receiving body to meet the assigned allocation. Therefore, legacy contamination in the sediments is addressed as a pollutant source in order to reduce loading from the sediments to a</p>	

No.	Author	Comment	Response
		<p>separate receiving body.</p> <p>The illegality of using a TMDL to force remediation of legacy pollutants aside, it is not technically possible to combine these two approaches into a single TMDL equation relating the TMDL to Waste Load and Load Allocations. As discussed above, in each approach the sediments must be treated differently and identified as either a receiving body or a pollutant source. It is neither physically possible nor logical for the sediments to be both a receiving body and a pollutant source at the same time. Furthermore, a “load” is the amount of a pollutant from a source that is introduced into the receiving body. Therefore, the source by definition must be separate and distinct from the receiving body; the pollutant source and the receiving body can’t be one in the same which is how the current TMDL is set up.</p> <p>Unfortunately, this Harbor TMDL makes an irreparable error of identifying sediments as both a source and a receiving body. In this case, the sediments were first identified as the receiving body, with the goal of protecting the sediments from ongoing sources. Then, the total amount of pollutants that the sediments could receive from all sources, while still meeting the water quality objectives, was determined (i.e. the TMDL). Next, the allocations from the various pollutant sources (i.e. air deposition, MS4s and POTWs) were assigned. The difference between the TMDL and the sum of the Waste Load and Load Allocations was calculated. This mathematically derived number represents the amount of excess loading to the bedded sediments each year. However, the TMDL writers arbitrarily assigned this excess loading to bedded sediments; thus making the sediment both the receiving body and a pollutant source. This is not a valid approach. There is no physical relationship or linkage between the actual bedded sediments and the excess loading that was assigned to bedded sediments.</p>	

No.	Author	Comment	Response
		<p>This flawed approach is highlighted by the fact that for some constituents, any change in pollutants within the bedded sediments will neither assist nor hamper achievement of the TMDL. Consider the hypothetical scenario where all impacted bedded sediments are completely removed from the system (through dredging or capping, making the pollutant loading from bedded sediments equal to zero) and all other allocations are met. Logically then, according to the equation $TMDL = LA + WLA$, the TMDL should be achieved if all allocations are met, but in this case, it is not achievable because on-going sources (e.g. air deposition and waste load allocations) are greater than the TMDL, thus illustrating there is no physical relationship between the load allocation assigned to the bedded sediments and the actual legacy sediments, their complete removal from the system does not aid in achievement of the TMDL. This is further explained in the following example, using specific allocations and the TMDL for the Inner Harbor for DDT:</p> <p>Example: DDT TMDL for Inner Harbor Equation: $TMDL = WLA + LA$ Specific to DDT in the Inner Harbor, this TMDL makes the following assignments for the TMDL and the WLAs and LAs: DDT TMDL = 3.56 g/yr MS4 WLA = 0.066 g/yr LA for air deposition = 129 g/yr LA for bed sediment = -125 g/yr Hence, the DDT TMDL equation for Inner Harbor is: $3.56 \text{ g/yr} = 0.066 \text{ g/yr (WLAs)} + 129 \text{ g/yr (LA air deposition)} - 125 \text{ g/yr (LA bedded sediments)}$ Assuming all WLAs and LAs are met, and bedded sediments are completely removed or capped, thus making their load equal to zero, then: $TMDL = 0.066(WLAs) + 129(LA \text{ air dep.}) + 0(LA \text{ bedded sediments}) = 129.66$ $3.56 \neq 129.99$</p>	

No.	Author	Comment	Response
		<p>Therefore, even when all allocations are met and complete removal of bedded sediment occurs, total loading to the system is 126.1 g/yr DDT over the TMDL of 3.56 g/yr DDT.</p> <p>Clearly, this TMDL does not protect sediments from ongoing sources, requires indefinite continual removal of excess loadings through continual dredging and does not address bedded sediments or hotspots. This is a critical flaw in the conceptual model and framework of the TMDL. Therefore, unless the structure of the TMDL is corrected, no amount of special studies, modeling improvements, or time, will be able to resolve this issue and the TMDL will never achieve its stated goals.</p>	
30.14		<p>The CEQA Document Does Not Adequately Analyze The Impacts And Thus Does Not Inform The Decision Makers Of The Significant Impacts Of The TMDL</p> <p>In December 2010, the Regional Board released for public review the SED for the TMDL pursuant to its certified regulatory program. The Port submitted comments on the draft SED during the public review period. A revised draft SED was released by the Regional Board in May 2011, in response to the comments received during the public review period. After reviewing the revised draft SED, it is clear that very few comments from the Port and other commenters were addressed and incorporated into the revised draft. Furthermore, copies of the written responses to public comments were not provided to responsible agencies at least 10 days prior to the Regional Board's approval of the SED as required by 23 C.C.R. §3779(d). Written responses were posted on April 29, 2011, only 7 days prior to the Regional Board's approval of the SED on May 5, 2011.</p> <p>The SED adopted by the Regional Board does not adequately analyze the environmental impacts of the TMDL under the CEQA and therefore does not provide the decision makers, other</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1,0.4 and Los Angeles Water Board's responses to comments 20.8.</p> <p>The Los Angeles Water Board made some revisions to the Staff Report and TMDL in response to comments.</p> <p>The Los Angeles Water Board's response to comments was posted on its website on April 26, 2011. This provided an opportunity for public agencies to review the responses to comments and make additional oral comments at the hearing on May 5, 2011. In addition, the commenters have provided these additional comments to the State Water Board for its consideration in approval of the TMDL. Finally, a review of the hearing transcript demonstrates that neither the</p>

No.	Author	Comment	Response
		<p>regulatory agencies, and the public with the required understanding whether the environmental benefits of the proposed TMDL outweigh the significant and unavoidable environmental impacts.</p> <p>In City of Arcadia v. State Water Resources Control Board, 135 Cal.App.4th 1392 (2006), a number of permittee cities challenged the Regional Board's adoption, and the State Board's approval, of a trash TMDL concerning the Los Angeles River and its surrounding watershed. The court held, in part, that the Regional Board failed to prepare an Environmental Impact Report (EIR). The Regional Board's completion of a CEQA checklist in a manner supporting a negative declaration was not sufficient, particularly in light of evidence in the record concerning potential adverse environmental impacts that could arise from the TMDL (despite its water quality enhancement purposes). The court concluded that the Regional 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 Regional 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 Regional 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.</p>	<p>commenter nor any other public agency objected to the Los Angeles Water Board's posting of the response to comments nine days before the public hearing. The State Water Board agrees that section 3779(d) must be complied with. But in this case, one less day for the public agencies to consider the response to comments has not prejudiced the public agencies.</p> <p>The commenter continues to draw erroneous conclusions about potential environmental effects of implementing the TMDL because the commenter significantly overestimates the amount of dredging necessary to achieve the goals of the TMDL. For a discussion of amount of dredging see comment 0.4.</p> <p>Compliance can be met by either demonstration of compliance with the protective conditions of the SQO and sediment targets to support fish tissue OR ERLs and sediment targets to support fish tissue, which the commenter understands. The Los Angeles Water Board is not required to evaluate methods of compliance which are unreasonable. For example, the assumption that the Port would dredge to ERL levels (entire Harbor) if it could comply with greatly less dredging is an unreasonable assumption so this assumption was not analyzed.</p> <p>The Los Angeles Water Board did not ignore any potential impact but analyzed to an appropriate level for a programmatic level CEQA analysis. The Water Board is prohibited from specifying the manner of compliance with its orders (Water Code</p>

No.	Author	Comment	Response
		<p>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.</p> <p>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 the TMDL. As stated on page 8 of the SED and in the California Code of Regulations (23 C.C.R. § 3777): “The environmental analysis shall take into account a reasonable range of environmental, economic, and technical factors, population and geographic areas, and specific sites.”</p> <p>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 timeframe. Therefore, the lead agency can reasonably foresee that specific large scale dredging will be required. 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.</p> <p>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 California Toxics Rule (CTR) target set in the TMDL for General NPDES discharges, or the WLA for Municipal Storm Sewer Systems (MS4). The only available method to feasibly approach achieving compliance with water quality WLAs at the ports is treatment control Best Management Practices (BMPs). (Attachments 11B and 11C.) Therefore, the lead agency can reasonably foresee that the specific</p>	<p>§13360). The TMDL does not specify the manner of compliance. It states in the Implementation Plan that the TMDL will be implemented in NPDES permits and other orders. As required in a certified regulatory program, the Water Board must include a description of proposed activities, analyze alternatives, and identify mitigation measures. These TMDL documents, including the SED, have identified the reasonably foreseeable methods of compliance and analyzed potential environmental effects and identified potential mitigation measures, at a programmatic level, without speculation. The revisions made to the SED checklist and findings sufficiently addressed concerns.</p>

No.	Author	Comment	Response
		<p>implementation measure of storm water 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.</p> <p>All potential environmental impacts from the project have not been properly addressed, 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 Regional 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.</p>	
30.15		<p>Inadequate Descriptions Of Structural Implementation Alternatives Result In Underestimated Environmental Impacts</p> <p>By underestimating the magnitude of the amount of sediment needed to be removed by dredging to comply with the TMDL, and the compliance methods of achieving CTR and WLAs, the existing environmental analysis does not fulfill the Regional Board's obligation under CEQA. The SED lacks an adequate discussion of the numerous environmental impacts associated with dredging and storm water treatment alternatives, as well as</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 30.14 and Los Angeles Water Board's responses to comments 20.9.</p>

No.	Author	Comment	Response
		<p>an accurate and complete assessment of air and transportation impacts resulting from a dredging project of this size. These numerous impacts are not provided to the public for review, and do not give the public a true indication of the significant environmental impacts of the project.</p> <p>The SED incorrectly describes dredging to be small in scale. Based on this inaccurate assessment, the environmental analysis incorrectly assumes most dredging impacts to be less than significant or no impact. According to the Staff Report, it is estimated that 11 to 35 million cubic yards of sediment would have to be removed within the Ports and San Pedro Bay to meet the requirements of the TMDL. (Staff Report, Table 7-3 at p. 122.) In order to comply with fish tissue targets stated in the TMDL, approximately 38 million cubic yards 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 (the time period estimated by the Port to complete this effort) 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.</p> <p>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, length of time of required dredging, methods of dredging (clamshell and hydraulic), methods of disposal (truck or rail), and disposal areas (upland and port landfill). Additionally, the option of capping is inadequately analyzed and there is neither discussion nor any assumptions about capping in the project description to allow the public to understand what is involved with the capping option.</p>	

No.	Author	Comment	Response
		Capping is a major undertaking and also needs to be properly analyzed for environmental impacts.	
30.16		<p>The Following Analyses Are Deficient Because No Impact And Less Than Significant With Mitigation Determinations Are Not Supported By Substantial Evidence</p> <p>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.)</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>
30.17		<p>Air Quality And Greenhouse Gases (2.a, 2.c)</p> <p>If the TMDL is enforced as written, large scale dredging and transport or dredging and capping are the reasonably foreseeable implementation alternatives that would achieve the sediment targets in the implementation time frame. (Anchor 2011.) The Port of Long Beach is concerned that significant air quality impacts associated with the Regional Board's proposed remediation effort have not been properly addressed, analyzed, and mitigated, as required by CEQA.</p> <p>The document incorrectly states that the project will have temporary, short-term impacts to air quality and that these impacts can be mitigated and that the project would not be significant to cause climate change. Dredging up to 38 million cubic yards of sediment within 15 years to meet the TMDL would cause adverse impacts in air quality in terms of the continuous,</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>

No.	Author	Comment	Response
		<p>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 cubic yards of material. (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. There is no substantial evidence supporting the statement that mitigation measures will reduce air quality impacts to less than significant levels without a quantitative analysis. Additionally, there is no substantial evidence supporting the statement that the emissions from implementation of the TMDL would not have a significant negative effect on climate change and would not conflict with the State's ability to meet Assembly Bill 32's greenhouse gas emission (GHG) reduction goals without a quantitative analysis. Additionally, storm water 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.</p> <p>This section provides an evaluation of SED methodology and findings as they relate to air quality impacts, provides a framework for analyses required to adequately assess air quality and associated health impacts, and provides a screening-level analysis of regional air quality impacts from remediation efforts necessary to achieve the TMDL.</p>	
30.18		<p>SED Evaluation And Required Analyses The remediation effort would result in air quality emissions and impacts, primarily from the use of diesel-fueled dredging equipment and the subsequent transport of dredged materials to upland and out-of-state landfills. Impacts from the remediation effort must be adequately described and evaluated under CEQA to provide decision makers and the general public with a means to understand the significant environmental repercussions of the</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>

No.	Author	Comment	Response
		project.	
30.19		<p>Environmental Criteria</p> <p>The California Code of Regulations requires SEDs to include a "Completed Environmental Checklist." (23 C.C.R. §3777(a)(2).) A sample checklist is presented as Appendix A to California Code of Regulations Title 23, Division 3, Chapter 27, Article 6. The SED uses an environmental checklist that differs significantly from the checklist in Appendix A. The SED checklist is not consistent with the Appendix A checklist, does not identify the source of its criteria, does not provide an explanation of how the checklist criteria were selected, does not address key air quality and health impacts, and in general lacks the rigor associated with adequate environmental analyses. In this case, the Regional Board has provided no indication of the appropriateness of the deviation from the Appendix A checklist that exists in the SED checklist. (23 C.C.R. §3777(a)(2).) In particular, Table 1 below identifies discrepancies and omissions in the SED checklist. The table shows that the SED is inadequate in addressing the basic criteria of an air quality assessment. (Table 1 is in original comment file)</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p> <p>The State Water Board CEQA regulations (23 CCR §3777(a)(2) contains a sample environmental checklist. The Los Angeles Water Board was not required to use the specific checklist contained in the CEQA regulations. That checklist did not exist at the time the Los Angeles Water Board prepared the SED because the State Water Board regulations were not yet final. The Los Angeles Water Board used a thorough checklist and evaluated all required environmental effects.</p>
30.20		<p>Thresholds Of Significance And Determination Of Significance</p> <p>The Appendix A checklist specifies that, where available, the significance criteria established by the applicable air quality management or air pollution control district be relied upon to make the determinations in the checklist. The South Coast Air Quality Management District (SCAQMD), the local air pollution control district, has set significance thresholds for CEQA projects. It is common practice that projects subject to the National Environmental Policy Act (NEPA) in the Port area also follow the same significance thresholds.</p> <p>Table 2 presents SCAQMD significance thresholds for CEQA projects. It should be noted that although the Appendix A checklist recommends that agency significance thresholds be</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p> <p>The Los Angeles Water Board evaluated potential air quality impacts of the reasonably foreseeable methods of compliance, including dredging and acknowledged that some impacts could be significant. For that reason, the Los Angeles Water Board prepared a statement of overriding considerations. The Los Angeles Water Board did not evaluate dredging of 39 million cubic yards</p>

No.	Author	Comment	Response
		<p>used, under CEQA, a lead agency can develop its own significance thresholds. The Regional Board, however, failed to either establish its own thresholds or to use SCAQMD thresholds of significance in making significance determinations in the SED.</p> <p>In lieu of analyzing project impacts and comparing those impacts to significance thresholds, the SED makes a qualitative determination by stating that “The potential implementation of alternatives may result in short-term construction impacts related to air quality. Once construction of the project has been completed, the on-site activities would return to preexisting levels.” (SED at p.43). Although the SED stipulates an overall implementation schedule for achieving the TMDLs, the SED does not quantify the actual number of years required to dredge the Harbor. Based on the amount of required dredging, the Port has determined that it would take approximately 15 years to complete the remediation effort. During this time dredging and associated activities would occur on a daily basis. It is unreasonable to assert that 15 years constitutes a “short-term” period. It is likely that dredging and supporting activities over a 15-year period would result in chronic health impacts; daily remediation activities would result in both regional and localized air quality impacts as well as acute health impacts. The SED has failed to adequately determine air quality and health impacts associated with remediation efforts.</p> <p>Furthermore, although the SED provides a discussion of GHG regulations, it draws a qualitative determination that GHG impacts would not be significant without quantifying GHG emissions and without comparing GHG emissions to significance thresholds. In lieu of a quantitative analysis, the SED makes the argument that the project’s GHG emissions would be less than CARB’s 25,000 metric tons of CO2 per year (mt) reporting threshold. It should be noted that the 25,000 mt is a regulatory reporting threshold for cement plants, oil refineries, fossil-fueled electric-generating</p>	<p>since that is not a reasonably foreseeable method of compliance. It evaluated the effects of dredging up to approximately 11 million cubic yards over a 20 year period.</p> <p>There is not a recognized GHG significance threshold for environmental programs, the 25,000 mt was used for comparison because it is a useful demonstration of scale in a programmatic-level analysis.</p>

No.	Author	Comment	Response
		<p>facilities, and other major stationary point sources; it is not a recognized GHG significance threshold for environmental programs. Moreover, it is impossible to determine the accuracy of the SED's assertion without a quantitative analysis.</p> <p>Finally, it is unclear whether the SED is using 25,000 mty as a significance threshold. If so, then it is likely that, given the volume of dredge material requiring transport, GHG emissions would in fact easily exceed this threshold and thereby result in a determination of significance. The SED has failed to adequately analyze GHG emissions and impacts and should be revised to include both quantification of GHG emissions and either the development of a GHG threshold or the use of an established threshold. As currently written, the SED fails to provide the level of information disclosure and analysis required by CEQA. (Table 2 is in original comment file)</p>	
30.21		<p>Required Analyses The criteria in Table 1 and thresholds of significance in Table 2 set the framework of required environmental analyses. At a minimum, the project should be evaluated for regional and localized impacts associated with criteria air pollutants as well as health impacts from diesel particulate matter and other toxic air contaminants (TACs). The SED does not provide analyses for regional air impacts or localized air impacts. The SED also does not provide analyses for health impacts such as cancer risk, non cancer chronic impacts, or acute impacts.</p> <p>These analyses, at a minimum, are required in order to provide decision makers and the public impacted by the proposed project with meaningful understanding of the impacts. Therefore, the SED, as written, is inadequate and fails to provide a meaningful understanding of air quality impacts.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p> <p>The Los Angeles Water Board's SED adequately described the potential air impacts for a programmatic-level CEQA analysis; neither the specific checklist nor the specific thresholds provided by the commenter are required.</p>
30.22		Screening-Level Analysis	State Water Board reviewed the Los Angeles

No.	Author	Comment	Response
		<p>A screening-level analysis of potential air quality impacts associated with the remediation effort was performed by the Port. The analysis estimates potential air emissions and regional impacts associated with the remediation effort. The scope is limited to regional impacts; localized impacts and health impacts constitute a larger effort and would need to be analyzed as part of a full air quality analysis. This analysis is not intended as a comprehensive determination of air quality impacts and is not to be regarded as a substitute for appropriate environmental documentation. A detailed analysis of anticipated emissions and air quality impacts should have been performed by the Regional Board and assessed in the SED to appropriately determine the full extent of the impacts. Appropriate mitigation measures cannot be recommended to reduce significant impacts without performing a proper detailed air analysis in conformance with CEQA.</p>	<p>Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p> <p>The commenter's assumption of the need to dredge 38 million cubic yard is flawed. See Response to Comment 0.4 and 30.14, . The conclusions drawn by this analysis (significant impacts) are the same as drawn by the Los Angeles Water Boards analysis.</p>
30.23		<p>Potential Activities And Sources</p> <p>Remediation effort activities identified in the SED would include dredging and transport of dredged materials to offsite disposal locations. It is estimated that approximately 38 million cubic yards of sediment would need to be dredged over a 15-year period from the Port of Long Beach harbor (Anchor 2011).</p> <p>Dredging is typically conducted via hydraulic or mechanical dredging, depending on anticipated dredging volume, disposal options, nature of the sediments, and site conditions. Hydraulic dredges remove and transport sediment in the form of a high-water and low solids content slurry and for a large scale project, such as the one identified in the SED, would result in a correspondingly large volume of slurry. The management of this slurry and excess water would be a significant consideration as it would require the construction of dewatering sites near the harbor. Very large new upland or aquatic fill sites close to the dredge site would be necessary to discharge the material. Sites</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 30.22 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>

No.	Author	Comment	Response
		<p>further than 1 mile away would require the addition of booster pumps to the discharge line. (Anchor 2011.) The construction of dewatering sites, operation at these sites, and burning fuel necessary to power booster pumps would all contribute to project emissions.</p> <p>In contrast to hydraulic dredging, mechanical dredging has a key advantage for the purposes of this project; mechanical dredging does not necessitate the use of slurry to transport dredged material from the dredging location to land and therefore produces a significantly smaller volume of material requiring dewatering, storage, and final transport. (Anchor 2011.) For these reasons, mechanical dredging with a typical clamshell dredge configuration was considered in this screening analysis.</p> <p>In addition to dredging equipment, ancillary harbor craft would be required to position dredge barges and push material-laden barges to a berth for off-loading, as well as to bring crew and supplies to the dredging barges. In addition, approximately 475 trucks would be required daily to transport dredged material to upland and out-of-state landfills. Ancillary land-side activities would be required to unload barges and load trucks. Finally, construction of dewatering and/or truck loading sites may be necessary.</p> <p>The following sources of air emissions were considered in this analysis:</p> <ul style="list-style-type: none"> • Dredging equipment; • Tugboats used to position/tender dredge barges; • Tugboats used to transport barges to a berth location; • Crew/supply vessels; • Trucks used to transport dredged material to upland disposal sites. <p>The following sources of air emissions were noted, but not addressed in this analysis due to a lack of specific information at</p>	

No.	Author	Comment	Response
		<p>the time of this analysis; these sources have the potential to contribute to regional impacts and should be addressed in the appropriate environmental impact documentation:</p> <ul style="list-style-type: none"> • Equipment used to off-load dredged material from transport barges to trucks; • Contractor vehicles; • Construction equipment such as excavators, graders, compactors, and other typical construction equipment, used to construct dewatering and/or truck loading sites. 	
30.24		<p>Methodology And Assumptions</p> <p>Emissions from clamshell dredging equipment and harbor craft were calculated based on a zero-hour emission rate for the engine model year, which is the emission rate in the absence of any malfunction or tampering of engine components, plus a deterioration rate. The deterioration rate reflects the fact that base emissions of engines change as the equipment is used due to wear of various engine parts or reduced efficiency of emission control devices. California Air Resource Board's (ARB) deterioration factors, useful life, and zero-hour emission factors for commercial harbor craft were used for all pollutants except sulfur oxides (SOX). (ARB 2007.) SOX emissions were quantified based on brake-specific fuel consumption and a sulfur fuel content of 15 ppm, which is the sulfur content limit for California harbor craft, in accordance with California Diesel Fuel Regulations. Harbor craft emission factors were deemed appropriate for dredger engines per ARB guidance. (Starcrest 2011.) Based on the quantity of materials that would need to be dredged, it was determined that two dredgers would need to operate concurrently.</p> <p>Emissions from on-road, heavy-duty diesel trucks used to transport dredged material to offsite disposal locations were calculated using emission factors generated by ARB's EMFAC2007 on-road mobile source emission factor model for a</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 30.22 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>

No.	Author	Comment	Response
		<p>truck fleet representative of the South Coast Air Basin (SCAB). Table 3 summarizes assumptions used to calculate emissions for each source category. The table also summarizes local policy requirements that were included in calculations as part of project conditions.</p> <p>(Table 3 is in original comment file)</p>	
30.25		<p>Emissions And Preliminary Impacts Regional Impacts</p> <p>The remediation effort would pose a significant impact under CEQA and NEPA if criteria pollutant emissions exceed regional significance thresholds as defined by the SCAQMD. (SCAQMD 2011.) Table 4 presents emissions associated with the remediation effort and shows that emissions would exceed significance thresholds for volatile organic compounds (VOC), carbon monoxide (CO), NOX, particulate matter with aerodynamic diameter less than 10 microns (PM10), and particulate matter with aerodynamic diameter less than 2.5 microns (PM2.5).</p> <p>(Table 4 is in original comment file)</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>
30.26		<p>General Conformity</p> <p>In accordance with the General Conformity Rule, activities using federal funds or requiring federal approval must not cause or contribute to any new violation of a National Ambient Air Quality Standard (NAAQS), increase the frequency or severity of any existing violation, or delay the timely attainment of any standard, interim emission reduction, or other milestone. Based on the present NAAQS attainment status of the SCAB, a federal action would conform to the State Implementation Plan if its annual emissions remain below 100 tons of CO and PM2.5, 70 tons of PM10, and 10 tons of NOX and VOCs. These de minimis thresholds would apply to the proposed dredging and associated activities. If the total direct and indirect emissions of any pollutant from the federal action were to exceed one or more of the de minimis thresholds, the action would be considered regionally significant and the federal agency would be required to make a</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>

No.	Author	Comment	Response
		<p>determination of general conformity.</p> <p>It was assumed that the federal action for the remediation effort, as defined per the General Conformity Rule, would be represented by in-water work only; on-land activities would not be considered either a direct or indirect federal activity, since the federal agency would have no authority over on-land activities such as truck transit. Table 5 presents a comparison of annual emissions, associated with the federal action, to de minimis thresholds. The table shows that the proposed federal action emissions would likely exceed the conformity de minimis threshold for VOC, CO, and NOX, thereby requiring a determination of general conformity.</p> <p>(Table 5 is in original comment file)</p>	
30.27		<p>Greenhouse Gas Impacts</p> <p>GHG emissions associated with the remediation effort were estimated and compared to SCAQMD's threshold of significance. (SCAQMD 2008.) Because GHGs are not geographically bound pollutants, it is appropriate to consider the total combined project GHG emissions in determining significance. GHG emissions were estimated based on the specific methodologies presented in Table 3. GHG emissions are presented in metric tons of CO₂e, where methane (CH₄) and nitrous oxide (N₂O) emissions were converted to CO₂e using their respective global warming potentials (21 for CH₄ and 310 for N₂O).</p> <p>Table 6 presents a comparison of annual GHG emissions to the SCAQMD threshold. The table shows that GHG emissions would exceed the SCAQMD's GHG threshold.</p> <p>(Table 6 is in original comment file)</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>
30.28		<p>Earth (1.a, 1.b, 1.c, 1.d)</p> <p>The document incorrectly states that dredging would not be to the depth or scale to cause unstable conditions or changes in</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p>

No.	Author	Comment	Response
		<p>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.</p> <p>Additionally, the document incorrectly states that infiltration systems and vegetated swales would not be of the size or scale to result in a change in topography and ground surface relief figures. Providing adequate infiltration for large volumes of storm water 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.</p>	<p>See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>
30.29		<p>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</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>

No.	Author	Comment	Response
		stated that this is an unavoidable significant impact.	
30.30		<p>Noise (6.a) The document incorrectly states that increases in existing noise levels from the installation of structural BMPs will be reduced to less than significant once mitigation measures have been properly applied. Additionally, it is stated that noise levels from dredge equipment would indicate a significant noise impact and that mitigation measures may reduce noise impacts. 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 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.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>
30.31		<p>Transportation/Circulation (13.a, 13.c, 13.d, 13.e) The SED 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 cubic yards 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</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>

No.	Author	Comment	Response
		<p>impacts on the rail network.</p> <p>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 traffic impacts should be quantitatively and adequately analyzed.</p> <p>This section provides a qualitative assessment of the potential effects on transportation and circulation in the Port of Long Beach and vicinity that could be expected if the Regional Board were to adopt the proposed TMDL. In order to achieve stated water quality objectives, the proposed TMDL would require the implementation of Structural BMPs and Non-Structural BMPs. Structural BMPs are described as physical facilities and activities to treat or divert water where it is generated or discharged, including infiltration systems, vegetated swales, storm water capture and re-use, sand/media filters, oil/water separators, removal of contaminated sediment by dredging, low flow diversion, and catch basin inserts. Non-structural BMPs are described as educational and pollution prevention practices that do not involve permanent, fixed facilities, including housekeeping BMPs, public education and outreach, trash collection/street sweeping, and storm drain cleaning. The SED assesses the potential environmental impact of implementing both structural and non-structural BMPs in the watersheds leading to the Dominguez Channel and the harbors in San Pedro Bay. The SED concludes that the project could have potentially significant effects in each of the six issue areas listed below that are assessed under the general topic of Transportation/Circulation. It must be noted that the SED does not follow the current Appendix</p>	

No.	Author	Comment	Response
		<p>A, the CEQA checklist for SEDs:</p> <ul style="list-style-type: none"> a. Will the project result in generation of substantial additional vehicular movement? b. Will the project affect existing parking facilities, or create demand for new parking? c. Will the project result in substantial impacts upon existing transportation systems? d. Will the project result in alterations to present patterns of circulation or movement of people and/or goods? e. Will the project result in alterations to waterborne, rail, or air traffic? f. Will the project result in increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? <p>The analysis and discussion of these effects in the SED is at a programmatic level, given the role of the Regional Board, and subsequent project-level analysis would be required of the implementing agencies if the project were adopted and specific Structural and Non-Structural BMPs were used to achieve compliance. The Port is among the responsible agencies that would be affected by the project, and the qualitative analysis that follows focuses on the potential implications to local transportation/circulation of one of the structural BMPs: the removal of contaminated sediment by dredging the Inner Harbor, Outer Harbor, and portions of San Pedro Bay.</p> <p>The SED states that:</p> <p>“Structural BMPs will not result in generation of substantial additional long-term vehicular movement. There may be additional vehicular movement during construction of structural BMPs and during maintenance activities. However, vehicular movement during construction , and excavation and disposal of dredge materials would be temporary during the duration of those activities, and vehicular movement during maintenance activities would be periodic and only as the vehicle passes through the area. This may generate minor additional vehicular movement. In order to reduce the impact of traffic related to construction and</p>	

No.	Author	Comment	Response
		<p>disposal of dredge material, a construction traffic management plan could be prepared for traffic control during any street closure, detour, or other disruption to traffic circulation. The plan could identify the routes that construction vehicles would use to access the site, hours of construction traffic, and traffic controls and detours. The plan could also include plans for temporary traffic control, temporary signage and stripping, location points for ingress and egress of construction vehicles, staging areas, and timing of construction activity which appropriately limits hours during which large construction equipment may be brought on or off site.” (SED at pp. 80-81.)</p> <p>While this discussion may be appropriate for many of the structural BMPs described in the project, it does not fully assess and disclose the implications of removing a large amount of contaminated soil from the Harbor. Based on written comments submitted by the Port, achieving the TMDL would entail dredging and disposal of up to 38 million cubic yards of material in a 15-year period. In order to dispose of the large quantity of material, a likely scenario would involve unloading the dredged material at a single consolidated location in the Port for storage, dewatering, and loading onto trucks for export to one or more upland disposal sites. Truck loading activity would occur 18 hours per day, 5 days a week. With a capacity of 15 cubic yards per truck, a total of 2.6 million truck loads (5.3 million truck trips including both inbound and outbound trips) would be required to haul the dredged material from the Port. Assuming that the loading of each truck requires approximately 15 minutes, the loading facility would need to accommodate 10 truck loading stations and would generate 1,440 truck trips per day. Spread evenly over an 18-hour workday, this equates to a continuous flow of 80 truck trips per hour on every weekday, excepting holidays, for 15 years. In order to account for the effect of these heavy trucks on the overall mix of traffic on the roadways, the Port’s normal practice calls for applying a passenger car equivalent (PCE) factor of 2.0 to each truck trip, resulting in an estimate of 160 PCE trips per hour (80</p>	

No.	Author	Comment	Response
		<p>inbound and 80 outbound) over long periods of each weekday. These estimates are for soil disposal only and do not include the additional trips that would be associated with two shifts of employees working at the site each day.</p> <p>While no site has been identified for the storage, dewatering, and loading of dredged material, it is known that a single consolidated site would be used (due to the large area of vacant land needed for such a processing and loading facility). This means that all of the trips would be concentrated along a single haul route to reach the I-710 freeway. Upon departing the site, trucks would carry the contaminated soil to an appropriate disposal location, likely beyond the California border, and would travel over I-710, SR 60, and I-10. The level of trips generated could exceed the thresholds of significance adopted by the Port, given the need to transport the dredged material continuously throughout the day to remove the total estimated volume of soil, any such impacts could not be avoided or reduced by a mitigation measure that limits truck trips to off-peak hours. In addition, the timeframe in which these trips would occur would overlap with a period of exceptional construction activity at the Port, as the construction of the Middle Harbor project and replacement of the Gerald Desmond Bridge occurs, which could result in significant cumulative impacts in the Port and the surrounding area.</p> <p>The SED states that “Structural BMPs will not result in generation of substantial additional long-term vehicular movement. There may be additional vehicular movement during construction of structural BMPs and during maintenance activities.” (SED at p. 80.) This mischaracterizes the likely transportation/circulation effects of dredging and disposing of up to 38 million cubic yards of contaminated soil. This quantity of material would require an estimated 160 PCE truck trips per hour continuously for 18 hours a day, 5 days a week, over 15 years in order to comply with the project. By any objective measure this would be considered</p>	

No.	Author	Comment	Response
		<p>“long-term” and could result in substantial and significant traffic impacts that could not be readily mitigated.</p>	
30.32		<p>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.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>
30.33		<p>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.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.</p>
30.34		<p>Water Quality The use of a small cutterhead dredge for a project of this size is</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and</p>

No.	Author	Comment	Response
		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, as is any analysis of the impacts of dredging at this unprecedented scale. These impacts should be adequately analyzed.	agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.
30.35		Public Services The SED 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.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.9 and 20.10.
30.36		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, however, 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 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.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 20.11.
30.37		The SED Fails To Provide An Adequate Cumulative Impact Analysis Of The Project	State Water Board reviewed the Los Angeles Water Board's responses to these comments and

No.	Author	Comment	Response
		<p>The cumulative impact analysis is inadequate and needs to be revised. 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.</p>	<p>agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 20.12.</p>
30.38		<p>The Statement Of Overriding Considerations Is Inadequate The statement of overriding considerations is inaccurate 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.</p> <p>Consequently, the SED also states that there are a 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</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's responses to comments 20.12 and 20.13.</p>

No.	Author	Comment	Response
		<p>reduce impacts to less than significant.</p> <p>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.</p>	
30.39		<p>The SED Is Inadequate As An Informative Document Under CEQA And Meaningful Public Review And Comment Could Not Be Performed</p> <p>The SED does not adequately address the environmental impacts of the Project. The SED does not meet the objectives of CEQA which are to:</p> <ul style="list-style-type: none"> a. Disclose to the decision-making body and the public the potential environmental impacts of proposed activities. <p>Propose feasible alternatives or mitigation measures that avoid, eliminate, or reduce project-related environmental effects.</p> <p>Describe the analytical process which led to the public agency's decision on the project.</p> <p>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.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 20.14.</p>
30.40		The SED Must Evaluate Project Alternatives	State Water Board reviewed the Los Angeles

No.	Author	Comment	Response
		<p>The State CEQA Guidelines require an EIR to describe a range of reasonable alternatives to the project that would feasibly attain most of its basic objectives but would avoid or substantially lessen any of its significant effects, and to evaluate the comparative merits of the alternatives. (14 C.C.R. § 16126.6(a).)</p> <p>The rules for evaluating alternatives also apply to substitute environmental documents prepared under the Regional Board's Certified Regulatory Program. (23 C.C.R. § 3777(b)(3).) The California Supreme Court has also held that an agency subject to a Certified Regulatory Program must evaluate alternatives. (<i>Mountain Lion Foundation v. Fish & Game Commission</i>, 16 Cal.4th 105 (1997).)</p> <p>The Guidelines further provide that while an EIR need not consider every conceivable alternative to a project, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. (14 Cal. Code Reg. 15126.6(a); <i>Citizens of Goleta Valley v. Board of Supervisors</i>, 52 Cal.3d 553 (1990); and <i>Laurel Heights Improvement Association v. Regents of the University of California</i>, 47 Cal.3d 376 (1988).)</p> <p>As set forth in the Regional Board's requirements for substitute environmental documents, an SED must identify ways to mitigate or avoid the significant effects that a project may have on the environment. (23 C.C.R. §3777(b)(3).) The discussion of alternatives should focus on alternatives to the project that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. (14 C.C.R. § 15126(b).) The regulations include</p>	<p>Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 30.41 and Los Angeles Water Board's response to comment 20.8-20.15.</p>

No.	Author	Comment	Response
		<p>both the requirement to consider project alternatives and to consider alternative methods of compliance with the TMDL that would have less significant environmental impacts. (23 C.C.R. §§ 3777(b)(3) and (b)(4)(C).) The SED should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives should be included in the administrative record. (See <i>Mountain Lion Foundation v. Fish & Game Commission</i>, 16 Cal.4th 105, 134 (1997).)</p> <p>Additionally, an SED must include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. (See <i>Id.</i>)</p>	
30.41		<p>The SED's Project Alternatives</p> <p>In the SED, the Regional Board purports to include three program alternatives. However, as explained further below, these do not represent a true range of alternatives to the Regional Board's proposed TMDL program as required by CEQA:</p> <p>Alternative 1: The Regional Board's Proposed TMDLs. This alternative, which is actually the proposed project and not an alternative, represents the Regional Board's proposed TMDL. The TMDL includes WLAs and LAs (which are not specified in the SED), which would be established through an amendment to the Basin Plan. The WLAs would focus on reductions of sources of heavy metals and organic pollutants from municipal storm drains and discharges associated with regional, state, and federal discharge permittees. LAs would focus on reductions of local sources associated with runoff and drainage. Implementation would be through the choice of structural and non-structural projects to be implemented by local agencies (including the Port) over a 20-year period.</p> <p>Alternative 2: EPA's Proposed TMDLs. This alternative is</p>	<p>The Clean Water Act section 303(d) requires the state to identify impaired water bodies and to establish a TMDL for those water bodies. If the state fails to act, then USEPA would establish the TMDL. As a result, there are three alternatives to consider under CEQA – a TMDL established by the Los Angeles Water Board that includes an implementation program with a schedule for compliance under Water Code section 13242, a TMDL established by USEPA without an implementation program, and a no project alternative.</p> <p>In addition, under Public Resources Code section 21159(a)(1)-(3), the SED must contain an analysis of the reasonably foreseeable environmental impacts of the methods of compliance, an analysis of reasonably foreseeable feasible mitigation measures, and an analysis of reasonably foreseeable alternatives</p>

No.	Author	Comment	Response
		<p>based on the same TMDL levels as Alternative 1 and the same choices for future structural and non-structural implementation measures, but would have to be implemented over a much shorter 5-year period. According to the SED, this alternative would have far greater impacts than the proposed project.</p> <p>Alternative 3: the No-Project Alternative. Under this alternative, TMDLs would not be adopted, and it is assumed that toxic pollutants impairment of the Dominguez Channel, Los Angeles Harbor, and Long Beach Harbor would continue. According to the SED, this alternative is not feasible.</p>	<p>means of compliance with the rule or regulation. Section 21159(d) specifies that CEQA does not require the agency to conduct a project-level analysis. The SED for this TMDL includes an analysis of the three alternatives and the analyses required by Section 21159(a). It also includes an analysis of alternative numeric targets to be used to implement the Basin Plan water quality objectives that have been exceeded resulting in the finding of impairment. And, it includes, an analysis of implementation alternatives. The SED explains the basis for selecting the alternatives. It does not include project-level analysis. The “alternatives” suggested by the commenter, are either project-level type actions that should be considered by the agencies that implement the TMDL or are “alternatives” that do not meet the statutory requirements for a TMDL.</p> <p>For your information, the Los Angeles Water Board response to comment is included as follows: 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 bacterial 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 feasible alternatives. The Regional Board also evaluated various alternatives to</p>

No.	Author	Comment	Response
			<p>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 documents. (See e.g., Al Larson Boat Shop, Inc. v. Board of Harbor Commissioner (1993) 18 Cal.App.4th 729.) The TMDL's range of alternatives is consistent with the CEQA Guidelines and case law.</p> <p>Also see response to comment 29.10, 29.22, and Los Angeles Water Board 39.16.</p>

No.	Author	Comment	Response
30.42		<p>The Alternatives Are Not Adequately Described In The SED</p> <p>The alternatives are insufficiently described and do not even include the specific standards established by the TMDLs for each relevant pollutant. The regulations state that the SED must contain “[a]n analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts.” (23 C.C.R. § 3777(b)(3).) Alternative 1 in the SED is actually the proposed project. The description of the project in Alternative 1 is wholly inadequate even under the broad standard described in the regulations, which state that the SED must contain “a brief description of the proposed project.” (23 C.C.R. § 3777(b)(1).) Guidance regarding what is meant by a “a brief description” can be taken from elsewhere in CEQA, where it states that a Project Description must include “a general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities” (14 C.C.R. § 15124(c).) The description of the project in the SED falls well short of this standard, or for that matter, any other reasonable interpretation of the requirement set forth in 23 California Code Regulations Section 3777(b)(1). Thus, because the project is described as an alternative and because that description is inadequate, the SED simultaneously fails to adequately describe the project and to adequately describe a project alternative.</p> <p>There are, in fact, significant problems with the descriptions of all three project alternatives discussed in the SED. While the specific standards for each relevant pollutant are described in various staff reports, that information is not carried forward into the SED as required by CEQA. (see Staff Report.) Since the specific quantitative standards are the fundamental components of TMDLs, the absence of this information in the SED deprives the public and decision makers of a meaningful understanding of</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 29.10, 29.22 and Los Angeles Water Board's response to comment 20.9, 20.10, and B4.1.</p>

No.	Author	Comment	Response
		<p>the proposed project and of the other two alternatives, thereby thwarting one of the key purposes of CEQA: the clear identification and description of the project and of viable project alternatives. A reader should not have to go on a scavenger hunt through staff reports and/or technical studies to find information that is supposed to be fundamental to CEQA's disclosure purposes. (<i>Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova</i>, 40 Cal.4th 412 (2007).)</p>	
30.43		<p>The Alternatives In The SED Do Not Represent A True “Range Of Alternatives” As Required By CEQA</p> <p>An SED must include an analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts. (23. C.C.R. § 3777(b)(3).) Additionally, CEQA guidance requires that, to be adequate, the range of alternatives must include those that would meet the project objectives, avoid or substantially reduce one or more of the significant impacts, and be ostensibly feasible. (14 C.C.R. § 15126.6.)</p> <p>Regarding the no-project alternative, although it is a requirement of CEQA, it is not one of the alternatives that should be considered part of the “reasonable range of alternatives.” The no-project alternative is different from other alternatives because it does not meet any of the project’s objectives (if it did, there would be no need for the proposed project).</p> <p>Regarding Alternative 2, the SED acknowledges that there are no differences in the actual TMDL standards between Alternative 1 and Alternative 2—only the implementation schedules would be different. As a result, there are no meaningful differences between these two alternatives nor would Alternative 2 avoid or reduce any of the significant environmental impacts. Rather, the Regional Board admits that this alternative would have greater negative environmental impacts than Alternative 1. (SED p. 17). Therefore, Alternative 2 does not represent a true alternative to the proposed project.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 30.41.</p>

No.	Author	Comment	Response
		<p>At the same time, as discussed further below, the SED eliminated from consideration the possible alternative of less stringent TMDL standards.</p> <p>Therefore, since neither the no-project alternative nor Alternative 2 represent true alternatives to the proposed project, the SED fails to contain the requisite “reasonable range of alternatives” as required by CEQA. In short, the SED does not present any meaningful alternatives to the proposed project: Alternative 1 is the project; Alternative 2 differs from the proposed project only in timing, not scope; and Alternative 3 is the statutorily required “no project” alternative. The SED fails to comply with CEQA by failing to provide and analyze a meaningful range of substantively significant alternatives.</p>	
30.44		<p>Partial TMDL Alternative</p> <p>The only other alternative that the SED considered but summarily eliminated was a partial TMDL. (SED p.15.) This alternative would achieve a 70–80% reduction in toxic pollutants based on numeric targets. This alternative was eliminated on the basis that it was unlawful because it would not meet water quality standards, despite being environmentally superior to either Alternative 1 or Alternative 2. The SED contains no substantial evidence to support the assertion that the partial TMDL alternative would not meet water quality standards. There is no discussion of which numeric targets were applicable or why it would not achieve them.</p> <p>Additionally, it is not appropriate to eliminate an alternative from consideration just because it does not meet all of the project objectives. To the contrary, CEQA provides that an environmental document should “focus on alternatives to the project which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project</p>	<p>The Los Angeles Water Board is required to adopt a TMDL that will result in elimination of the impairment and comply with water quality objectives. The Board in the SED chose not evaluate alternatives that would result in partial compliance with the standards since it would not result in compliance with the Clean Water Act.</p>

No.	Author	Comment	Response
		<p>objectives, or would be more costly.” (14 C.C.R. §15126(b).) This standard provides guidance for the consideration of project alternatives required of the SED. Indeed, the opposite conclusion would invalidate the entire purpose of considering project alternatives in the first place. Thus, the partial TMDL alternative should have been considered in the SED.</p>	
30.45		<p>The Use Of SQO Rather Than ERLs</p> <p>The use of SQOs instead of ERLs as numeric targets for sediment. By using the SQO process, a site-specific numeric target can be developed for sediment and fish tissue. Effluent limits (WLAs and LAs) for storm water would be based on this site-specific target.</p> <p>This alternative should be considered because it would fully meet the water quality objectives and goals of the TMDL while being more protective of the environment and resulting in less associated environmental impacts. The alternative would translate into more realistic and meaningful effluent limits for storm water and would allow more accurate identification of appropriate “hot spots” for management. As the Regional Board admits, in order to meet the proposed targets, approximately 38 million cubic yards of material (essentially the entire harbor) will need to be dredged. (Staff Report at p. 122, Table 7-3.) In comparison, approximately 2 million cubic yards will need to be dredged to meet SQO identified hot spots. (<i>Id.</i>) There is a considerable difference in the estimated amount of material that will need to be managed to meet water quality objectives. The use of site-specific targets for sediment and fish tissue will result in less dredging and fewer detrimental environmental impacts. Therefore, an alternative using SQOs or site-specific numeric targets should also be analyzed as a feasible alternative in the draft SED.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 20.1.</p> <p>Alternatives in targets were considered during development of the TMDL including (1) a categorical target using the SQO assessment categories of “unimpacted” or “likely unimpacted” (1) targets for each triad leg (i.e. benthic community, toxicity, and chemistry) separately based on the SQO and (3) targets using a numeric sediment quality guideline (currently ERL).</p> <p>The factors considered when selecting the recommended alternative included:</p> <ul style="list-style-type: none"> · Consistency with state and federal water quality laws and policies, · The necessity of numeric targets to calculate allocations · Level of beneficial use protection, · Consistency with current science regarding water quality. <p>Because SQOs can be used to <i>comply</i> with the TMDL, much less than 38 mcys of sediments will</p>

No.	Author	Comment	Response
			need to be dredged, as acknowledged by the commenter, to comply with the TMDL.
30.46		<p>The SED Lacks Any Meaningful Analysis And Comparison Of Alternatives</p> <p>Even assuming that the alternatives in the SED were reasonable, the SED lacks any meaningful evaluation or comparison of such alternatives. In the Environmental Checklist and accompanying impact discussions, only Alternative 1, the Regional Board's TMDLs, is addressed. There is no discussion of the impacts of either Alternative 2 or the no-project alternative. Also, there is not any matrix or other approach to comparing the impacts of each alternative to the others. This deprives the public of any possibility of being informed about the differences between the alternatives and deprives the decision-makers of any possibility of making an informed decision, thus violating CEQA. Indeed, CEQA requires that if an alternative would "cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed. . . ." (14 C.C.R. § 15126.6(e).)</p>	State Water Board disagrees. Discussion of the differences between the alternatives and their impacts were adequately discussed in the SED, Section 4.1 Program Alternatives, page 15-17.
30.47		<p>CEQA Requirement To Recirculate</p> <p>A lead agency is required to recirculate CEQA documents when significant new information is added to those documents after public notice is given of the availability of the draft documents for public review, but before certification. Recirculation is required when the CEQA document is changed in a way that deprives the public of a meaningful opportunity to comment on the substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:</p> <p>(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be</p>	<p>For the reasons discussed in the Los Angeles Water Boards responses to comments 20.8 – 20.14 and for the reasons discussed in these comments 30.14 – 30.46, no revision to the CEQA documents nor recirculation is necessary.</p> <p>The Los Angeles Water Board did not make substantial changes to the project after circulation for public comment that would require recirculation.</p>

No.	Author	Comment	Response
		<p>implemented.</p> <p>(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.</p> <p>(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.</p> <p>(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (<i>Mountain Lion Coalition v. Fish & Game Commission</i>, 214 Cal.App.3d 1043 (1989).)</p> <p>The rules regarding recirculation do not just apply to EIRs and MNDs, they also apply to substitute environmental documents prepared under certified regulation programs. (<i>Joy Road Area Forest & Watershed Association v. California Department of Forestry and Fire Protection</i>, 142 Cal.App.4th 656 (2006).)</p>	
30.48		<p>Recirculation Will Be Required Due To The Addition Of New Alternatives And Disclosure Of Additional Information</p> <p>As explained previously, the SED is currently inadequate due to its failure to properly evaluate alternatives. When the Regional Board revises the SED to include additional alternatives, the inclusion of such alternatives will trigger the requirements to recirculate the document. The additional alternative suggested previously is likely to avoid or reduce significant environmental impacts disclosed in the SED. Therefore, if the Regional Board declines to adopt any additional alternatives, recirculation of the SED is still required. Furthermore, preparation of an adequate analysis pursuant to the appropriate checklist (Appendix A of Title 23, Division 3, Chapter 27) necessarily will present significant new information, and therefore recirculation will be required for this reason as well.</p>	<p>For the reasons discussed in the Los Angeles Water Boards responses to comments 20.8 – 20.14 and for the reasons discussed in these comments 30.14 – 30.46, no revision to the CEQA documents nor recirculation is necessary.</p>

No.	Author	Comment	Response
30.49		<p>Conclusion As To CEQA Issues</p> <p>In conclusion, for all of the reasons set forth above, the SED is inadequate and violates CEQA. In addition, as stated in the Port's comment table (attached to the February 22, 2011 comment letter), the SED also fails to adequately analyze the environmental impacts in several other resource areas. Without an accurate and detailed analysis of the environmental impacts of the proposed project, the proper mitigation measure to reduce such impacts cannot be identified. Therefore, the SED must be revised and recirculated for a new public review period before the Regional Board seeks to rely upon it. Failure to do so would deprive the public and decision makers of a meaningful understanding of the environmental impacts of the proposed TMDL program and its alternatives and would, therefore, be a violation of CEQA. The Port objects to the approval of the TMDL in its current form given the deficient environmental analysis, which fails to comply with CEQA in numerous respects.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 29.22, 30.14, 30.41 and Los Angeles Water Board's response to comment 20.8-20.15; 36.10.</p>
30.50		<p>The Port Was Denied Due Process</p> <p>The Port has concerns regarding the hearing conducted by the Regional Board on May 5, 2011, related to the TMDL. Given the monumental financial commitment at stake for the Port, the Port was not given a fair opportunity to fully address comments and receive clarification of comments made by other parties at the hearing. The Port was allowed to make a brief presentation, which occurred early at the hearing. During the course of the hearing, Regional Board staff made comments that the Port believes are factually inaccurate, as follows: (1) staff members represented that the TMDL would not result in the dredging of the entire harbor; and (2) staff indicated that the linkage between measurements of toxicity in fish tissue and the remediation of sediments was firmly established.</p> <p>Due to the fact that the Port is one of the primary entities affected by this TMDL, the Port was not provided with an adequate</p>	<p>During the course of the May 5, 2011 Los Angeles Board hearing, Los Angeles Board staff (1) represented that the TMDL would not result in the dredging of the entire harbor and (2) indicated that the linkage between measurements of toxicity in fish tissue and the remediation of sediments was firmly established; however, the Los Angeles Water Board included and discussed these positions in draft and tentative documents, so the commenter had ample opportunity to comment.</p> <p>The draft Staff Report released on December 17, 2010, included a discussion of sediment management in the implementation section, Section 7.3.2, and included Figure 7.1 <i>Proposed Sediment Monitoring Program and Priority Assessment Flowchart</i>. The discussion and the</p>

No.	Author	Comment	Response
		<p>opportunity to meaningfully participate in this process. Government Code section 11346.8(a) states that “[i]f a public hearing is held, both oral and written statements, arguments, or contentions, shall be permitted. The agency may impose <i>reasonable</i> limitations on oral presentations” (emphasis added). The limitations on the Port’s ability to present information to the Regional Board and receive clarification of staff and third party comments were not reasonable and deprived the Port of due process.</p> <p>At the hearing, the Port requested an opportunity to address and receive clarification regarding the aforementioned comments made by Regional Board staff and others, but this request was denied. The California Code of Regulations provides that during quasi-legislative hearings held by the State and Regional Water Quality Control Boards: “[q]uestions from Board members, staff or legal counsel are in order at any time. Persons wishing to have prior evidence or comments clarified should request the Chairperson, presiding member, or hearing officer, to obtain the answer or clarification. The Chairperson, presiding member, or hearing officer, may allow additional answers to be given as appropriate. . . .” (23 Cal. Code Reg. §649.5.) The Port was not given the opportunity to address or seek clarification of the evidence presented by Regional Board staff or third parties, including Heal the Bay. Instead, the Port listened as erroneous evidentiary testimony was submitted to the Regional Board. This erroneous testimony ultimately contributed to the Regional Board adopting the TMDL. This denial of due process caused direct injury to the Port in that it led to the adoption of an excessively expensive TMDL that is not scientifically sound.</p> <p>Beyond this, the rulemaking procedure set out in 23 California Code of Regulations, section 649, which the Regional Board utilized for the hearing, deprived the Port of due process. The adoption of the TMDL may not be proper subject matter for a quasi-legislative proceeding. In light of the substantial economic impact of this TMDL, the Port should have been given an</p>	<p>proposed flowchart clearly shows that sediments may be managed in several ways beside dredging. The flowchart shows “SQO evaluation to determine if sediments are impacted” can lead to “special studies” or “revise TMDL”, or “no further action continue monitoring” or, even, potentially, “remediate site” (i.e. dredging). The discussion and the flow chart are clear that the Los Angeles Water Board’s position is that the TMDL would not result in the dredging of the entire Harbor. The revised draft Staff Report released prior to the May 5, 2011 Los Angeles Board hearing includes the same discussions.</p> <p>The draft Staff Report released on December 17, 2010, included a discussion of fish tissue targets and associated sediment targets in Section 3.3. Fish tissue associated sediment targets were developed for chlordane and total DDT from an Indirect Effects draft report of SFEI in 2007; PCBs from a San Francisco Bay bioaccumulation study of Gobas & Arnot in 2010 and toxaphene from a New York DEP study in 1999. Staff indicated that the linkage between measurements of contamination in fish tissue and the remediation of sediments was firmly established by including these calculations and targets. The revised draft Staff Report released prior to the May 5, 2011 Los Angeles Board hearing includes the same calculations and targets.</p> <p>The Ports of Los Angeles and Long Beach requested 20 minutes to present at the Los Angeles Board May 5, 2011, hearing and were granted 20 minutes by the Los Angeles Board</p>

No.	Author	Comment	Response
		<p>opportunity to present evidence, address comments made by other parties at the hearing, and receive further clarification of those comments.</p> <p>The Port is also concerned about the substantial eleventh-hour changes that were made to the Basin Plan Amendment late in the day at the hearing. Government Code section 11346.8(c) states: “No state agency may adopt, amend, or repeal a regulation which has been changed from that which was originally made available to the public pursuant to Section 11346.5 [setting out notice requirements for quasi-legislative hearings], unless the change is (1) non-substantial or solely grammatical in nature, or (2) sufficiently related to the original text that the public was adequately placed on notice that the change could result from the originally proposed regulatory action. If a sufficiently related change is made, the full text of the resulting adoption, amendment, or repeal, with the change clearly indicated, shall be made available to the public for at least 15 days before the agency adopts, amends, or repeals the resulting regulation. Any written comments received regarding the change must be responded to in the final statement of reasons required by Section 11346.9.”</p> <p>Substantial changes were adopted into the Basin Plan Amendment at the end of the hearing, just moments after they were made for the first time on the record without input by interested parties. The changes were recited orally and no documentation of such changes was provided by the Regional Board at the hearing. Government Code section 11346.8(c) requires the production of documentation indicating the proposed changes and a 15-day period in which comments to those changes can be made. The failure of the Regional Board to provide such notice potentially compromises the legality of these last minute changes to the Basin Plan Amendment.</p> <p>We assume that the Regional Board will comply with the entire</p>	<p>Chair.</p> <p>The Port’s meaningful participation in the process included, but was not limited to, participation in all or nearly all of the stakeholder meetings from 2004 until 2011; early and frequent opportunities to comment on the progression of the models; written comments and multiple meetings and phone calls with Los Angeles Board staff to discuss changes to the tentative Basin Plan Amendment which resulted in many changes to the Basin Plan Amendment to address Port concerns; multiple meetings and phone calls with Los Angeles Board staff to discuss changes to the revised tentative Basin Plan Amendment including the opportunity to provide specific language for changes to the revised tentative Basin Plan Amendment to address Port concerns.</p> <p>The fact that all parties are not afforded multiple presentations or opportunities to address the Board during a Board hearing does not represent a deprivation of due process. See also response to 22.1 on due process.</p> <p>State Board assumes the commenter’s “<i>substantial eleventh-hour changes</i>” refers to the statement included in the adopted Basin Plan Amendment “<i>If at any point during the implementation plan, monitoring data or special studies indicate that load and waste load allocations will be attained, but fish tissue targets may not be achieved, the Regional Board shall reconsider the TMDL to modify the waste load and load allocations to ensure that the fish tissue</i></p>

No.	Author	Comment	Response
		<p>TMDL process again to the extent it attempts to revise any of the provisions in the TMDL. To the extent the Regional Board does not intend to do so and believes the language in the TMDL would allow the Regional Board to make changes without going through this process, the Port objects to any such language.</p> <p>In short, the Port has serious reservations about the fairness of the hearing.</p>	<p><i>targets are attained.</i>” This statement is true for this TMDL (and other Basin Plan Amendment TMDLs) regardless of whether the statement is explicitly included in the Basin Plan Amendment. If data or studies make clear that allocations are insufficient to attain targets, than the allocations, in fact, need to be recalculated. While the allocations are the method of reaching the targets, the goal of the TMDL is the targets, not the allocations in and of themselves. In fact, while the Los Angeles Basin Plan, including this amendment, can be reconsidered at any time the Los Angeles Board determines, this adopted Basin Plan Amendment includes a specific commitment to reconsider the TMDL, including allocations, at year 6 of implementation.</p> <p>The tentative Basin Plan Amendment released on December 17, 2010, included this specific task in Table 7-40.2: “<i>Regional Board will reconsider targets, WLAs, and LAs based on new policies, data or special studies as necessary. Regional Board will consider requirements for additional implementation or TMDLs for Los Angeles and San Gabriel Rivers and interim targets and allocations for the end of Phase II.</i>” This task was assigned a deadline of “6 years after the effective date of the TMDL.”</p> <p>The revised tentative Basin Plan Amendment released prior to the Los Angeles Hearing on May 5, 2011 and the final, adopted Basin Plan Amendment, included the same language with the words “as necessary” removed.</p>

No.	Author	Comment	Response
			The tentative Basin Plan Amendment and the final adopted Basin Plan Amendment also include, in the Implementation Plan Section 4 <i>Special Studies and Reconsideration of TMDL Targets, Allocations, and Schedule</i> , a discussion of the potential need to adjust targets, allocations, and the schedule based on new science, special studies or policy.
30.51		<p>The TMDL May Not Comply With The Administrative Procedure Act</p> <p>The California Administrative Procedure Act (“APA”) requires a showing that any regulation adopted by the State meets the following standards: (1) necessity; (2) authority; (3) clarity; (4) consistency; (5) reference; (6) non-duplication. (Government Code § 11349.1.) The Port has concerns regarding the Regional Board’s authority to impose historical remediation cleanup actions through the TMDL’s Basin Plan Amendment. Furthermore, the Port questions the clarity of the TMDL, which attempts to impose numerous calculations, LAs and WLAs with calculations and means of compliance that are as much a mystery as is to whom they apply. The Regional Board has not made it clear how much dredging will occur, with estimates varying wildly. The TMDL documents also do not identify precisely which parties are responsible for various ongoing monitoring and reporting requirements. Statements to the contrary by the Regional Board to the effect that they have clarified the TMDL are blatantly incorrect. Finally, the TMDL is duplicative because it addresses the remediation of legacy pollutants in the Harbor that have already been addressed through a CERCLA consent decree. Thus, because it lacks authority, clarity, and is illicitly duplicative, the TMDL violates the APA.</p>	See responses 32.27 through 32.44.
30.52		The TMDL Amounts To An Unconstitutional Unfunded	The State Water Board disagrees. The TMDL is

No.	Author	Comment	Response
		<p>Mandate By imposing this new regulatory requirement, the Regional Boards is 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.</p> <p>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. The Port estimates that 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 storm water 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. <i>Hayes v. Commission on State</i></p>	<p>not an unfunded mandate because, among other reasons, it is compelled by federal law. See response 32.79.</p>

No.	Author	Comment	Response
		<p><i>Mandates</i> (1992) 11 Cal.App.4th 1564, 1593- 1594. If the state refuses to appropriate money to reimburse a city, the enforcement of the state mandate can potentially be enjoined by a court. <i>Lucia Mar Unified School District v. Honig</i> (1988) 44 Ca1.3d 830, 833-834.</p> <p>The TMDL contains new programs and mandates imposed at the discretion of the Regional Board that go beyond the specific requirements of either the Clean Water Act or EPA's regulations implementing the Clean Water Act. Accordingly, these aspects of the TMDL constitute non-federal state mandates. (See <i>City of Sacramento v. State of California</i>, 50 Cal.3d 51, 75-76 (1990).) Furthermore, California's TMDL program was voluntarily assumed by the State, insofar as California had the option of allowing EPA to run the state's 303(d) program and declined that option. (See <i>Id.</i>) Accordingly, the Regional Board is incorrect that aspects of the TMDL do not amount to an unfunded state mandate because the TMDL program is a Federal program. (Comment Responses at pp. 62-63.) Indeed, the Court of Appeals has previously held that NPDES permit requirements imposed by the Regional Board under the Clean Water and Porter-Cologne Acts can constitute state mandates subject to claims for subvention. (<i>County of Los Angeles v. Commission on State Mandates</i>, 150 Cal. App. 4th 898, 914-16 (2007).)</p> <p>The Regional Board also argues that 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. Accordingly, the Regional Board states, without any citation to authority, that "the availability of such funding mechanisms precludes a claim for subvention." (Comment Responses at p. 63.) This is an incorrect statement of law. Time to plan plus the mere future possibility of obtaining funding from sources does not render a claim for subvention invalid. Such a rule would invalidate Article XIII B, Section 6, as it would preclude</p>	

No.	Author	Comment	Response
		<p>all subvention claims, as all unfunded state mandates could conceivably be funded by other means. (Cal. Const. Art. XIII B, § 6.)</p> <p>Finally, the Regional Board is incorrect that the TMDL's "requirements are not exclusive to municipalities, but apply with an even hand to all responsible parties, municipal and private alike." (Comment Responses at p. 63.) Though the TMDL affects both private and public entities, it would be manifestly false to say it provides blanket obligations that apply evenly to private and public entities alike. Rather, the TMDL imposes specific, costly requirements entirely unique to the Port and other impacted government agencies. Accordingly such requirements of the TMDL are ripe for a subvention claim under Article XIII, Section 6. (<i>County of L.A. v. Cal.</i>, 43 Cal. 3d 46, 49-50 (1987) ("the drafters [of Article XIII, § 6] and the electorate had in mind subvention for the expense or increased cost of programs administered locally and for expenses occasioned by <i>laws that impose unique requirements on local governments</i> and do not apply generally to all state residents or entities.")).)</p> <p>Accordingly, if the state wishes to impose this program, it needs to provide a means to pay for its implementation.</p>	
30.53		<p>This TMDL May Not Be The Appropriate Regulatory Mechanism To Address Legacy Pollution In The Harbor</p> <p>The Port questions whether this TMDL is essentially being used to engage in a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) action. The purpose of a TMDL is to protect impaired water bodies by limiting the amount of a specified pollutant that can be discharged, or "loaded," into a water body from all sources. (<i>Pronsolino v. Nastri</i>, 291 F.3d 1123, 1127-1128 (9th Cir. 2002); 33 USC §§ 303(d)(1)(C), 1313(d)(1)(C) and (D); 40 C.F.R. §§ 130.2(g)-(i).) A TMDL is meant to protect impaired water bodies against the</p>	<p>In addition to the requirement of the Clean Water Act to prepare TMDLs for impaired water bodies, California Water Code section 13242 authorizes the Los Angeles Water Board to adopt an implementation program for achieving water quality objectives. The TMDL not only establishes the WLAs and the LAs, but also establishes an implementation program. The program, in this case, includes implementation through NPDES permits and removal of sediments. CERCLA does not prevent the state from adopting a TMDL</p>

No.	Author	Comment	Response
		<p>future “loading” of specified pollutants. (<i>City of Arcadia v. State Water Resources Control Board</i>, 135 Cal.App.4th 1392, 1404 (2006).)</p> <p>Nonetheless, a major component of this TMDL relates to the remediation of historic contamination of sediments already present in the Harbor. (See, e.g., Resolution R11-008 at ¶ 17; Basin Plan Amendment at 2.) The Harbor is described as a “reservoir of historically deposited pollutants” from myriad sources over the course of many decades. (Final Staff Report at 57.) The Regional Board determined that the sources potentially include storm water runoff from innumerable upstream sources, manufacturing, military facilities, fishing activities and facilities, wastewater and wastewater treatment plants, oil production facilities, shipbuilding and ship repair operations, port sources such as commercial vessels, port operations, and ships coming in and out of the Harbor. (Final Staff Report at 57.) DDT is a prime example of a pollutant for which the Port has not been a source, yet DDT is now found widespread in sediments throughout the Harbor.</p> <p>There is a federal statute, the precise purpose of which is to remediate historically deposited contamination. It is not the Clean Water Act but CERCLA, which mandates “response actions” to “remedy” existing environmental hazardous waste contamination. (See 42 USC §§ 9601(23)-(25).) Instead of imposing a total maximum daily load of the enumerated contaminants for the Harbor, however, the TMDL could be interpreted in a manner that would essentially require a CERCLA response action to remediate historical contamination in the Harbor. CERCLA was designed precisely for this function; it applies liability only to responsible parties, allows responsible parties to seek cost recovery and contribution from other responsible parties, and allows for an equitable allocation of liability among responsible parties. (42 USC §§ 9607 (a)-(b), 9613.)</p> <p>In response to this argument the Regional Board stated</p>	<p>to address impaired water bodies. Numerous TMDLs throughout the state have specified removal of pollutants as part of implementation programs. In this case, pollutants in sediment contribute to impairments in the affected water bodies. The Clean Water Act does not preclude a WLA or LA from being assigned to “legacy” pollution.</p>

No.	Author	Comment	Response
		<p>“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 [Montrose Consent Decree (discussed in further detail below)].” (Comment Responses at p. 3.) The Regional Board goes on to cite <i>City of Arcadia</i>, 135 Cal.App.4th at 1414-15, for the proposition that “[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...” (<i>Id.</i>)</p> <p>A TMDL’s proper regulatory function is to adjust pollutant discharge requirements from point sources and require non-point source controls to limit the amount of pollutants loaded into an impaired water body. By potentially requiring the remediation of contaminated sediments in the Harbor, the TMDL could be interpreted to impose a “response action” as defined by CERCLA insofar as such an action is defined to include “the clean up or removal of released hazardous substances from the environment.” (42 USC § 9601(23).)</p> <p>The Port takes its role as an environmental steward and trustee under the State Tidelands very seriously. However, the Port alone cannot shoulder the burden of mitigating the region’s legacy of environmental contamination. Under CERCLA, such an effort would allow for the inclusion of all existing responsible parties and for the equitable allocation of liability to those entities on the basis of comparative fault. (See 42 USC §§ 9607 (a)-(b), 9613; <i>United States v. Atlantic Research Corp.</i>, 551 U.S. 128, 140 (2007).)</p>	
30.54		<p>The TMDL Does Not Adequately Address The Fact That Certain Of Its Components May Have Been Funded By An Existing CERCLA Consent Decree</p> <p>A primary component of the TMDL is the requirement to remove</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 11.3, 24.5 and</p>

No.	Author	Comment	Response
		<p>contaminated sediments from the harbors. (Basin Plan Amendment at 2.) Contaminated sediment work on certain parts the harbors and outlying waters to the west of the harbors was the precise subject dealt with by the Consent Decree entered in 1999 by the Environmental Protection Agency in the case <i>United States of America, et al. v. Montrose Chemical Corporation of California, et al.</i>, USDC Case No. CV 90-3122-AAH (JRx). The Consent Decree included a release of liability for “natural resource damages” under CERCLA or “any other federal, state, or common law.” (Consent Decree at 30-31.) Natural resource damages are defined by the Consent Decree as including “restoration costs” and “response costs” with respect to any and all natural resources in and around the Superfund site’s various “Operable Units.” (Consent Decree at 26.) Furthermore, the Consent Decree includes a covenant not to sue or bring an administrative action for “natural resource damages” incurred in connection with the Montrose Superfund site. (Consent Decree at 42-43.)</p> <p>The Port has already paid money into a fund maintained pursuant to the Consent Decree. This fund has thus far not been used for its purpose, the funding of the remediation of Harbor contaminants, as far as the Port is aware.</p> <p>At the hearing, the Regional Board made last minute changes purportedly intended to address issues arising out of the Consent Decree. These changes only appear to provide a mechanism for the Executive Officer of the Regional Board to consider this Consent Decree in the future in determining whether to approve Contaminated Sediment Management Plans. The issues presented by the Consent Decree are not addressed by this minor modification.</p>	<p>Los Angeles Water Board's response to comment 19.7, 28.7, 30.2, 30.11, 36.24, 38.8.</p> <p>As noted in response to comment 11.3, the Consent Decree defined the “Montrose NPL Site” (also known as the Montrose Superfund Site) to include, among other properties, the Montrose DDT Plant Property, portions of the Normandie Avenue Ditch, the Kenwood Drain, the Torrance Lateral, the Dominquez Channel (from Laguna Dominquez to the Consolidated Slip), the portion of the Los Angeles Harbor known as the Consolidated Slip, the Joint Outfall, and the Palos Verdes Shelf where effluent from the Joint Outfall deposited DDT and PCBs. The Consent Decree did not apply to the entire area covered by the TMDL. In addition, the Consent Decree explicitly does not relieve any parties from complying with the Clean Water Act.</p>
30.55		The Regional Board Has Failed To Fully Consider The Economic Impact Of The TMDL	State Water Board reviewed the Los Angeles Water Board's responses to these comments and

No.	Author	Comment	Response
		<p>Water Code section 13000 mandates that the Regional 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." This general requirement to reasonably consider the economic ramifications of regulations applies with full force to the TMDL. Nevertheless, the Regional Board has failed to fully and reasonably consider all the economic ramifications of the TMDL, which promises to have a multi-billion dollar impact.</p> <p>Water Code section 13241 requires the Regional Board to consider a number of factors when adopting its regulations to achieve water quality objectives, including economic considerations. In the Resolution to the TMDL and the response to comments, however, the Regional 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. (Resolution at pp. 5, 6; Comment Responses at p. 6.) This argument is the same one that was most recently made by the State Board in <i>San Joaquin River Exchange Contractors Water Authority v. State Water Resources Control Bd</i>, 183 Cal.App.4th 1110, 1119- 1120 (2010). In that case, however, the Court of Appeal once again declined to hold that section 13241 does not apply to a TMDL.</p> <p>Though the Court of Appeals in <i>San Joaquin River Exchange</i> 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. (<i>Id.</i> 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</p>	<p>agrees with its responses. See response to comment 0.1, 29.57, 32.48 and Los Angeles Water Board's responses to comments 20.10 and 20.12.</p>

No.	Author	Comment	Response
		<p>provision's requirements, including all of the economic considerations. (<i>Id.</i> 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. <i>City of Arcadia v. State Water Resources Control Bd.</i>, 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 13241's requirements); <i>City of Burbank v. State Water Resources Control Bd.</i>, 35 Cal.4th 613, 625 (2006) (holding that TMDLs complied with section 13241).</p> <p>Thus, it would seem that the best course of action 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 State 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 Regional Board's estimates, despite their insistence otherwise. (Response to Comments at 7.) 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 Regional Board failed to consider. Final adoption of the TMDL requires a full economic analysis.</p> <p>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</p>	

No.	Author	Comment	Response
		<p>U.S.C. §§ 3501 <i>et seq.</i> 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.</p> <p>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 Port is not solely responsible for the impairments and therefore should not be held solely responsible for remediating the sediments to address those impairments.</p> <p>The Regional Board has completely failed to consider the indirect economic effects of the proposed plan, and in particular the potential for the substantial disruption of commerce in the nation's busiest port by a wide-scale dredging operation. The Regional Board did not address this issue in its response to comments, despite urging from commenters. This failure is substantial.</p> <p>To reduce both costs and environmental impacts, the Regional Board used dredging volumes based on the SQO Part I hot spot analysis conducted by the Port, however, SQO Part 1 does not address PCBs and DDT (the fish issue) which are the drivers for</p>	

No.	Author	Comment	Response
		<p>determining what needs to be dredged. Because there is not a similar process for identifying PCB and DDT hotspots, the amount of dredging required for DDT and PCBs is 38 million cubic yards at a cost of \$9 billion (not including eastern San Pedro Bay) based on the targets. The Regional Board has completely ignored this fact in both the SED and the purported cost estimates.</p>	
30.56		<p>The TMDL Imposes Numerous Conditions That Do Not Constitute Maximum Daily Loads As Required By Law In <i>Friends of the Earth v. EPA</i>, 446 F.3d 140 (D.C. Cir. 2006), the Court determined that the word “daily” in “total maximum daily load” means what it says: a TMDL is meant to impose limitations on daily contaminant loadings and not on the basis of any other timeframe. The case involved a challenge to the Anacostia River TMDL for turbidity and dissolved oxygen. An environmental group challenged the adoption of the TMDL, arguing that the TMDL’s <i>seasonal</i> and <i>annual</i> load targets for the discharge of oxygen-depleting pollutants were barred under the Clean Water Act. (<i>Id.</i> at 143.) The Court of Appeals agreed, holding that “[n]othing [in the language of the Clean Water Act] even hints at the possibility that EPA can approve total maximum “seasonal” or “annual” loads. The law says ‘daily.’ We see nothing ambiguous about this command.” (<i>Id.</i> at 144.)</p> <p>The TMDL contains numerous alleged LAs and WLAs that are not “daily” load targets, or even targets that are oriented toward any time frame. The prime examples of these derivations from legally proper TMDL “daily load” targets are this TMDL’s “site specific cleanup criteria,” the ERL-derived “sediment quality values,” the numeric toxicity targets identified as “TUc,” and, exactly like the deficient TMDL in <i>Friends of the Earth</i>, annual and concentration-based load allocations. (Basin Plan Amendment at pp. 29, 4, 2-3, 14, 17.) None of these measures constitute true “daily loads.” Accordingly, they cannot be included in the TMDL.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 39.6.</p>

No.	Author	Comment	Response
		<p>In response, the Regional Board cites <i>Natural Resources Defense Council v. Muszynski</i>, 268 F.3d 91, 99 (2d Cir. 2001), wherein the Second Circuit Court of Appeals held, contrary to <i>Friends of the Earth</i>, that a TMDL could potentially be expressed by a measure of mass per time of something greater than a single day. But even if this case provides support for load allocations expressed in timeframes greater than one day, it lends no support to the aforementioned load targets based on “site specific cleanup criteria,” the ERL-derived “sediment quality values,” the numeric toxicity targets identified as “TUc,” and concentration-based load allocations. (Basin Plan Amendment at pp. 29, 4, 2-3, 14, 17.) These requirements account for the majority of load allocation requirements in the TMDL and are completely unsupported by statutes or case law.</p>	
30.57		<p>Conclusion</p> <p>The Port respectfully requests that the TMDL not be incorporated into the Basin Plan until such time as the Regional Board and affected stakeholders can conduct a thorough scientific study on the effectiveness of the Regional Board’s plan with respect to toxic pollutants in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters. Requiring stakeholders to comply with this plan without addressing the technical, legal, and economic issues with this TMDL would be an inefficient and unproductive use of public resources.</p> <p>The Port is committed to dedicating the resources required to properly address and mitigate our fair share of legitimate issues associated with toxic pollutants in the waters in question. Prior to dedicating the significant amount of resources required for this undertaking, however, the Port asks that the State Board take the time to ensure that the prescribed remedy is scientifically grounded to reasonably assure achievable results. The Port does not believe that the TMDL as it is presently written sufficiently</p>	<p>State Water Board finds that the TMDL, as it is adopted by the Los Angeles Water Board, was properly developed, technically and legally sound, and feasible. The TMDL includes detailed narrative and numeric targets, assigns appropriate WLAs and LAs to point and non-point sources, and incorporates a flexible 20-year implementation schedule to address a total of 79 impairments in different media: water column, sediment, and fish tissue. Due to its scope and complexity, this TMDL recognizes that as work continues to understand these impaired waters and the associated chemical, physical and biological processes, the targets, allocations, and the flow threshold for wet-weather conditions and the implementation actions to reach those targets and allocations may need to be adjusted. The TMDL identifies a number of special studies that could be undertaken early in the implementation</p>

No.	Author	Comment	Response
		<p>addresses the assessed water quality impairments associated with toxic pollutants. In contrast, implementing the TMDL as written may result in greater environmental harm than exists under current conditions.</p> <p>For this TMDL to be scientifically and legally sound and technically and economically feasible, the Port recommends that the State Board remand the TMDL to the Regional Board to adopt a TMDL that:</p> <ul style="list-style-type: none"> • Establishes a scientifically valid TMDL for sediment protection (source control) based on sediment endpoints (targets) derived through Sediment Quality Objectives (SQO) Phase 1 process for direct effects and PV Shelf cleanup goals as interim targets for bio-cumulative pollutants until site specific studies and/or the implementation of SQO Phase 2 can be established through a regional assessment that is inclusive of all sources of loading. • Does not include fish tissue targets until a regional assessment that is inclusive of all coastal waters for which fish tissue are impaired (Santa Monica to Seal Beach) is conducted to ensure all potential sources of loading to fish tissue, including the PV Shelf, are evaluated. • Includes an SED that is in full compliance with CEQA, ensuring that a full and complete environmental analysis of project impacts and alternatives was conducted, providing the decision makers, other regulatory agencies, and the public with the required understanding of whether the environmental benefits of the proposed TMDL outweigh the significant and unavoidable environmental impacts. <p>Given the obvious technical and legal inadequacies with this TMDL, absent a full reassessment of this TMDL, at a minimum the State Board should direct the Regional Board refrain from incorporation of the targets, WLAs and LAs into permits until after special studies can be completed to establish scientifically sound</p>	<p>period and provides a clear opportunity for reconsideration of the TMDL to incorporate the findings of these studies after five years of implementation.</p> <p>The State Water Board appreciates the Port's effort and commitment to dedicating the resources required to properly address and mitigate issues associated with toxic pollutants in the waters. When the responsible parties determine how they will to implement the TMDL, they can and should incorporate such alternatives and mitigation measures into any subsequent projects. Project-level EIRs should be developed and reviewed to ensure the proposed implementation action does not result in greater environmental harm than current conditions.</p> <ul style="list-style-type: none"> • As identified in the BPA, sediment targets were determined by the narrative standards of this Basin Plan, the SQO Part 1 and the sediment quality guidelines of Long et al. (1998) and MacDonald et al. (2000), which are recommended by the State Listing Policy. • Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters are listed for fish tissues for a number of bioaccumulative compounds. Therefore, fish tissue targets based on <i>Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene</i>, developed by OEHH

No.	Author	Comment	Response
		<p>targets, interim or otherwise. In addition the State Board should ensure that all regional stakeholders are held accountable for all sediment remediation.</p>	<p>(2008)</p> <ul style="list-style-type: none"> • The SED contains a detailed description of the applicable law, physical setting, scope of the problem, and basis for taking the action. The SED adequately set forth project objectives based on the scope of the problem to be addressed (water bodies impaired for toxic pollutants). As explained in response to comment 30.41, the Los Angeles Water Board adequately considered alternatives.
30.58		<p>The Ports of Long Beach and Los Angeles provided a supplementary table of technical comments, including a table summarizing the Port of Long Beach Responses to RWQCB Responses to All Comments. This table generally reiterates previous Port comments; therefore, their principle concerns are summarized below:</p> <p>ERLs are unjustifiably strict standards for TMDL development. The Regional Board's response is misleading as individual targets were set without considering multiple lines of evidence as required by the SQO. RWQCB staff failed to address comment regarding the quality of data used to define current condition.</p> <p>Regional Board response to comments does not clarify how zero or negative allocations in the sediments should be interpreted regarding short-term and long-term compliance with the TMDL. OEHHF FCGs should not be used as a TMDL endpoint.</p> <p>The Regional Board's defense of its linkage analysis and the language added to the Staff Report are insufficient. Until appropriate linkages between contaminants and specific waterbody impairments are completed, compliance for NPDES permits measured at the point of discharge is inappropriate.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comments 1.1, 20.1, 20.2, 20.3, 20.4, 20.5, 20.6, 20.8, 20.9, 20.10, 20.11, 20.12, 20.14, 20.15, 20.16, 39.2, 39.3, and 39.6.</p> <p>Highlights from these responses and additional clarification that are associated with the principle concerns in the comments are provided below:</p> <p>State Water Board agrees with the Los Angeles Water Board selection of ERLs as the TMDL target concentration and believes the Los Angeles Water Board response to comment 20.1 is thorough and appropriate.</p> <p>For allocations in the sediment, see response to comment 0.3 and the Los Angeles Water Board response to comment 20.2 For FCGs, see</p>

No.	Author	Comment	Response
		<p>As the TMDL is written, a massive dredging project is simply not a discretionary method of compliance the Port may simply ignore in favor of other alternatives. Accordingly, the Regional Board cannot ignore the impact in the SED. Very few comments on the draft SED from the Port and other commenters were addressed and incorporated into the revised draft. Furthermore, copies of the written responses to public comments were not provided to responsible agencies at least 10 days prior to the Regional Board's approval of the SED (they were only posted 7 days prior to the Regional Board's approval). The SED does not adequately analyze the environmental impacts of the TMDL under CEQA (including the ancillary impacts of the continuous 15 year dredging operation the TMDL mandates and the impacts of adequate storm water treatment for large volumes of storm water). The SED fails to comply with CEQA by failing to provide and analyze a meaningful range of significant alternatives. The SED was not adequately revised to address the referenced comments regarding noise, transportation impacts, and human health impacts, among others. The Regional Board's cost estimates to implement the TMDL are absurdly low given the magnitude of the project.</p> <p>The TMDL contains new programs and mandates imposed at the discretion of the Regional Board that go beyond the specific requirements of either the Clean Water Act or EPA's regulations implementing the Clean Water Act. Time to plan plus the mere future possibility of obtaining funding from sources does not render a claim for subvention invalid (the Ports claim that the Regional Board response includes an incorrect statement of law).</p> <p>The TMDL contains numerous alleged LAs and WLAs that are not "daily" load targets, or even targets that are oriented toward any time frame. Implementing the programs outlined in the TMDL</p>	<p>comment 2.96 and the Los Angeles Water Board response to comment 20.3.</p> <p>The linkage is discussed in 0.2.</p> <p>For amount of dredging see response to comment 0.4; for SED comments, see response to 32.82 – 32.101.</p> <p>For programs and mandates, see response to 32.78 and 32.79.</p> <p>For "daily " loads see Los Angeles Water Board's response to comment 36.20. For cost, see response to comment 0.14 and Los Angeles Water Board's response to comments 1.5 and 23.9.</p> <p>For responses on the consent decree see response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.</p> <p>For responses to APA see 32.27 – 32.42 and Los Angeles Water Board's response to comment 18.1 – 18.6.</p>

No.	Author	Comment	Response
		<p>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. The Regional Board has failed to consider the indirect economic effects of the proposed plan.</p> <p>The Port has already paid money into a fund maintained pursuant to the Consent Decree. This fund has thus far not been used for its purpose, the funding of the remediation of Harbor contaminants, as far as the Port is aware. The issues presented by the Consent Decree are not addressed by the minor modification in the Basin Plan Amendment. The Port questions whether this TMDL is essentially being used to engage in a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) action. Because it lacks authority and clarity, the TMDL as adopted by the Regional Board may not comply with the APA.</p>	
30.59		<p>The Ports of Long Beach and Los Angeles provided a supplementary table of technical comments, including a table summarizing the responses to RWQCB Responses on Basin Plan Amendment Comments (Table 1). This table generally reiterates previous Port comments; therefore, their principle concerns are summarized below:</p> <p>The Port comments that several comments were not addressed or responses are inadequate in the revised version of the BPA and Staff Report. In addition, many of the comments in this table were related to the comment tables associated with the TMDL Staff Report provided by the Port of Long Beach.</p> <p>Use of ERLs is not substantially supported and ERLs are not appropriate for sediment numeric targets. The reference of ERLs, as they relate bioaccumulation in fish tissue, should be removed. The use of FCGs as fish numeric targets is inappropriate.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 0.3, and 30.60 and Los Angeles Water Board's response to comments B1.1 through B1.34.</p> <p>Highlights from these responses and additional clarification that are associated with the principle concerns in the comments are provided below: State Water Board agrees with the Los Angeles Water Board selection of ERLs as the TMDL target concentration and believes the Los Angeles Water Board response to comment 20.1 is thorough and appropriate.</p>

No.	Author	Comment	Response
		<p>Linkages are not adequately demonstrated or addressed in Staff's responses. RWQCB does not address the importance and impact of direct air deposition.</p> <p>The use of negative allocations is not in the definition of allocations. Negative allocations are not only due to the uncertainty in the air deposition, but also the way the load allocations for the sediment were determined. Instead, an appropriate mass balance should have been done on either the water column or the sediment, but not in the combined manner set forth in this TMDL. This is a major flaw in this TMDL. The language added does not sufficiently explain what is to be done to meet a negative allocation.</p> <p>Compliance of bioaccumulative TMDLs calls for meeting final sediment allocations; however, for DDTs, the final sediment allocations are negative, which is meaningless as an allocation. It is still not clear how compliance at the end of discharges can be established. It is economically irresponsible to remediate without source control.</p> <p>Section 7.6.2 of the Staff Report is inconsistent with page 24 of the BPA. The Staff Report states that fish tissue samples will be collected annually, while the BPA states that fish tissue samples shall be collected every 2 years. The Staff Report wording should be changed to every 2 years to provide consistent information.</p> <p>Regional Board responses do not address the selection of species to monitor.</p>	<p>For FCGs, see comment 2.96 and the Los Angeles Water Board response to comment 20.3.</p> <p>For allocations in the sediment, see response to comment 0.3 and the Los Angeles Water Board response to comment 20.2</p> <p>For amount of dredging and costs see response to comment 0.4.</p> <p>If, in some way, the Staff Report and the Basin Plan Amendment do not agree, the Basin Plan Amendment is the regulatory authority.</p> <p>On fish species, see Los Angeles Water Boards response to comment 35.4(a).</p>
30.60		<p>The Port of Long Beach provided a supplementary table of technical comments, including a table summarizing the Port of Long Beach Responses to RWQCB Responses on TMDL Staff Report Comments (Table 2). This table generally reiterates previous Port of Long Beach comments; therefore, their principle concerns are summarized below:</p> <p>The term "greater San Pedro Bay" should not be used. Table 3-1 still lists "average" in the footnote and the table is not clear that</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1; 30.61; 30.62; 30.63 and Los Angeles Water Boards response to comments B2.1 through B2.95.</p> <p>Specific comments were provided requesting</p>

No.	Author	Comment	Response
		<p>these targets are for dissolved metals. Staff Report Table 3-1 must be replaced with the table on page 3 of the BPA for consistency. RWQCB staff failed to address comment regarding the quality of and specific data used to and no justification was given for excluding specific data (tables, text, and notations were not updated as indicated in the response to comments for various comments). With the exclusion of old data from areas that have more recent data assessments and the inclusion of old data, the impaired/not impaired categorical assessment does change. A stressor identification test should be conducted to determine which analytes are the causative agent, and allocations should be developed for those analytes only.</p> <p>Alternative approaches, targets, compliance measures, and implementation strategies were provided to the RWQCB and were not included. Use of ERL and CTR values are inappropriate. Individual targets were set without considering multiple LOE. Only in the case of compliance is the SQO MLOE used in this TMDL. Table 3-6 and associated text are inconsistent with respect to use of reference or control sediments during testing. Response does not adequately address the inappropriate use of FCGs as fish numeric targets. Targets for WILD or RARE beneficial uses are not required or necessary until impairment is observed. Data should be provided that shows impairment exists for these beneficial uses.</p> <p>It should be explained why the load allocation for air (DDT in Inner Harbor) is more than five times the current loading. Reasons for excluding Machado Lake are not consistent with other assumptions made for the TMDL (see comment 30.63 for details on identical comments). The individual and major NPDES permits have not been updated as indicated and the cities included as MS4 permittees were not updated as indicated. Inland air deposition station is not appropriate for the Inner Harbor waters. No changes were made to the Staff Report to clarify how loads were calculated for direct and indirect deposition. No documentation was provided for the Dominguez Channel</p>	<p>clarification or updates to the reports, including figures and tables. These revisions have not been made. State Board finds that the adopted Basin Plan amendment is sufficiently clear. Modifications, if useful and necessary, could be considered during a TMDL reconsideration.</p> <p>For allocations in the sediment, see response to comment 0.3 and the Los Angeles Water Board response to comment 20.2 For FCGs, see comment 2.96 and the Los Angeles Water Board response to comment 20.3.</p> <p>State Board notes that all beneficial uses are to be protected.</p> <p>Several of the comments in this table are duplicative of comments listed below (response to comment 30.61, 30.62, 30.63, 30.64). If a comment was also raised in a more specific table (i.e., Table M2 is generally associated with EFDC modeling), the comment is responded to in the more specific table.</p>

No.	Author	Comment	Response
		<p>Watershed Model. The EFDC model was not calibrated or verified for sediment transport and deposition or wet weather. The top 5 cm of the sediment bed should not be used to determine the sediment deposition rate or existing sediment contaminant loadings to the bed (see comments 30.61 and 30.62 for identical EFDC modeling comments).</p> <p>The response does not address the failure to include a linkage analysis between fish and sediments. Linkages have not been adequately demonstrated. Sediment deposition rates are too small when compared with known sediment rates from prior USACE studies. Inclusion of San Gabriel River should be clarified. Dominguez Channel area used for atmospheric deposition calculation should be clarified. Mass balance should have been done on either the water column or the sediment but not in the combined manner set forth in this TMDL.</p> <p>Recontamination from direct deposition or watershed sources is possible if remediation actions are taken prior to source control. The TMDLs include the incorrect assumption that all of the atmospheric deposition on the surface of each water body settled directly in the sediment of the waterbody. It is not clear how a 3-year averaging period can be calculated. Explain how “discharge” is measured in sediments and averaged through a 3-year period. The RWQCB has not addressed the concerns regarding anti-backsliding policy.</p> <p>Monitoring sediments every two years is an inappropriate scale to assess trends in sediment. Section 7.6.2 of the Staff Report is inconsistent with page 24 of the BPA. The Staff Report states that fish tissue samples will be collected annually while the BPA states that fish tissue samples shall be collected every 2 years. The Staff Report wording should be changed to every 2 years to provide consistent information. The Port has specific comments on the specific implementation tasks, including comments on schedule and associated economic considerations.</p> <p>Several of the comments in this table are duplicative of comments listed below. If a comment was also raised in a more specific table</p>	

No.	Author	Comment	Response
		(i.e., Table M2 is generally associated with EFDC modeling), the comment is responded to in the more specific table.	
30.61		<p>The Port of Long Beach provided a supplementary table of technical comments, including a table summarizing the Port of Long Beach Responses to RWQCB Responses on Attachment 7 Comments (RWQCB Table M1).</p> <p>This table generally reiterates previous Port of Long Beach comments; therefore, their principle concerns are summarized below:</p> <ul style="list-style-type: none"> i. The models have not been adequately calibrated or verified. Majority of WRAP data provided by the Ports were not used in the EFDC model. Wet weather calibration is important because most rain and associated pollutant loadings occur during wet weather. The EFDC model has not been calibrated for wet weather. ii. Sediment transport calibration is particularly important since the TMDL relies on model-predicted sediment deposition (Ports comment that the simulated sediment deposition rate underestimates the value associated with known data from USACE). iii. The Ports strongly disagree with the statement that they agreed the sediment simulations were realistic. When using only two model scenarios, multiple pollutant sources cannot be linked to multiple waterbodies. iv. TMDL formulation and development has not been discussed at any meetings and stakeholder input has not been requested on how the models should be used for TMDL allocations. The policy for negative allocations referenced in the response does not apply to the negative watershed contributions in 	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 0.3 and Los Angeles Water Boards response to comments M1.3, M1.6, M1.8, M1.9, M1.10, M1.11, M1.13, M3.2, M4.1, 20.2, and 20.4.</p> <p>Highlights from these responses and additional clarification that are associated with the principle concerns in the comments are provided below:</p> <ul style="list-style-type: none"> i. Data and information available at the time of the original modeling were included in the EFDC model. While additional data would certainly have been useful to the modeling process, especially during wet weather conditions (note: the available wet weather data did not overlap with the modeling time period), the existing data were determined sufficient for TMDL development. TMDLs are required to be based on the best available data and the process does not mandate the collection of new data because such data collection is usually costly and time consuming. If all TMDLs waited for the ideal dataset, water quality conditions would generally continue to deteriorate in the waterbody during data collection efforts; therefore, it is more protective to move forward with a TMDL and consider additional

No.	Author	Comment	Response
		<p>determining the WLAs. Model output should be provided prior to, not after, the TMDL is approved.</p> <p>v. Input from Machado Lake to the harbor should be included in the model as it is not as insignificant as described in the staff report.</p> <p>vi. Air deposition directly ending at the sediment bed is a fundamentally flawed assumption and should be changed. The studies mentioned in the response are not relevant to the original comment. It is unclear if air deposition was included in the model. If not, it should be.</p> <p>vii. The average concentration in the top 5 cm does not reflect the existing deposition (since it takes longer than the simulation period to accumulate 5 cm in most waterbodies). TMDLs are being developed based on the concept that the sediment contaminant concentrations are the direct result of the net deposition of sediments and contaminants (allocations are based on the modeled sediment deposition rates).</p> <p>viii. Assignment of LAs to existing bed sediments is not consistent with other toxic sediment TMDLs developed for the California Region. TMDLs should not be allocated for waterbody-pollutant combinations that were not identified based on assessment findings.</p>	<p>data and modifications during the implementation process and/or TMDL re-openers.</p> <p>ii. The Los Angeles Water Board incorporated data and information subsequently received, if technically feasible and within the available time and project budget. Due to this data cutoff, it was not possible to incorporate the 2010 USACE study the Ports reference as well as their reported sediment deposition rates.</p> <p>iii. On August 24, 2009, the POLA submitted a comment document to USEPA regarding the revised sediment simulations. In this comment document, they state "...model now predicts more realistic sediment deposition patterns"; therefore, the State Water Board stands by the original response provided by the Los Angeles Water Board mentioning that the Ports were in agreement with the sediment simulations. The project schedule and budget also required focused selection of model scenarios to support TMDL development and existing load calculations. These scenarios are appropriate and were sufficient to link the pollutant sources to the receiving waters. Additional scenarios may be helpful to support implementation alternatives and the models are available for use by stakeholders.</p> <p>iv. State Water Board disagrees with comment that TMDL development was not discussed</p>

No.	Author	Comment	Response
			<p>with stakeholders. Numerous TMDL Technical Advisory Committee (TAC) meetings occurred between 2006 and 2010. Regional Board and EPA hosted several teleconference calls with TAC members in summer 2010 to specifically discuss TMDLs and allocations. Draft modeling reports and draft TMDL sections (Problem Statement and Targets) were released in draft form for comment. Also, stakeholders were provided with extended opportunity (longer than 45 days) to comment on draft Staff Report, SED and tentative Basin Plan Amendment and Resolution. For watershed contributions, the absolute value difference between the model scenarios was used to determine the allocations from these sources. Model output (as well as input and executable) files were made available as soon as possible in the TMDL development process. In addition, the Ports had access to previous versions of the model (and did not specifically request the TMDL scenarios being performed). It is not a requirement of the TMDL process that the output files are available to the public before the draft TMDL is public noticed. State Water Board believes the Los Angeles Water Board was forthcoming with the technical files and provided ample opportunity for stakeholder input.</p> <p>v. Analyses were performed to assess the potential inputs from Machado Lake. As previously indicated in the modeling reports as well as the Los Angeles Water Board</p>

No.	Author	Comment	Response
			<p>response to comments, it was determined that Machado Lake is generally a sink in the system. Therefore, at this time State Water Board disagrees with the comment that Machado Lake should be included in the model. If information on loadings from Machado Lake become available in the future and suggest that Machado Lake should be included, revisions can be made to the models if the TMDLs are reopened for that purpose in the future.</p> <p>vi. Direct air deposition was not directly simulated by the EFDC model; however, indirect air deposition was implicitly included in the LSPC watershed loadings. Direct deposition could be integrated into TMDL models in the future.</p> <p>vii. State Water Board disagrees with the assertion that the average concentration in the top 5 cm does not represent existing conditions. The average concentration in the top 5 cm considers existing inputs (amount of sediment as well as its concentration) and initial sediment concentrations, which does represent existing conditions in the sediment after the four-year simulation period (whether or not a full 5 cm has been deposited in that time). The simulated values are considered representative of annual conditions (regardless of the number of years simulated). The sediment contaminant concentrations used for the TMDL and associated allocations are based on the</p>

No.	Author	Comment	Response
			<p>selected numeric targets and the net deposition of sediment to each waterbody (the net deposition does take into account processes that impact sedimentation such as watershed inputs, currents, etc.). This is a commonly applied practice for quantifying allowable sediment loads. For direct simulation of sediment contaminant concentrations during existing conditions, other processes are taken into account, such as burial, porewater diffusion, and tidal impacts.</p> <p>viii. State Water Board agrees with the Los Angeles Water Board's approach to assign load allocations to bed sediments for these greater Harbor waters. The TMDL goal is to protect habitat for benthic organisms as well as reduce toxic pollutant fluxes into water column. State Water Board agrees with Los Angeles Water Board's approach to define TMDLs for all WB-pollutant combinations. Note TMDL Staff Report, Appendix III includes SQO assessment showing that all waters are impaired and thus it is appropriate to assign allocations for all WB-pollutant combinations.</p>
30.62		<p>The Port of Long Beach provided a supplementary table of technical comments, including a table summarizing the Port of Long Beach Responses to RWQCB Responses on Appendix I Comments (RWQCB Table M2). This table generally reiterates previous Port of Long Beach comments; therefore, their principle concerns are summarized below:</p> <ul style="list-style-type: none"> Exact data used from the DCEM Study should be specified in 	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 30.61 and Los Angeles Water Boards response to comments M2.1, M2.5, M2.9, M2.10, M2.11, M2.12, M2.13, M2.14, M2.17, M2.21, M2.22, M2.23, M2.26,</p>

No.	Author	Comment	Response
		<p>Appendix I. If TSS data for 2007 were included, then wet weather data from 2006 should be included as well. It cannot be assumed that the results from one model (DCEM) can be reproduced with the other model (EFDC) nor should it be implied that the models are interchangeable.</p> <ul style="list-style-type: none"> Model files should be provided prior to, not after, the TMDL is approved. Model files are not publically available, so additional text should be added to explain the lack of hydraulic connection near Cabrillo Marina. San Gabriel River should be shown in the model grid. Using daily input for the nearshore watersheds could completely miss rain events. Exclusion of TIWRP pollutant loadings from the model illustrates the fundamental flaw in the TMDL since these pollutant loadings were not simulated as part of the linkage analysis, but added on in the TMDL allocations. Exclusion of TIWRP concentrations and daily nearshore inputs could substantially underestimate pollutant loadings to the harbor. A map of inflow locations should be added to the report. The assumption that the concentration of organic pollutants from the watershed is the same as the pollutant concentration in the harbor sediment is invalid. EFDC model calibration shows poor comparison with field data. The model simulation period is arbitrarily chosen and the model results have indicated that the period may not be long enough. Differences between the sediment quality guidelines illustrated in Figures 23-28 and those provided in the Staff Report Table 2-4 should be added to the text. Figure 39 is confusing and could be misinterpreted by the reader. The continual increase and decrease in sediment concentration after day 913 in Figure 40 is not explained. Justification should be provided for the inclusion or exclusion of TSS data representing dry weather conditions. 	<p>M2.27, M2.29, and 19.6.</p> <p>Highlights from these responses and additional clarification that are associated with the principle concerns in the comments are provided below:</p> <ul style="list-style-type: none"> Data used in the EFDC model have been identified in Appendix I. Specifically, data collected after the modeling period were generally excluded. In certain cases, data available after 2005 were incorporated into the model. These include the current and surface water elevation data collected by the Ports. Even though the observed period did not match with the modeling period, these data were included because the harmonic analyses approach used in model calibration allows data from different years to be compared. Other data such as salinity, water quality, dye observations, and wet weather measurements fell outside of the modeling period and could not be appropriately compared with the model results. Fall dry weather data from 2007 were also included in the model for comparison with other dry weather periods because the inflows were essentially the same and this was the only TSS data available for comparison. Because the inflow conditions associated with wet weather events varies more than dry weather, the 2006 wet weather data would not be used for comparison with any modeled events in 2002-2005. The commenters are correct that the models are not parameterized identically and are therefore not interchangeable.

No.	Author	Comment	Response
			<p>However, it is important to note that the data referred to are outside of the modeling period; therefore, most of the data could not be incorporated into the TMDL modeling process.</p> <ul style="list-style-type: none"> • The model files are publically available (see response to comment 30.61 above) and the Ports have had access to previous versions of the model for several years; therefore, the hydraulic connection could have been verified in previous versions. As indicated in response to comment M2.9, the San Gabriel River watershed is included in the model. The daily rainfall used to represent nearshore watersheds is cumulative over the day, so rainfall events are not missed by the model. Inclusion of hourly inflows for 67 nearshore watersheds would have resulted in prohibitive computation time; therefore, simulated daily flows and concentrations were used to represent the multiple nearshore watershed inputs. TIWRP loadings could be integrated into TMDL model in the future. Yes, allocations were identified for this source using the same conceptual approach for particulate or sediment deposition. As indicated previously (see response to comment 30.61), the model and associated reports are based on the best available data that could be considered with the available time and budget; additional data and details could be incorporated at a later date if the TMDLs are reopened for that purpose in the future. The model simulation period was

No.	Author	Comment	Response
			<p>determined based on a balance of the available data, project start date based on project schedule and budget, and reasonable computation time. A longer simulation period would have resulted in prohibitive computation time. In addition, the model output were evaluated as annual conditions (regardless of the number of years simulated).</p> <ul style="list-style-type: none"> Specific comments were provided requesting clarification or updates to the report. These revisions have not been made. This is considered a reasonable decision based on limited budget and requirement to complete the TMDLs within the deadline. Such modifications could be considered during a TMDL reopener.
30.63		<p>The Port of Long Beach provided a supplementary table of technical comments, including a table summarizing the Port of Long Beach Responses to RWQCB Responses on Appendix II Comments (RWQCB Table M3). This table generally reiterates previous Port of Long Beach comments; therefore, their principle concerns are summarized below:</p> <p>Citing an “unpublished” document for a key component of the technical analysis violates USEPA guidelines and accepted scientific protocols as the stakeholders cannot review an “unpublished” document.</p> <p>Machado Lake drainage should be included as an input to the harbors, which could have been included based on the regionally calibrated parameters. The Ports disagree that the Machado Lake overflow for June 2008 to February 2010 are a small fraction of</p>	<p>State Water Board reviewed the Los Angeles Water Board’s responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 30.61 and Los Angeles Water Boards response to comments M3.1, M3.2, 19.6, and 23.6b.</p> <p>Highlights from these responses and additional clarification that are associated with the principle concerns in the comments are provided below:</p> <p>State Water Board finds it is acceptable to cite an unpublished document, albeit rarely, within TMDLs and Implementation Plans.</p> <p>As indicated in the original response comment</p>

No.	Author	Comment	Response
		<p>the total volume to the Harbors and request further explanation. If pollutant loads from Machado Lake are excluded due to implementation of TMDLs (Proposition O funds), than pollutant loads from the Los Angeles and San Gabriel Rivers should also be excluded.</p> <p>The model used for TMDL development has not been properly calibrated, and the model predictions poorly compare with field data. The assumption that the concentration of organic pollutants from the watershed is the same as the pollutant concentration in the harbor sediment is invalid.</p>	<p>M3.1, stakeholders can contact SCCWRP regarding the availability of the unpublished results. It is important to note that the model used to represent the DC watershed is not documented in a published report; however, the model itself has been available to stakeholders for several years.</p> <p>See response to comment 30.61 above regarding Machado Lake. The loads from Machado Lake are excluded partially because of the implementation through the Proposition O funding. This case is different than the LAR and SGR metals TMDLs because the remediation/implementation activities in Machado Lake are actually funded and planned, which is not necessarily the case for full implementation of the LAR and SGR metals TMDLs.</p> <p>See response to comment 30.61 above regarding the model calibration comment as well as the comment on organic pollutants concentrations.</p>
30.64		<p>The Port of Long Beach provided a supplementary table of technical comments, including a table summarizing the Port of Long Beach Responses to RWQCB Responses on Appendix III Comments (RWQCB Table M4). This table generally reiterates previous Port of Long Beach comments; therefore, their principle concerns are summarized below:</p> <p>Model-predicted sediment deposition rate underestimates the sediment deposition rate in the harbor when compared with known data. The Ports strongly disagree with the statement that they agreed the sediment simulations were realistic. The USEPA</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 30.61, and 30.63 and Los Angeles Water Boards response to comments M1.6, M1.7, M1.11, M4.1, M4.2, M4.3, M4.4, M4.5, M4.6, M4.8, M4.9, M4.10, M4.14, 20.2 and overarching air dep response.</p> <p>Highlights from these responses and additional</p>

No.	Author	Comment	Response
		<p>has not communicated with the stakeholders that the entire TMDL conceptual framework would be established based on the model-predicted sedimentation rates in the harbor. The average concentration in the top 5 cm should not be used to calculate contaminant loading. Citing an “unpublished” document for a key component of the technical analysis violates USEPA guidelines and accepted scientific protocols as the stakeholders cannot review an “unpublished” document.</p> <p>Data used to define the watershed model and consequently the pollutant loadings appear to differ from data used to define the jurisdictional areas (comment refers to Figure 39 in Appendix II and jurisdictional area tables presented in Appendix III). Air deposition rates are reported in different units.</p> <p>Text should be modified to explain how the model results were used to show the dominant watershed sources of the waterbodies. If a watershed source was identified as impacting a waterbody, allocations for that waterbody should be made for that watershed source. Results of scenarios 3, 4, and 5 should be provided and discussed to explain and support the conclusion that upland sources impact downstream waterbodies.</p> <p>The described interactions between waterbodies and the role of watershed loadings on the waterbodies are not consistent with how the TMDL allocations were calculated. The use of the base and no uplands scenarios is not sufficient to identify specific watershed loadings for specific waterbodies. The use of all watershed loadings together contradicts how the TMDL WLAs were determined for individual waterbodies. Allocations were considered to be arbitrary because allocations were made for a negative percent watershed contribution, which is physically impossible. The policy for negative allocations referenced in the response does not apply to the negative watershed contributions in determining the WLAs. Nor does this policy apply to the</p>	<p>clarification that are associated with the principle concerns in the comments are provided below:</p> <p>See response to comment 30.61 above regarding comments on the simulated sediment deposition rates and average concentrations as the comments in this table are very similar to those presented above. In addition, please see response to comment 30.63 regarding the unpublished SCCWRP study.</p> <p>Data used to define the watershed model were watershed boundaries in GIS and these same boundaries were used to clip the jurisdictional boundaries; therefore, the sources referenced in the comment do not differ. The text in Appendices I Section 7.4 does explain the assignment of watersheds to each receiving water. As explained in this section, in some cases the watershed loading is distributed among more than one receiving water.</p> <p>Specific comments were provided requesting clarification or updates to the reports, including figures and tables. These revisions have not been made. This is considered a reasonable decision based on limited budget and requirement to complete the TMDLs within the deadline. Such modifications could be considered during a TMDL reopener.</p> <p>State Water Board determines that the interactions between waterbodies are consistent with how the TMDL allocations were calculated. Specifically, the MS4 WLAs were assigned based</p>

No.	Author	Comment	Response
		negative LAs due to the TIWRP WLAs specified for the Outer Harbor. Air deposition directly ending at the sediment bed is a fundamentally flawed assumption and should be changed. Model output should be provided prior to, not after, the TMDL is approved.	on the relative contribution from the upstream watershed when comparing two modeling scenarios. The output from the modeling scenarios considered various interactions between the waterbodies; therefore, the final output from the scenarios were specific to each waterbody. Please see response to comment 30.61 for additional discussion of the model scenarios used to represent required reductions and allocations as well as atmospheric deposition and availability of model files.
30.65		<p>The Port of Long Beach and Port of Los Angeles provided a supplementary table of technical comments, including a table summarizing the Ports' Responses to RWQCB Responses on CEQA Comments (Table 4). This table generally reiterates previous Port comments. Summarized below are comments which are not reiterations of previous Port comments, above.</p> <p>"The Regional Board's TMDL affirmatively demands somewhere between 11 and 38 million cubic yards of sediment dredging, removal, treatment and possibly capping from the Harbor sea bed. "</p> <p>"It is the burden of the Regional Board as the lead agency to point to substantial evidence in the record that indicates that these impacts will be reduced to less than significant levels. The Regional Board has failed to do so."</p> <p>Specific sites should be included in the CEQA analysis.</p> <p>Partial TMDLs should be considered an alternative and other alternatives should be considered.</p>	<p>The State Water Board concurs with the Los Angeles Water Board that the environmental impacts were adequately assessed and met the obligations of CEQA. The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 0.4, and Los Angeles Water Board's response to comment 20.8 and 20.11.</p> <p>The State Water Board disagrees that the TMDL "affirmatively demands somewhere between 11 and 38 million cubic yards of sediment dredging, removal, treatment and possibly capping from the Harbor sea bed." The TMDL does not specify the manner of compliance but does evaluate reasonably foreseeable methods of compliance and evaluates what quantity of sediment removal may be necessary to achieve compliance with the WLAs and LAs. The TMDL suggests that removal of about 11 million cubic yards would result in</p>

No.	Author	Comment	Response
		Linkage between sediment and water quality is not set.	<p>compliance with the WLAs and LAs. See response to comment 0.4.</p> <p>For specific sites see response to comment 32.97 and for partial TMDL see response to comment 30.44.</p> <p>The linkage is discussed in 0.2.</p> <p>It is not the burden of the Los Angeles Board to provide evidence that these impacts will be reduced to less than significant levels but instead the Los Angeles Board has made a Statement of Overriding Considerations.</p>
31	Port of Los Angeles		
31.0		<p>Port(s) are active stakeholders in TMDL:</p> <ul style="list-style-type: none"> -in cooperation with POLA, both Ports have spent \$3M in connection with TMDL, including monitoring data, hydrodynamic model, historical information, technical support and responding to Water Board and EPA staff; -conducting extensive fish studies in Harbor waters, building on EPA Superfund-led study, will be helpful for defining parameters that affect fish tissue aspects of TMDL; -continue to demonstrate efforts for safe sequestration of contaminated sediments, including agreement to accept 1.3M cubic yards of such material from throughout the region to be reused in Middle Harbor landfill -have adopted and now implementing the Water Resources Action Plan, which is a voluntary proactive effort to put in motion the programs, BMPs, and other measures to help meet TMDL; -is encouraged to see SQO Part I incorporated into the TMDL's Implementation Plan and Sediment Monitoring program. 	<p>State Water Board and Los Angeles Water Board appreciate the significant resources and continued efforts by Ports of Los Angeles and Long Beach to support TMDL development as well as to initiate implementation via WRAP and management of contaminated sediments.</p>
31.1		Our first major concern is the way the TMDL compliance	The TMDL technical approach recognizes the

No.	Author	Comment	Response
		<p>methodology handles the bedded sediments. No effort was made to determine whether toxics contained in sediments are transferred to or from the water body, and if so, at what rate. Without a sound understanding of this transfer dynamic, bedded sediments are treated as a source of contaminants in the TMDL equation. Since load and waste load allocations for all other non-sediment sources far exceed the TMDL, in order to compensate, the compliance burden is fully assigned to the load allocation for sediments. This means that the only way to achieve compliance is through continuous dredging to remove sediment mass regardless of the actual contribution of bedded sediments to toxicity in harbor waters. A more pronounced problem is that the TMDL targets cannot be met even after all bedded sediments have been removed from the harbor so long as other inputs continue. For example, there is inadequate analysis and understanding of the source contribution from aerial deposition, and no attempt was made to estimate reductions or put forward reduction strategies. This is a key area requiring additional technical study in order to more fairly determine the source reductions potentially assigned to sediments.</p> <p>As we have pointed out previously, the actions required by the TMDL could ultimately result in unintended consequences and net environmental harm. Large amounts of dredging could arbitrarily be required, which would destroy the healthy ecosystem already in place in the harbor as well as cause significant air quality, traffic, and other environmental impacts. Along these lines, our attached submittal includes the comments we have prepared regarding the environmental analysis in the Substitute Environmental Document.</p> <p>Furthermore, it makes no sense to dredge contaminated sediments in the harbor until upstream sources of contamination are controlled. Newly dredged areas will simply become recontaminated. A primary example of this significant problem</p>	<p>toxic pollutants are predominately associated with sediments and that toxins diffuse out of the sediments into the water column. Thus the fate and transport of toxic pollutants is assumed to be linked to the sediments, whether loading from upstream sources or air deposition or flux out of the bedded sediments. Given the chemical properties of the TMDL pollutants, hydrophobic nature and high affinity for sorption onto particulate matter, this approach and its underlying assumption are reasonable. State Water Board disagrees the TMDL requires continuous dredging to compensate for air deposition loads and that compliance requires dredging the whole harbor. See response to comment 0.3 and 0.4.</p> <p>As previously described State Water Board and Los Angeles Water Board have determined Dominguez Estuary and Consolidated Slip to be toxic hot spots and therefore the Boards consider methods of reducing pollutant loading into and within these waterbodies as highest priority. See Response to comment 29.60 and Los Angeles Water Board responses to comments 19.7 and 35.3.</p>

No.	Author	Comment	Response
		involves legacy contaminants that are found in sediments in the Dominguez Channel Estuary, an eight mile saltwater reach of channel immediately upstream of Consolidated Slip, a high priority contaminated site in the harbor. There is evidence to show that sediments from the Estuary are transported into Consolidated Slip and the rest of the harbor. It is imperative that this TMDL identify and engage all responsible parties to address ongoing inputs in order to prevent further contribution to legacy contamination and re-mobilization of sediments within the harbor.	
31.2		<p>New language related to fish tissue has resulted in a significant change to the TMDL. At the May 5, 3011 TMDL adoption hearing, the following language was added to the TMDL without any opportunity for public review or comment:</p> <p>“If at any point during the implementation plan, monitoring data or special studies indicate that load and waste load allocations will be attained, but fish tissue targets may not be achieved, the Regional Board shall reconsider the TMDL to modify the waste load and load allocations to ensure that the fish tissue targets are attained.”</p> <p>The implication of this added language is that fish tissue-related sediment targets for Los Angeles and Long Beach harbors, which are already unrealistically low, could be lowered at any time, even though there is inadequate evidence to ascertain the degree to which harbor sediments are contributing to the fish tissue toxicity. We ask that this language be removed in light of the inadequate understanding of the bioaccumulation processes. Further, the following specific steps are essential to a realistic and achievable TMDL.</p>	See response to comment 30.50 and 34.1.
31.3		The TMDL does not take into account that fish populations in the harbor very likely receive contaminant loadings from sources other than harbor sediments. Given the extensive foraging range for many of the species of concern (e.g. white croaker, halibut,	The State Water Board disagrees. The Staff Report includes an optional Special Study - Sediment and Fish Tissue Linkage Studies to determine the range and habitat of specific fish

No.	Author	Comment	Response
		etc.), a major source is likely the highly contaminated sediments found on the Palos Verdes Shelf. The TMDL, as written, could require actions that are outside the control of the currently named responsible parties, potentially resulting in significant expenditure of resources with little to no effect on tissue contaminant levels. Technical studies are planned to better understand foraging behavior and specifically what portion of contaminant uptake may be attributable to foraging in the harbor area.	populations within the receiving waterbodies, which can help guide implementation actions and the attainment of targets. Completion of studies linking sediment pollutant concentrations with fish tissue pollutant concentrations and evaluating the range and habitat of specific fish populations may be used to evaluate the attainment of targets, guide future implementation actions, and may lead to changes in TMDL targets, WLAs and LAs.
31.4		The fish tissue-related targets set in the TMDL disregard the most recent guidance from OEHHA, namely that Advisory Tissue Levels are more appropriate to protect human health than are the obsolete Fish Contaminant Goals. We have attached detailed comments on this point.	Most recent guidance from OEHHA is Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Polybrominated Diphenyl Ethers (PBDEs), which was published on June 9, 2011, after the TMDL was adopted, and only addressed PBDEs contaminants only. http://www.oehha.ca.gov/fish/gtltsv/index.html
31.5		We strongly urge that the TMDL be modified to set interim targets for sediment contaminant levels consistent with cleanup levels established for the PV Shelf, as fish movement between the two areas precludes their evaluation/regulation in isolation. This will set a protective interim goal while scientific studies are conducted to better inform/refine contaminant transfer estimates and will provide a more meaningful path toward reducing fish consumption risk.	Interim WLAs are intended to not allow any decrease in current condition and the use of 95th percentile values to develop interim limits is consistent with NPDES permitting methodology. The State Water Board finds that the assigned interim WLAs are appropriate and achievable. Results of Special Studies to refine contaminant transfer estimates will be considered when the studies are completed and will be used to revised the interim WLAs as appropriate.
31.6		The TMDL should explicitly require incorporation of Sediment Quality Objectives (SQO) Part II (indirect effects) endpoints and methodology when the SQO Part II is adopted as State policy. Applying the indirect effects methodology will establish a site-	Comment noted. Regional Board may reconsider the TMDL to incorporate the Sediment Quality Objectives (SQO) Part II as appropriate when it is adopted as State policy.

No.	Author	Comment	Response
		specific relationship between sediment-based contaminants and fish tissue contaminant burdens to more accurately reflect the potential contribution of harbor sediments to fish tissue toxicity. The Basin Plan Amendment, referring to an alternate means of compliance with the bioaccumulative part of the TMDL, states, “Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife”, However, the “resident finfish and wildlife” amendment is only a narrative and does not include risk assessment methodology.	
31.7		We request that the deadline for submission of the Sediment Management Plan for Los Angeles and Long Beach harbors be extended from 24 months to 35 months to mirror the extension granted for submittal of the monitoring plan, which was extended from 9 months to 30 months during the May 5, 3011 LARWQCB hearing. The draft Sediment Management Plan depends on data from the monitoring program and 4 months is not a feasible timeframe to incorporate this essential data. We will need to use the data from the monitoring program to draft the Sediment Management Plan.	The State Water Board rejects the request. The State Water Board finds that assigned 24-months deadline for submission of the Sediment Management Plan (SMP) for Los Angeles and Long Beach Harbors (24 months) is appropriate which provide sufficient time for responsible parties to develop and incorporate the monitoring data into the SMP.
31.8		<p>The Port of Los Angeles provided a supplementary table of technical comments, including a table summarizing the Port of Los Angeles Responses to RWQCB Responses to All Comments. This table generally reiterates previous Port of Los Angeles comments; therefore, their principle concerns are summarized below:</p> <p>RWQCB staff failed to address comment regarding the quality of data used to define current condition. RWQCB staff failed to acknowledge the schedule concerns. While actions may be underway, completion of Phase II cannot be guaranteed.</p>	<p>State Water Board reviewed the Los Angeles Water Board’s responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and 30.58 and Los Angeles Water Board’s response to comments 20.1, 20.2, 20.3, 20.4, 20.8, 20.9, 20.10, 20.11, 20.14, 22.1, and 22.5.</p> <p>Highlights from these responses and additional clarification that are associated with the principle concerns in the comments are provided below:</p>

No.	Author	Comment	Response
		<p>The provided responses do not substantially support the use of ERLs and the defense of the linkage analysis is insufficient. Many of the comments in this table were related to the comment tables</p>	<p>Final data available at the time of TMDL development were used in the assessments and TMDL development. If additional final data are available, then those can be similarly evaluated and integrated with the previous assessment results. State Board finds that the schedule has sufficient flexibility and that the planned reconsideration of the TMDL may be an appropriate time to reconsidered the schedule, if necessary.</p> <p>The State Water Board responses to comments that are related to the Port of Long Beach comments are provided above (see response to comment 30.58).</p>
32	Rutan & Tucker		
32.1	(Introduction)	<p>Initially, on the procedure set up by the State Board, the Cities reject the State Board's suggestion in its September 20, 2011 Notice of Opportunity to Comment that "the commenter must explain why and in what manner each of the responses provided by the Los Angeles Water Board to each comment was inadequate or incorrect" or else "the State Water Board will presume that the Los Angeles Water Board's response adequately addressed the commenter's concern." (State Board's September 20, 2011 Notice of Opportunity to Comment — hereafter "State Board Notice," p. 2.) This attempt by the State Board to unilaterally limit the identified concerns of opponents of the proposed TMDL is inappropriate. For example, under the California Environmental Quality Act ("CEQA"), the final actions of both the Regional Board and the State Board (collectively, "Boards") must contain written responses to significant environmental points raised during the evaluation process. The responses must include a "good faith and reasoned analysis" of</p>	<p>The State Water Board's Notice of Opportunity to Comment concerning this Basin Plan amendment accurately informs interested persons of the procedural requirements used to implement the State Water Board's regulatory programs. According to the State Water Board's CEQA Regulations (23 Cal. Code Regs. § 3779, subd. (f)):</p> <p>The State Water Board, when considering approval of a regional board's adoption of an amendment to its water quality control plan or guideline, shall prescribe a comment period of not less than 30 days. The State Water Board may refuse to accept any comments received after the noticed deadline. All comments submitted to the state board must be specifically related to the final</p>

No.	Author	Comment	Response
		<p>why specific comments and objections were not accepted. (<i>Ebbetts Pass Forest Watch v. Dept. of Forestry</i> (2008) 123 Ca1.4th 936, 943; <i>Gallegos v. State Bd. of Forestry</i> (1978) 76 Cal. App.3d 945, 954; Pub. Res. Code § 21080.5(d)(2)(D).) The written response requirement "ensures that members of the [Boards] will fully consider the information necessary to render decisions that intelligently take into account the environmental consequences." (<i>Mountain Lion Foundation v. Fish & Game Com.</i> (1997) 16 Ca1.4th 105, 133.)</p>	<p>amendment adopted by the regional board. If the regional board previously responded to the comment, the commenter must explain why it believes that the regional board's response was inadequate. The commenter must include either a statement that each of the comments was timely raised before the regional board, or an explanation of why the commenter was unable to raise the specific comment before the regional board. The State Water Board may refuse to accept any comments that do not include such a statement. The State Water Board is not required to consider any comment that is not in compliance with this section.</p>
32.2	(Introduction)	<p>Whether the Regional Board and the State Board adequately addressed the Cities' concerns and responded to such comments with the requisite good faith and reasoned analyses will be determined by the responses themselves, not by whether the Cities explained, in response to the Regional Board's Responses to Comments, why and how the Regional Board failed to comply with the law. The burden is on the Boards, not the commentators, to provide adequate Responses to Comments. Indeed, the Cities respectfully submit that the Regional Board's responses to the Cities' Comments were universally deficient, conclusory, and nonresponsive.</p>	<p>Comment noted.</p>
32.3	(Introduction)	<p>Accordingly, except as modified or added to below, the Cities incorporate herein by reference all of the RB Comments to the proposed TMDL, particularly including those comments concerning the Substitute Environmental Document ("SED"). Without waiving any of the objections/comments raised with the Regional Board, and to provide the State Board with an explanation of why the Regional Board's Responses to Comments and/or BPA changes on the more significant concerns</p>	<p>See response 32.1.</p>

No.	Author	Comment	Response
		<p>were patently deficient, the following comments are provided. The Comments below track the Roman numeral headings and order of the February 2011 RB Comments (enclosed).</p>	
32.4	(Introduction)	<p>Initially, however, it is important to note that at the hearing on the TMDL before the Regional Board, substantive changes were made to the TMDL after the close of the public hearing by the Regional Board. Such changes amended the proposed Basin Plan Amendment ("BPA") to include language providing for the reopening and imposition of yet additional requirements on the responsible entities to further address fish tissue targets. The entire dialogue on this issue (see May 5, 2011, Transcript of Hearing before the Regional Board -- "Transcript", pp. 182-197) not only reflects the making of significant and substantive changes to the TMDL (again, all after the close of the public hearing), it also reflects the Regional Board's complete lack of understanding and analysis of the "proper technical conditions" involving the TMDL, required for the development of a proper TMDL. (See 43 Fed. Reg. 60662.)</p>	<p>The State Water Board disagrees with the commenter. First, there were no substantive changes made to the TMDL after the close of the public hearing. The public hearing did not close until the Board members voted. According to the transcript, the Los Angeles Regional Board members did not vote on adoption of the TMDL until pages 249-250, which was after the transcript pages that the commenter cites. Second, any substantive changes or modifications made to the basin plan amendment prior to the board's vote were a logical outgrowth of the comments and concerns raised either during the public comment period and/or at the public hearing. In fact, it is standard practice for this Board and all regional boards to make substantive changes to a proposed Order or Basin Plan Amendment prior to the close of the hearing, so long as those changes are a logical outgrowth of the public comments received. The water boards apply this rule based on the courts' interpretation of the federal Administrative Procedures Act and USEPA's rulemaking regulations. In <i>NRDC v. USEPA</i> (9th Cir. 2002) 279 F.3d 1180, 1186, the court explained, "Of course, the final permit issued by the agency need not be identical to the draft permit. That would be antithetical to the whole concept of notice and comment. Indeed, it is 'the expectation that the final rules will be somewhat different and improved from the rules originally proposed by the agency.'" Regulatory agencies</p>

No.	Author	Comment	Response
			<p>frequently cannot predict the practical impact of proposed regulations. The public's objective is to persuade the agency into action that may differ from the proposal. If such persuasion is successful, then the final rule or order will likely diverge from the originally proposed draft. See also <i>NRDC v. USEPA</i> (9th Cir. 1988) 863 F.2d 1420, 1429 ("The agency must have authority to promulgate a final rule that differs in some particulars from its proposed rule. Otherwise, the process might never end. If the final rule deviates too sharply from the proposal, however, affected parties will have been deprived of notice and an opportunity to respond to the rule. Accordingly, a final rule which departs from a proposed rule must be a 'logical outgrowth' of the proposed rule.").</p>
32.5	(Introduction)	<p>Further, the belated inclusion of the additional "fish tissue" language was not a logical outgrowth from the noticed TMDL, and was not addressed, nor reasonably anticipated from the public notice provided by the Regional Board in connection with the hearing on the adoption of the TMDL. As such, the changes made to the Basin Plan Amendment ("BPA") were not properly noticed and were not made pursuant to applicable law requiring a "public hearing" on all such changes to the Basin Plan. These Regional Board changes thus violated basic due process and notice and hearing requirements. (See e.g., CWC § 133244 ["The regional boards shall not adopt any water quality control plan unless a public hearing is first held, after the giving of notice of such hearing by publication in the affected county or counties pursuant to Section 6061 of the Government Code."].) The failure of the Regional Board to follow basic notice, hearing and due process requirements before making such substantive changes to the Basin Plan, prevents the State Board from approving the subject TMDL in its present form at this time.</p>	<p>The Los Angeles Water Board complied with due process and provided adequate notice of the public hearing to all interested parties. In addition, any changes to fish tissue targets in the basin plan amendment were a logical outgrowth of the comments received. Various commenters before the Los Angeles Water Board raised concerns about the fish tissue targets in their comment letters: see, e.g., Los Angeles Water Board comments 20.2-20.4, 20.7, 22.3, 35.4(a). As such, the public could have reasonably anticipated that the Los Angeles Water Board would make some changes regarding fish tissue targets in the final basin plan amendment. See also response 32.4.</p>

No.	Author	Comment	Response
32.6	(Formal Consent Decree)	<p>In a Consent Decree approved by the U.S. District Court in and for the Central District of California and entered in August 24, 1999 (hereafter, "Cities Consent Decree," "Decree" or "CD"), the District Court issued an Order that included two important "Covenants Not to Sue" on behalf of the United States and the State of California, including all "agencies and instrumentalities thereof," with the Regional Board itself being a signatory to the Decree. In the first Covenant Not to Sue in the Decree, the State of California promised: not to sue or take any administrative action against the "Settling Local Governmental Entities" (includes every city in the Los Angeles County, the County of Los Angeles, and the County Sanitation Districts), as follows:</p> <p style="padding-left: 40px;">Except as specifically provided in paragraphs 12 and 13 of this Amended Decree, the United States, and the State, and agencies or instrumentalities thereof, each hereby covenants not to sue or to take any other civil or administrative action against any of the Settling Local Governmental Entities for any and all civil or administrative liability to the United States, the State, and agencies or instrumentalities thereof, for Natural Resource Damages under CERCLA, 42 U.S.C. §§ 9601 et seq., or under any other federal, State or common law. (Decree, pp. 30-31.)</p> <p>The Cities Consent Decree also contains a second "Covenant Not to Sue" against both the United States, the State of California, and their instrumentalities, concerning the "Montrose NPL Site," as follows:</p> <p style="padding-left: 40px;">"not to sue or take administrative action against any of the Settling Local Governmental Entities, to compel response activities or to recover a Response Cost incurred or to be incurred in the future in connection with the Montrose NPL Site including, but not limited to, costs for studies and evaluations of the area covered by Response Activities under CERCLA §§ 106 and 107, 42 U.S.C. §§ 9606 and 9607, or pursuant to the California Hazardous Substance</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 11.3, 24.5, and 30.54, and Los Angeles Water Board's response to comment 1.1 and 39.1.</p>

No.	Author	Comment	Response
		<p>Account Act, California Health & Safety Code §§ 25300 et seq., or any other state statute or state common law." (Decree, pp. 42-43.)</p> <p>The term "Natural Resource Damages" is defined broadly in the Decree to mean "damages, including loss of use, restoration costs, resource replacement costs or equivalent resource values, and damage assessment costs, and Response Costs incurred by the Trustees, with respect to injury to, destruction of, or loss of any and all natural resources in and around the Montrose NPL Site and the Montrose NRD Area." (Decree, p. 26.)</p> <p>The terms "Montrose NPL Site" and "Montrose NRD Area" are also each defined broadly. The "Montrose NPL Site" is defined to include among other areas, "the Kenwood Drain; the Torrance Lateral; the Dominguez Channel (from Laguna Dominguez to the Consolidated Slip); [and] the portion of the Los Angeles Harbor known as the Consolidated Slip from the mouth of the Dominguez Channel south to but not including or proceeding beyond, Pier 200B and Pier 200Y." The "Montrose NRD Area" is similarly defined to include an expansive area that encompasses "the Channel Islands, the Palos Verdes Shelf, the San Pedro Channel, including Santa Catalina Island, and the Los Angeles and Long Beach Harbors as described in the Complaint." (Cities Consent Decree, pp. 24-25.)</p> <p>In short, in August of 1999, the U.S. District Court entered an Order prohibiting the State of California and the United States from taking any administrative action against the Cities "to compel response activities" regarding the Dominguez Channel, the Consolidated Slip, the Kenwood Drain and the Torrance Lateral, and prohibiting the State and U.S. Governments from taking "any other civil or administrative action" against the Settling Local Governmental Entities for any "restoration costs" or any "injury to, destruction of, or loss of any and all natural resources in and around" each of the above referenced areas as well as the "Los</p>	

No.	Author	Comment	Response
		<p>Angeles and Long Beach Harbors." (Decree, pp. 30-31 and 42-43.) In return, the "Settling Local Governmental Entities" paid, through funds or in-lieu services, \$45.7 million to resolve all such claims for Natural Resource Damages, and all rights "to sue or take administrative action" to "compel response activities" or to recover "Response Costs" involving the Montrose NPL Site. Accordingly, any attempt to utilize the subject TMDL to "compel response activities" at this time within the Los Angeles and Long Beach Harbors, or to take action to accomplish the "restoration" of the Dominguez Channel; the Consolidated Slip, the Los Angeles and Long Beach Harbors, the Kenwood Drain or the Torrance Lateral, or any other areas governed by the Cities Consent Decree, is directly prohibited by such Decree. All portions of the subject TMDL which seek to compel such "response activities," and/or "restoration" work, are expressly and directly in a conflict with, and prohibited by, the Cities Consent Decree.</p>	
32.7	(Formal Consent Decree)	<p>As expressly set forth in the Basin Plan Amendment ("BPA"), and further explained in the TMDL staff report: "The goal of this TMDL is to protect and restore fish tissue, water and sediment quality in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters by removing contaminated sediment and controlling the sediment loading and accumulation of contaminated sediment in the harbors." (See BPA, p. 2; also see discussion in RB Comments at pp. 3-4.) In fact, as discussed in the RB Comments, not only is the prime goal of the subject TMDL to "protect and restore fish tissue, water and sediment, quality ... by removing contaminated sediment," by far, the "removal" of the contaminated sediment is the single most expensive component of the TMDL in issue, undoubtedly because of the enormous quantity of sediment to be removed and the unit cost of this removal work. As such, there can be no legitimate dispute that the removal of the existing contaminated sediment is the single most important and expensive component of the TMDL.</p>	<p>Comment noted. The State Water Board does not dispute that removal of contaminated sediment can be costly. However, as the Los Angeles Water Board noted in its response 23.9, "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."</p>

No.	Author	Comment	Response
32.8	(Formal Consent Decree)	However, in light of the clear language of the Cities Consent Decree, and the consideration already paid by the Settling Local Government Entities to resolve their alleged responsibility under the Decree, i.e., \$47.5 million, and given the unambiguous promises made by the State of California, including the Regional Board, "not to sue or take any other civil or administrative action against any of the Settling Local Governmental Entities for any and all civil or administrative liability ... for Natural Resource Damages ... under any other federal, State or common law," any obligation imposed under the TMDL at this time on these Settling Local Governmental Entities to "remove" contaminated sediment, or to otherwise take any other assessment or remedial action to address the existing contaminated sediment within the areas covered by the Consent Decree, is expressly prohibited by the terms of the Decree. So too is any administrative action to "compel response activities" in the Dominguez Channel, the Consolidated Slip, the Kenwood Drain or the Torrance Lateral.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.
32.9	(Formal Consent Decree)	In its Responses to Comments on these issues, the Regional Board utterly failed to address these concerns. Particularly, in its Responses to Comments, the Regional Board asserted "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." (Regional Board Response to Comment 1.1.) The Regional Board goes on to claim that 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 that "nothing in the CD supersedes the Regional Water Quality Control Board's authority to adopt and implement TMDLs pursuant to Clean Water Act § 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	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.

No.	Author	Comment	Response
		Costs, as those terms are used in the CD. [Citation.]" (Id.)	
32.10	(Formal Consent Decree)	The obvious defect with the Regional Board's Responses to Comments on the application of the Decree is that the TMDL is clearly "an administrative action" being pursued against the Settling Local Governmental Entities for "Natural Resource Damages" under State law. As discussed, the term "Natural Resource Damages" specifically includes "restoration costs," "resource replacement costs or equivalent resource values," "with respect to injury to, destruction of, or loss of any and all Natural Resources in and around the Montrose NPL Site and the Montrose NRD Area." (Cities Consent Decree, p. 26.) Moreover, the Decree specifically prohibits the State, including the Regional Board, from taking "administrative action against any of the Settling Local Governmental Entities, to compel response activities or to recover Response Costs incurred or to be incurred in the future in connection with the Montrose NPL Site." (Decree, p. 42.)	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.
32.11	(Formal Consent Decree)	The Regional Board's Responses to Comments completely fail to address how or why these clear provisions of the Decree do not apply, where it is clear on their face they do apply, and where it is clear from the plain language in the Decree that they were expressly designed to prohibit the Boards from "compelling" these Cities to take any such removal or remedial activities in the described areas.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 11.3 and Los Angeles Water Board's response to comment 1.1 and 39.1.
32.12	(Formal Consent Decree)	The Regional Board also asserts in its Responses to Comments that the Permittees are responsible for insuring that waste discharges from their facilities "cannot cause or contribute to exceedances of water quality standards." (Regional Board Responses to Comments, p. 4.) However, the Cities are not contending that those aspects of the TMDL that limit future discharges of pollutants, cannot be regulated by the Regional and State Boards pursuant to a TMDL. Rather, the Cities are	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.

No.	Author	Comment	Response
		asserting, and it is clear from the face of the Decree, that existing sediment contamination in the subject areas cannot be made to be the responsibility of the Cities herein, nor the responsibility of any of the other Settling Local Governmental Entities, as any and all obligations involving the existing sediment contaminants have already been resolved by the Cities Consent Decree.	
32.13	(Formal Consent Decree)	Moreover, during the course of the hearing before the Regional Board on the TMDL, the Regional Board's Counsel asserted that the Cities Consent Decree only applied to certain limited pollutants, namely DDT and PCBs (Transcript, p. 129). However, the terms of the Cities Consent Decree do not in any way support this claim, and to the contrary, directly refute the assertion. Specifically, nothing in the Cities Consent Decree limits the application of the Decree to any particular pollutants or class of pollutants. (See e.g., p. 30 [making clear the Decree applies to all "hazardous substance contamination"].) And, in fact, various portions of the Decree confirm that the Decree is not so limited. (See e.g., Decree, p. 32.) [providing that a previously identified natural resource injury caused by the release "of a hazardous substance, including hazardous substances other than PCB or DDT," shall not be considered "New Information or Unknown Conditions" — and would therefore be covered by the Covenant Not to Sue or take administrative action in connection with any Natural Resource Damage].)	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.
32.14	(Formal Consent Decree)	The Regional Board further asserts in its Responses to Comments that "the fact that sediment is contaminated from prior releases of hazardous substances does not make this TMDL unlawful. In fact, bioaccumulation of pollutants and aquatic life tissue as well as sediment toxicity are two major factors used in placing water segments on a 303(d) list." (Response to Comments 1.1, p. 4.) The Response goes on to cite to the Calleguas Creek TMDL (which allegedly involved PCBs) and asserts that the subject TMDL "addresses PCBs and other toxic	Comment noted.

No.	Author	Comment	Response
		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." (Regional Board's Response to Comments 1.1, p. 4.)	
32.15	(Formal Consent Decree)	These Responses to Comments again entirely miss the legal effect of the Decree. In fact, the Cities have not alleged that the existence of prior releases of hazardous substances make the TMDL unlawful; instead, it is the attempt by the Boards to impose requirements on the Cities to "remove" contaminated settlement or otherwise "restore" the area by removing the existing contaminated sediment, which causes the TMDL to be in conflict with the Decree and therefore unlawful.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.
32.16	(Formal Consent Decree)	Furthermore, with or without the Decree, as discussed below, although it is appropriate to use a TMDL to control future releases of pollutants to the extent they are being discharged into an impaired water body, it is not appropriate to utilize a TMDL to force the cleanup of previously released pollutants. To the contrary, the authority to require a responsible party to address previously released pollutants, and thus to remediate existing soil, groundwater and/or surface water contamination, does not exist under the TMDL provisions of the Clean Water Act.	The State Water Board disagrees with the commenter's assertions regarding the TMDL's ability to assign load allocations to bed sediments. Bioaccumulative legacy pollutants are not beyond the scope of the TMDL's regulatory action. 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. As the Los Angeles Water Board noted in response 33.10, " 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." In addition, in Los Angeles Water Board response 30.14, "pollutants such as DDT, PCBs, dieldrin and chlordane exist within the urban areas and therefore are still entering the receiving waters via stormwater runoff." Because allocations are assigned to pollutant sources, it is appropriate to assign load

No.	Author	Comment	Response
			allocations to bed sediments. See also Los Angeles Water Board response 23.6(a)(iii).
32.17	(Formal Consent Decree)	In short, the Boards are prevented from taking "administrative action" through the subject TMDL or otherwise, to force any of the "Settling Local Governmental Entities" to "restore" water and sediment quality by taking any action to "remove" or "remediate" existing contaminated sediment within the Dominguez Channel or Los Angeles and Long Beach Harbors areas, or the other areas covered by the Cities Consent Decree.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.
32.18	(Formal Consent Decree)	Finally, it should be noted that at the Regional Board hearing on May 5, 2011, Board Counsel suggested language to be added to the BPA apparently in light of the oral comments presented during the course of the hearing. However, the language added by the Board's Counsel merely described the existence of the Cities Consent Decree (see BPA, p. 32), and simply require the Regional Board's Executive Officer to "consider the Consent Decree for the Montrose Superfund Site in determining whether to approve the CSMP [Contaminated Sediment Management Plan]." (BPA Table 7-40.2, p. 37.) The problem with each of these two references added at the hearing is that they do absolutely nothing to address the legal conflict between the Decree and the language in the TMDL requiring the "removal" or "remediation" of the contaminated sediment so as to "restore" the water bodies.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 1.1 and 39.1.
32.19	(Formal Consent Decree)	In light of the Cities Consent Decree, the proposed TMDL cannot be adopted so long as it continues to "compel response activities" or other "restoration" activities in direct conflict with the Decree.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 11.3 and Los Angeles Water Board's response to comment 1.1 and 39.1.
32.20	(Contaminate	As discussed in the Regional Board's final Resolution, and addressed in much more detail in the RB Comments starting on	Comment noted

No.	Author	Comment	Response
	d Sediment Clean Up Vehicle)	page 8, a TMDL is defined as "the sum of the individual wasteload allocations for point sources, load allocations for non-point sources and natural background." (Regional Board Final Resolution, p. 1-2, citing 40 C.F.R. 130.2; <i>also see, Dioxin/Organic Chlorine CTR v. Clarke</i> (9 th Cir. 1995) 57 F.3d 517, 520 ["A TMDL defines the specified maximum amount of a pollutant <i>which can be discharged or 'loaded'</i> into the waters at issue from all combined sources."]; <i>and City of Arcadia et al. v. State Water Resources Control Board</i> (2006) 135 Cal.App.4th 1392, 1404 [similarly describing a TMDL as specifying the maximum amount of pollutant " <i>which can be discharged or loaded.</i> "].)	
32.21	(Contaminated Sediment Clean Up Vehicle)	In its Responses to Comments, the Regional Board claims that "the fact that sediment is contaminated from prior releases of hazardous substances does not make this TMDL unlawful." Said Board goes on to refer to a San Francisco Bay Regional Board TMDL for PCBs and to assert that "this TMDL addresses PCBs and other toxic pollutants that persist in the environment from past discharges." (Response to Comment 39.2, p. 257.) Again, however, the Response to Comment misses the point.	Comment noted.
32.22	(Contaminated Sediment Clean Up Vehicle)	It is not the existence of contaminated sediment "from prior releases of hazardous substances" that makes the TMDL unlawful; rather, it is the attempt by the Boards, through the use of a TMDL to address prior release of pollutants, that makes the TMDL unlawful. Specifically, it is the admitted objective of the TMDL, to require the "removal" of contaminated sediment, that makes the TMDL legally improper, since by definition, a TMDL can only be used to limit the amount of future discharges of pollutants, and cannot be used to force the remediation of prior/past discharges of pollutants. (See 33 U. S. C. § 1313(d)(1)(c).)	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 32.16 and Los Angeles Water Board's response to comment 39.2..
32.23	(Contaminated Sediment Clean Up Vehicle)	Nowhere in the Clean Water Act, or in the regulations thereunder,	State Water Board reviewed the Los Angeles

No.	Author	Comment	Response
	minate d Sedime nt Clean Up Vehicle)	is there any authority for using a TMDL to force the removal or remediation of existing contaminated sediment or contamination in surface water or groundwater. To the contrary, under the plain language of the Clean Water Act, specifically Section 1313(d)(1)(C) of the Act, each State is to establish, for impaired water bodies, "the total maximum daily load, for those pollutants which the administrator identifies ... as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonable variations and a marginal safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality." (33 U.S.C. § 1313(d)(1)(C).)	Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 32.16 and Los Angeles Water Board's response to comment 39.2.
32.24	(Conta minate d Sedime nt Clean Up Vehicle)	The regulations under the Clean Water Act which define a TMDL similarly confirm that a TMDL is the "sum of the individual WLAs [wasteload allocations] for point sources and LA [load allocations] for non-point sources and natural background." (40 C.F.R. § 130.2(i).) A "wasteload allocation" or "WLA" is defined as being a "portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-effluent limitation." (40 C.F.R. § 130.2(h).) Moreover, a load allocation is defined as "the portion of a receiving waters 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 a water can receive without violating water quality standards." (40 C.F.R. § 130.2(f), emphasis added.) Thus, by its definition, a TMDL establishes that amount of a "load" that may be discharged; it does not, however, establish the amount of load that must be removed or remediated from existing contaminated sediment.	The TMDL establishes a load allocation for existing bed sediment because the re-suspension of these sediments and diffusive flux into the water column contributes to fish tissue impairments. Based on 40 CFR citations, allocations are assigned to pollutant sources and loading capacity applies to the [whole] water so as not to exceed water quality standards. Given that WQS applies to all applicable beneficial uses, including aquatic organisms and their habitat, it is appropriate to consider bed sediments within the loading capacity. We disagree with the commenter regarding that a load must be discharged. See also response 32.16. These TMDLs do not establish the amount of load that must be removed or remediated – they simply establish the amount of load that can remain in the waterbodies and still achieve the applicable WQS.
32.25	(Conta	In short, nothing in the language of the Clean Water Act, nor the	The State Water Board disagrees with the

No.	Author	Comment	Response
	minate d Sedime nt Clean Up Vehicle)	federal regulations thereto, authorizes the Boards to utilize a TMDL as a "Cleanup and Abatement Order" or any other form of enforcement action to force the removal or remediation of existing contaminated sediment or other contaminated soil or groundwater. To the contrary, as discussed in the RB Comments, other State and federal mechanisms have been adopted by Congress (e.g., the Comprehensive Environmental Response Compensation and Liability Act ("CERCLA" — 42 U.S.C. 9601, et seq.) as well as by the California Legislature (e.g., CWC § 13304) to force the cleanup of previously discharged hazardous substances.	commenter's assertions. The TMDL is neither a Cleanup and Abatement Order nor a form of enforcement action. Clean Water Act section 303(d)(1) requires each state to identify the waters within its boundaries that do not meet water quality standards. The Dominguez Channel watershed is impaired with toxic pollutants, including several metals, several PAHs, chlordane, toxaphene, dieldrin, DDT, and PCBs. As such, the TMDL is an appropriate mechanism for setting allocations of the 79 impairments for toxic pollutants in order to achieve water quality standards in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters. As the Los Angeles Water Board noted in response 23.6(a), "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." The TMDL does not mandate removal or remediation of the sediment, but anticipates that some removal will be necessary to remediate the sediments during implementation of the TMDL. See also responses 32.16 and 32.24.
32.26	(Conta minate d Sedime nt Clean Up Vehicle)	The Regional Board in its Responses to Comments has failed to respond to this issue, and the core of the subject TMDL which require the removal and/or remediation of existing contaminated sediments, is not authorized by law.	See response 32.25.

No.	Author	Comment	Response
32.27	(California Administrative Procedures Act Violations)	<p>Except as otherwise discussed below, the Cities hereby reiterate and incorporate all of the RB Comments concerning the lack of compliance with the California Administrative Procedures Act ("APA") into these Comments as though fully set forth herein. The Regional Board ignored most all of the RB Comments involving the Regional Board's failure to comply with the APA, and appears to have made only limited changes to address the lack of "clarity" that existed with the prior draft of the TMDL. Importantly the Regional Board failed to rectify any of the significant "clarity" deficiencies with the TMDL. Furthermore, the Regional Board made no changes to address any of the "necessity," "authority" or "non-duplication" problems under the APA with the TMDL, and its Responses to such Comments were entirely irrelevant and/or non-responsive in this regard.</p>	<p>The Los Angeles Water Board did, in fact, respond to the commenter's concerns that the TMDL did not comply with the APA, in response 39.3. In addition, the Los Angeles Water Board did make clarifying changes in the revised tentative basin plan amendment. which was posted on the Los Angeles Boards website in trackchanges so that changes made would easily be identified. The Regional Board has discretion whether to accept or reject all of the clarifying changes requested by the commenter.</p> <p>Federal law compels the adoption of the TMDL. Clean Water Act section 303(d) requires states to adopt TMDLs for impaired waterbodies. The Dominguez Channel and Greater Harbor Waters are on the 303(d) list because they are impaired for various toxic metals, and so the Los Angeles Water Board was required to adopt the TMDL in order to attain and maintain water quality standards in these waterbodies. Moreover, the regulatory action meets the "necessity" standard of the Administrative Procedures Act, Government Code section 11353, subdivision (b). The TMDL is necessary to carry out the express requirements of Congress to establish TMDLs at a level that achieves water quality standards. The fourth appellate district court has affirmed what statutory authority commands: "The statute applicable to establishing a TMDL, 33 United States Code section 1313(d)(1)(C), does not suggest that practicality is a consideration. To the contrary, a regional board is required to establish a TMDL 'at a level necessary to implement the applicable water quality standards with seasonal</p>

No.	Author	Comment	Response
			<p>variations and a margin of safety.” (<i>City of Arcadia v. State Water Resources Control Bd.</i> (2006) 135 Cal.App.4th 1392, 1428.) Moreover, federal law and regulations require that TMDLs be incorporated or referenced in the state’s water quality management plan. The Regional Board’s Basin Plan is a component of the water quality management plan, and the Basin Plan is how the Regional Board takes quasi-legislative, planning actions. Because the TMDL is a program of implementation for existing water quality objectives, it is therefore an appropriate component of the Basin Plan under Water Code section 13242. The necessity of developing a TMDL is established in the Staff Report, the 303(d) List, and the data contained in the administrative record documenting the toxic metals impairments in the Dominguez Channel and Greater Harbor waters.</p>
32.28	(California Administrative Procedures Act Violations)	<p>In its Responses to Comments, the Regional Board made the unsupported assertion that the TMDL was "necessary" under the APA, based on CWC section 13242 and Section 303(d)(1)(C) of the Clean Water Act, as well as 40 C.F.R. § 130.6(c)(1). (Response to Comment 39.3, pp. 257-58.) The Regional Board also claimed that "with respect to the comments about 'clarity,' staff concurs that some changes would improve clarity. (See the revised tentative Basin Plan Amendment.)" (Id.) The Response to Comments contains no other substantive comments on the APA deficiencies, and as a result, the subject TMDL remains contrary to the requirements of the APA and cannot lawfully be adopted at this time.</p>	See response 32.27.
32.29	(California	<p>First, it must be recognized that the Regional Board Responses to Comments completely ignored the arguments made on the lack of</p>	<p>The TMDL does not specify the means of compliance; it does not require a specific means</p>

No.	Author	Comment	Response
	Admin Procedures Act Violations)	"authority" to adopt the subject TMDL in the first instance. The arguments on the lack of "authority," as set forth in the RB Comments, are based on the fact that the Clean Water Act does not authorize the issuance of a "total maximum daily load" as a means of requiring "removal" or "remedial" action to address previously released pollutants. (See RB Comments, pp. 12-13, and discussions, supra.) The Regional Board never responded to this Comment and never addressed this deficiency with the TMDL.	of implementation. See responses 32.25 and 32.27.
32.30	(California Admin Procedures Act Violations)	Similarly, the Regional Board never responded to the concern that it lacked the "authority" under the APA to adopt the subject TMDL because the subject TMDL constitutes an "administrative action" to force the Cities and the other Settling Local Governmental Entities to address contaminated sediment when the issue of contaminated sediment has already been resolved by the Decree. (See RB Comments pp. 3-8, and discussion supra.)	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's responses to comments 1.1, 30.1, and 31.1
32.31	(California Admin Procedures Act Violations)	In addition, as set forth in the RB Comments, the TMDL fails both the "necessity" and "non-duplication" tests under the APA, in light of the existing metals TMDLs for the Los Angeles and San Gabriel Rivers, as well as the metals TMDL for the Los Cerritos Channel. Because of these three existing metals TMDLs for the identified water bodies, each of these three water bodies are already governed by metals TMDLs, and the applicable wasteload allocations therein. The Regional Board Responses to Comments entirely fail to address this lack of "necessity" argument and the need for the TMDL to avoid "non-duplication" under the APA. As such, for these reasons as well, as explained in the RB Comments, the proposed TMDL cannot legally be adopted at this time. (See RB Comments, pp. 20-23.)	The fact that other metals TMDLs exist for the Los Angeles River, San Gabriel River, and Los Cerritos Channel, respectively, has no bearing on the APA's necessity or non-duplication requirements as applied to this Dominguez Channel watershed TMDL. A TMDL is not one-size-fits-all. Pursuant to Clean Water Act section 303(d), each state must identify, rank, and list the waters within its boundaries that do not meet water quality standards. For each listed waterbody, the state is required to establish a TMDL for each pollutant impairing the water quality standards in that waterbody. The Los Angeles River, the San Gabriel River, the Los Cerritos Channel, and the Dominguez Channel are all separate waterbodies, each with their own specific anthropogenic and natural background

No.	Author	Comment	Response
			sources of metal pollutants. Because these waterbodies have their own separate pollutant loading problems, it is highly unlikely that the wasteload and load allocations of toxic metals for this TMDL would be identical to the wasteload and load allocations for the LA River, San Gabriel River, or Los Cerritos Channel TMDLs. As such, the Los Angeles Water Board must develop a TMDL specific to toxic metals in the Dominguez Channel and Greater Harbor Waters.
32.32	(California Admin Procedures Act Violations)	Finally, the RB Comments involving the violations of the APA include a lengthy discussion on the various areas of the TMDL that lack "clarity." The Regional Board's Responses to Comments indicate that they concur that "some changes that improve clarity" are to be made, and then refer to the revised "tentative Basin Plan Amendment," presumably meaning certain changes have been made to the TMDL in the BPA to address some of the ambiguities. Unfortunately, with one exception, the revisions to the revised Basin Plan Amendment fail to address any of the significant "clarity" deficiencies raised in the RB Comments.	The State Water Board disagrees with the commenter's assertions. The Los Angeles Water Board made a variety of clarifying changes in response to the comments received, and has the discretion to decide whether it should make any changes in response to those comments, provided the final basin plan amendment is supported by substantial evidence.
32.33	(California Admin Procedures Act Violations)	Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL: 1. The proposed TMDL specifically fails to identify the particular requirements for sediment removal or remediation that are or may be imposed upon any particular city (excepting possibly the Ports of Los Angeles and Long Beach) either now or in the future, and further fails to otherwise identify with any "clarity" what is required of any individual city to meet a particular wasteload or load allocation for a particular pollutant. For example, the TMDL fails to identify whether any city or other local agency, outside of the Ports of Los Angeles or Long Beach, are or will be obligated to conduct dredging of contaminated sediments under the TMDL, and if in the future, what	Pursuant to Water Code section 13360, "No waste discharge requirement or other order of a regional board or the state board or decree of a court issued under this division shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner." Because the TMDL cannot specify the manner of compliance, the TMDL cannot and does not require dredging as a means of implementation. As such, the TMDL will not identify any requirements for sediment

No.	Author	Comment	Response
		<p>determinations will need to be made before any particular city may be required to ultimately dredge/remove contaminated sediment under the TMDL. For example, the City of Signal Hill is listed as a Greater Los Angeles and Long Beach Harbor Waters responsible party as an "MS4 Permittee," and is listed as a Los Angeles River Estuary Subgroup responsible party for bed sediment and fish. (See pp. 35-36 of the BPA.) Yet, the proposed TMDL is entirely vague as to what obligations Signal Hill has or may have to remove or otherwise remediate sediment either in the harbor areas or in the Estuary, either now or in the future.</p>	<p>removal or remediation. The TMDL is purposely silent as to how the responsible parties are to implement the load and wasteload allocations. See also responses 32.25, 32.27, and 32.29.</p>
32.34	(California Admin Procedures Act Violations)	<p>Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL:</p> <p>2. The Greater Los Angeles and Long Beach Harbor Waters responsible parties are presumably required to prepare a "Sediment Management Plan" as a part of Phase 1 Work, and for the Phase 2 Work, are required to include an implementation plan for "additional BMPs and site remedial actions in the near shore watershed and in the harbors." Phase 2 also requires the implementation of "site-specific cleanup actions for areas identified as high priority in the Harbor Waters and per the Sediment Management Plan." In addition, the stated purpose of Phase 3 is to "implement secondary and additional remediation actions as necessary to be in compliance with the final wasteload and load allocations by the end of the TMDL implementation period." In short, the TMDL is entirely ambiguous as to what cities are or may be obligated to perform what removal or remedial action, for "what contaminated sediment," and "where" and "when," and to "what depths" the removal work is to be conducted. Nor it is clear what factors are to trigger the need for any city to perform any removal or remedial work under the TMDL.</p>	<p>While the Water Boards may set targets and allocations and will incorporate these into permits and other regulatory instruments, the Water Boards do not dictate the method of compliance. These are not "ambiguities," but a flexible implantation structure for the responsible parties to follow. The responsible parties, themselves, will determine the best methods to achieve compliance including when it will be necessary or useful to perform any removal or remedial work. See also responses 32.25, 32.27, 32.29, and 32.33.</p>
32.35	(California	<p>Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL:</p>	<p>Staff Report (at page 123) estimates "varying depths within a range of 2-8 feet may be dredged</p>

No.	Author	Comment	Response
	Admin Procedures Act Violations)	<p>3. Similarly, the TMDL is entirely ambiguous as to where and to what depths the dredging/removal activities are to be conducted. The TMDL Staff Report indicates at one point that 2-8 feet of sediment must be dredged (TMDL Staff Report, p. 122), but at another point, inconsistently assumes that the dredging depths will be 2-3 feet. (Id.) In addition, the TMDL Staff Report estimates that 11,173,066 cubic yards of sediment is to be dredged (id.), but does not indicate where this dredging activity is to occur, other than a vague reference to harbor areas. Also, the TMDL Staff Report indicates that 35,527,233 cubic yards of contaminated soil may have to be removed, rather than 11,173,066 cubic yards, to meet the TMDL's targets. (Id.) In short, where sediment removal is to occur under the TMDL, to what depths, and at what point additional removal work is to be required, is all entirely ambiguous, and the TMDL lacks the "clarity" required by the APA. (Id.)</p>	<p>" and then later identifies "...minimal dredging depths are in a range of 2-3 feet." These statements are not in conflict. See response to 32.34.</p> <p>See also responses 32.25, 32.27, 32.29, and 32.33.</p>
32.36	(California Admin Procedures Act Violations)	<p>Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL:</p> <p>4. It is equally entirely unclear as to when any "secondary remediation activities" are to be triggered, what will trigger the need for "secondary remediation activities," and which cities are or may be required to conduct such "secondary remediation activities." Nor is it clear which areas within the harbors or other areas are subject to "secondary remediation activity." (See, e.g., BPA, pp. 14 and 18.) In short, again, there is no "clarity," as required by the APA, for the alleged responsible parties to understand who, what, when and where "secondary remediation activities" are to be undertaken.</p>	See response to 32.34.
32.37	(California Admin Procedures)	<p>Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL:</p> <p>5. The subject TMDL also imposes a number of monitoring and other requirements upon the alleged responsible parties, but is entirely ambiguous as to what particular parties are to conduct</p>	The responsible parties, themselves, will develop the detailed monitoring plans. These are not "ambiguities," but a flexible requirement for the responsible parties to follow.

No.	Author	Comment	Response
	Act Violations)	<p>what monitoring, where, when, and for how long. For example, on page 27 of the BPA, it is provided that: "The Greater Los Angeles and Long Beach Harbor's responsible parties are each individually responsible for conducting water, sediment and fish tissue monitoring Under the coordinated compliance monitoring option, the compliance point for the stormwater WLAs shall be storm drain outfalls or a point(s) in the receiving waters that suitably represents the combined discharge of cooperating parties." However, the TMDL does not identify where individual dischargers are to conduct water, sediment and fish tissue monitoring, at which storm drain outfalls, within which Cities, or who is to conduct the monitoring. Nor does the TMDL explain how a "suitable" alternative compliance monitoring point is to be selected. Also on page 27, the BPA provides that the "Los Angeles River Watershed and San Gabriel River Watershed responsible parties identified in effective metal TMDLs 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 Los Angeles River, respectively, to determine the River's contribution to the impairments in the Greater Harbor Waters." There is no description, however, as to who is to conduct the monitoring, for what constituents and at what locations. Nor is there any description of which wasteload allocations are to govern for the Los Angeles and San Gabriel Rivers, i.e., those set forth in the Los Angeles and San Gabriel River Metals TMDLs, or those set forth in the subject TMDL.</p>	<p>No allocations were developed for the Los Angeles River (above the estuary) or the San Gabriel River, although the adopted Basin Plan Amendment does include that, for the Los Angeles and San Gabriel River in Phase I or II: "TMDLs to allocate contaminant loads between dischargers in the Los Angeles and San Gabriel Rivers watersheds may also be developed, if necessary" .</p>
32.38	(California Administrative Procedures Act Violations)	<p>Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL:</p> <p>6. The TMDL also remains ambiguous regarding the various implementation measures to be complied with. The implementation measures are broken down into Phases 1, 2 and 3. Under Phase 1, for example, for the Greater Los Angeles and Long Beach Harbor Waters alleged responsible parties, a</p>	<p>The Phases provide a structure and a schedule for implementation of the TMDL. The responsible parties, themselves, will develop the Sediment management Plan and determine the best methods to achieve compliance. These are not "ambiguities," but a requirement that allows the responsible parties flexibility in achieving</p>

No.	Author	Comment	Response
	ons)	<p>"sediment management plan" must be prepared and implemented, and under Phase 2, certain "site-specific cleanup criteria" must be met. (BPA, pp. 31-32.) Yet, there is no indication who has what responsibilities for preparing and implementing the sediment management plan, nor is there any explanation as to what the "site-specific cleanup criteria" for any particular sediment and location or water body are to be, or how the "site-specific cleanup criteria" is to be tied to the sediment bed load allocation assigned for the various water bodies under the TMDL. Nor is it clear whether dredging/removal activity need only meet the site-specific cleanup criteria on a one-time basis, or whether additional dredging/removal activity is to be combined to continually meet the "site-specific cleanup criteria."</p>	<p>compliance with the TMDL.</p> <p>Site-specific cleanup criteria must also be consistent with state and national policy and guidance at the time a sediment remediation takes place during the 20 year implementation schedule of the TMDL.</p>
32.39	(California Administrative Procedures Act Violations)	<p>Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL:</p> <p>7. In addition, the TMDL, again for the Greater Los Angeles and Long Beach Harbor Waters responsible parties, references the efforts that are being conducted by US EPA in making a "final remediation decision with respect to certain of the Montrose Superfund Site Operable Units that remain contaminated." (BPA, p. 32.) According to the TMDL, DDT is to be taken into account in the course of the "remedial decision-making process," and the City of Los Angeles and Los Angeles County, if they are taking any action in the upper units, are required to consult with US EPA in advance of their cleanup action. (Id.) However, whether compliance with any work required by EPA at the referenced Superfund Sites is to constitute compliance with the subject TMDLs in any way is entirely unclear.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 11.3, 24.5, and 30.54 and Los Angeles Water Board's response to comment 19.7.</p>
32.40	(California Administrative Procedures)	<p>Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL:</p> <p>8. The TMDL is further ambiguous as to the implementation measures to be required of the Los Angeles River and San Gabriel River responsible parties. Under Phase 1 for these</p>	<p>The requirement is non-specific towards individual or separate reports and what constitutes a complete report, but it is not ambiguous. The level of specificity is appropriate for a Basin Plan Amendment requirement. The report is required</p>

No.	Author	Comment	Response
	Act Violations)	responsible parties, such parties are to submit a "Report of Implementation describing how current activities support the downstream TMDL." (BPA, p. 33.) Yet it is unclear whether this so-called Report of Implementation is to simply describe the activities that are presently being conducted in connection with the LA and San Gabriel River Metal TMDLs, or whether some scientific analysis is required to explain how particular pollutants may or may not be reduced by the activities to be undertaken for the LA and San Gabriel River TMDLs. Nor is it clear whether individual Reports of Implementation must be submitted, or joint reports are necessary.	from the responsible parties two years after the effective date of the TMDL.
32.41	(California Admin Procedures Act Violations)	Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL: 9. Further, the Cities of Bellflower, Lakewood, Paramount and Signal Hill all appear to be included as alleged responsible parties for the "Greater Los Angeles and Long Beach Harbors (BPA, p. 35) because they are presumed to discharge directly into a saline receiving water. Yet, the TMDL is unclear as to why these Cities are included as alleged responsible parties for the Greater Los Angeles and Long Beach Harbor Waters, since they do not discharge directly into "saline" a receiving water. The Regional Board's response to the technical comment on the issue only further confuses the matter, where it confirms that only cities directly discharging to a saline water are to be assigned a mass load allocation, but then implies that cities discharging to the Los Cerritos Channel will be discharging to Los Alamitos Bay (a non-TMDL receiving water) and thus are to be assigned a concentration based load allocation. (Response to Comment, 1.4.) The TMDL lacks the "clarity" required by the APA for this reason as well.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See Los Angeles Water Board's response to comment 1.4. The area discharging to Alamitos Bay was not included in any of the mass-based allocation calculations. Because these areas do discharge to Alamitos Bay (a non-TMDL receiving water), which ultimately reaches the TMDL receiving waters, this drainage area is assigned a concentration-based allocation.
32.42	(California Admin	Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL: 10. In addition, the TMDL requires that the alleged responsible	The State Water Board agrees that a TMDL is not self-executing until it is incorporated into a permit Pursuant to Water Code section 13242, the TMDL

No.	Author	Comment	Response
	Procedures Act Violations)	<p>parties meet the various interim allocations as of the "effective date of the TMDL." (BPA, p. 37.) It also requires that all the monitoring obligations and all of the other implementation obligations be complied with within a period of time after the "effective date of the TMDL." (BPA, pp. 37-38.) Yet, as recognized in the Regional Board's Resolution (at p. 2, paragraph 5, "TMDLs are not generally self-implementing." As such, imposing requirements within a TMDL that tie the obligation to the "effective date of the TMDL," when it is clear that the TMDL itself, even after finally adopted, is not self-executing, creates significant confusion. The "clarity" requirements of the APA compel "clarity" on when the subject requirements are to be met. This ambiguity created should be rectified by, for example, tying the compliance dates to the date the applicable assumptions and requirements of the WLAs are incorporated into the various NPDES permits. To do otherwise not only creates confusion, but also the potential for an invalid retroactive application of the TMDL regulation. By law, none of the requirements in the TMDL can legally take effect and thus be required to be complied with, unless and until the relevant NPDES permits are issued or amended to include terms to implement the WLAs. (See, e.g., City of Arcadia v. US EPA (2003) 265 F.Supp.2d 1142, 1156-60 [where the District Court found that the Trash TMDL for the Los Angeles River was not ripe for challenge unless and until the TMDL was incorporated into the relevant municipal NPDES Permit, finding "[d]espite their preoccupation with various official pronouncements that the State Trash TMDLs are 'effective' and 'enforceable,' Plaintiffs' cannot point to a single future event or condition that is fairly certain to occur or will adversely impact Plaintiffs themselves."].) The lack of a clear set of compliance dates in the TMDL make this proposed TMDL regulation unlawful.</p>	<p>must include an implementation plan. The Implementation Plan in the TMDL sets forth the regulatory mechanisms that will be used to implement the TMDL. These mechanisms include various stormwater NPDES permits and the issuance of orders pursuant to Water Code sections 13263, 13267, and 13383. Upon approval of the TMDL, the Regional Board will begin to incorporate the requirements of the TMDL into the NPDES permits or other orders, including requirements to conduct monitoring. To the extent the TMDL states that a provision of the TMDL is immediately effective, it will become effective upon incorporation into an NPDES permit or other order of the Regional Board.</p>
32.43	(California Admin	<p>Specifically, the Regional Board failed to "clarify" the following ambiguities in the TMDL:</p> <p>11. The TMDL is further ambiguous and lacks the "clarity"</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to</p>

No.	Author	Comment	Response
	Procedures Act Violations)	required under the APA in light of the series of highly complex proposed calculations and load and wasteload allocations set forth therein, with some of these requirements being internally inconsistent and others being entirely incomprehensible. (See discussion in RB Comments at p. 14, including confusion over the various complex concentration-based and mass-load based wasteload allocations.) The comments submitted by Dr. Susan Paulsen to the Regional Board involving the various technical deficiencies and errors in analysis committed by the Regional Board, along with the comments submitted by Dr. Paulsen to the State Board at this time (under separate cover), are hereby incorporated herein as evidence of additional technical ambiguities in the TMDL that violate the "clarity" requirements of the APA. Included among the ambiguities addressed in Dr. Paulsen's technical comments are the problems and confusion created by the Regional Board's inclusion, after the close of the public hearing, of additional terms to the BPA based on fish tissue targets. These changes concerning the fish tissue targets convert the TMDL into an ever-evolving and uncertain set of regulatory requirements, thus further violating the "clarity" requirements of the APA.	comment 0.1 and Los Angeles Water Board's responses to comments 18.1-18.16.
32.44	(California Admin Procedures Act Violations)	None of the above referenced comments, were addressed by the Regional Board, either in its Responses to Comments or at the time of the hearing on the TMDL. The only issue raised in the RB Comments that appears to have been resolved by the Regional Board concerned the lack of a description of the "LAR Dischargers" in the Regional Board's initial draft of the TMDL BPA. This ambiguity appears to have been addressed by the added language identifying the Los Angeles River Estuary Dischargers on page 36 of the BPA. Outside of this particular clarification, however, none of the other identified ambiguities in the TMDL have been addressed by the Regional Board, and because all of these ambiguities and others remain with the TMDL, the TMDL regulation fails the "clarity" requirement of the	Comment noted. The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. To the extent there was any ambiguity, see the above responses 32.32 through 32.43.

No.	Author	Comment	Response
		APA, in addition to failing the other APA requirements discussed above.	
32.45	(Failed compliance of CWC §§ 13000, 13240 and 13241)	<p>The Cities hereby reiterate and incorporate in their entirety herein, the RB Comments on the need for the Boards to comply with CWC sections 13000, 13240 and 13241. In its Responses to Comments, Regional Board Staff asserts that the Regional Board was not required to consider CWC section 13241 in developing the TMDL, claiming that said section only applies to the "establishment" of water quality objectives, and that the TMDL is not an attempt to establish a water quality objective, but only an effort to implement it. (Response to Comment 1.5, pp. 6-7.)</p> <p>The fallacy with this contention is that, by definition, a TMDL is an amendment to a "water quality objective" in the Basin Plan, and thus TMDLs do not simply "implement" the "water quality objectives"; they also "establish" water quality objectives. In short, because TMDLs are specifically designed to change existing water quality objectives in the Basin Plan (usually through the use of specific load and wasteload allocations), they most always will trigger the need to comply with CWC section 13241. As such, Regional Board wrongly refused to recognize that a TMDL is not simply the "implementation" of an existing water quality objective, but is also a basin plan amendment incorporating a new, specific water quality objective.</p>	<p>The State Water Board disagrees with this comment's assertions and conclusions. First, regarding the commenter's assertion that the Regional Board failed to comply with the requirements of Water Code § 13000, that statute contains general statements of legislative intent and does not impose affirmative duties on the regional boards. (See <i>City of Arcadia v. State Water Resources Control Board</i> (2010) 191 Cal.App.4th 156, 175-76).</p> <p>Regarding Water Code § 13240, the Regional Board has adopted a water quality control plan which conforms with the policies of the Porter-Cologne Act.</p> <p>Water Code § 13241, by its express terms, only requires consideration of the listed factors when "establishing water quality objectives." The Porter-Cologne Act defines "water quality objectives" to mean "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." (Water Code § 13050(h).) The Regional Board's adoption of a TMDL is not an amendment to water quality objectives; TMDLs and the assigned wasteload/load allocations are a means of implementing water quality objectives that have previously been established in order to achieve water quality standards. (See <i>City of Arcadia v.</i></p>

No.	Author	Comment	Response
			<p><i>State Water Resources Control Board</i> (2010) 191 Cal.App.4th 156, 175-79 as modified on denial of rehearing (Jan 20, 2011).) A program of implementation for achieving water quality objectives must include, at a minimum: (a) a description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any public or private entity; (b) a time schedule for the actions to be taken; and (c) a description of surveillance to be undertaken to determine compliance with objectives. A TMDL is considered such a program of implementation, as it constitutes a program to implement existing federal water quality standards. Thus, the factors to be considered when establishing a water quality objective, contained in § 13241, are inapplicable.</p>
32.46	(Failed compliance of CWC §§ 13000, 13240 and 13241)	<p>In its Response to Comments, the Regional Board also alleges that "the Board's adoption of the TMDL is compelled by federal law — Clean Water Act section 303(d)." (Response to Comment 1.5, p. 7.) The Response is misplaced, as nothing in federal law requires the State to adopt TMDLs in general, and nothing in federal law further requires the State to adopt any particular terms or requirements within a particular TMDL it does adopt. And, plainly nothing in federal laws compels the Board to adopt a TMDL that contains various provisions compelling sediment removal; no such terms are required or even authorized anywhere under the Clean Water Act. Accordingly, CWC section 13241 was required to have been complied with.</p>	<p>The State Water Board disagrees with the commenter's assertions. The Regional Board's adoption of the TMDL is compelled by federal law. (Clean Water Act, § 303(d)(1)(C).) See response 32.27. As the Court of Appeal in <i>City of Arcadia</i> explained, a section 13241 analysis is only required when water quality objectives are more stringent than what federal law requires. (191 Cal.App.4th at 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.</p>
32.47	(Failed compliance)	<p>In addition, in response to the need to comply with CWC section 13000, the Regional Board asserts in its Responses to</p>	<p>Comment noted.</p>

No.	Author	Comment	Response
	nce of CWC §§ 13000, 13240 and 13241)	Comments, that: "Section 13000 does not require the Board to consider costs in establishing the TMDL and its 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." (Response to Comment 1.5, p. 7, citing <i>City of Arcadia v. State Water Resources Control Bd.</i> (2010) 191 Cal.App.156, 175-76.)	
32.48	(Failed compliance of CWC §§ 13000, 13240 and 13241)	<p>Yet, CWC section 13000, on its face, requires a consideration of "economics" along with other social and tangible and intangible factors, where it provides as follows:</p> <p style="padding-left: 40px;">The Legislature further finds and declares that activities and factors which may affect the quality of the water of the state shall be regulated to attain the highest water quality which is 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.</p> <p>(CWC § 13000.) Moreover, the factors referenced under Section 13000 are not merely general legislative policy, but to the contrary, are specific requirements that must be complied with each time a Basin Plan is adopted or amended. In particular, CWC section 13240 provides as follows:</p> <p style="padding-left: 40px;">Each regional board shall formulate and adopt water quality control plans for all areas within the region. Such plans shall conform to the policies set forth in Chapter 1 (commencing with Section 13000) of this division and any state policy for water quality control. During the process of formulating such plans the regional boards shall consult with and consider the recommendations of affected State and local agencies. Such plans shall be periodically reviewed and may be revised. (CWC § 13240.)</p> <p>Accordingly, CWC sections 13000 is not simply the expression of</p>	<p>The Commenter's assertions concerning Water Code section 13000 are incorrect. It is well settled that statements of legislative policy do not impose any specific duty on an agency. See, e.g., <i>City of Arcadia v. State Water Resources Control Board</i> (2010) 191 Cal.App.4th 156, 175-76; <i>Shamsian v. Department of Conservation</i>, 136 Cal.App.4th 621, 640–641; <i>Common Cause v. Board of Supervisors</i> (1989) 49 Cal.3d 432, 444.</p> <p>Water Code section 13000 contains statements of legislative policy and therefore do not impose any specific duty on the Regional Board. In reversing the trial court's ruling that the Regional Board has a duty to consider the statements of legislative intent in section 13000, the Court of Appeal very clearly stated in <i>City of Arcadia v. State Water Resources Control Board</i> (2010) 191 Cal.App.4th 156, 175-76), that Water Code section 13000 is not a basis for mandamus relief: the "Regional Board was not obligated to consider the factors contained in sections 13000 and 13241 when conducting the basin plan's 2004 Triennial Review. . . . [Section 13000] provides, 'The Legislature finds and declares that the people of the state have a primary interest in the</p>

No.	Author	Comment	Response
		<p>general legislative intent, as asserted by the Regional Board, but to the contrary, contains specific factors and considerations which the California Legislature has expressly determined must be evaluated by the Boards when developing and amending Basin Plans, including the "Basin Plan Amendment" proposed at this time to implement the subject TMDL.</p>	<p>conservation, control, and utilization of the water resources of the state, and that the quality of all the waters of the state shall be protected for use and enjoyment by the people of the state[;] ... that activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is 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[;] ... that the health, safety and welfare of the people of the state requires that there be a statewide program for the control of the quality of all the waters of the state; that the state must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state from degradation originating inside or outside the boundaries of the state; that the waters of the state are increasingly influenced by interbasin water development projects and other statewide considerations; that factors of precipitation, topography, population, recreation, agriculture, industry and economic development vary from region to region within the state; and that the statewide program for water quality control can be most effectively administered regionally, within a framework of statewide coordination and policy.' A statute containing 'a general statement of legislative intent ... does not impose any affirmative duty that would be enforceable through a writ of mandate.'"</p> <p>See also response 32.45.</p>

No.	Author	Comment	Response
32.49	(Failed compliance of CWC §§ 13000, 13240 and 13241)	For the reasons set forth in the RB Comments, and in other written and oral comments to the Regional Board, the requirements of CWC sections 13000 and 13241 have not been complied with, and the TMDL cannot therefore be adopted until such time as the requirements under these sections have been met.	See response 32.45 and 32.48.
32.50	(Proposed MS4 Limitations)	The Cities hereby reiterate and incorporate the RB Comment concerning the need for the inclusion of language within the TMDL that makes clear that compliance with the wasteload allocations may be obtained through the use of best management practices ("BMPs") rather than through the use of numeric effluent limits. In its Responses to Comments, the Regional Board asserts that the TMDL does not address whether an NPDES permit implementing the TMDL is to use BMPs or numeric effluent limits, suggesting that the method of implementation will be determined at the time the NPDES permits in issue are revised. (Responses to Comment 39.5, p. 258.)	Comment noted.
32.51	(Proposed MS4 Limitations)	The Responses to Comments also suggest, however, that even though federal regulations allow the permitting authority to specify, as a part of an NPDES permit, the use of BMPs to control or abate the discharge of pollutants in stormwater, that this approach 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." (Id.) Regional Board Staff goes on to contend that the State Board had recently addressed the issue of translating a TMDL's WLAs into effluent limits in an MS4 permit, and that such a determination is to be based on the Regional Board's findings either supporting the need for numeric or non-numeric effluent limitations. (Id. at p. 259.)	Comment noted.

No.	Author	Comment	Response
32.52	(Proposed MS4 Limitations)	The Regional Board refers back to its Response to Comment 14.3, wherein it cites to recently issued EPA Guidance on the implementation of TMDLs and MS4 permits (presumably referencing US EPA's 2010 Guidance Memorandum on this subject — which is presently under review by the EPA), and asserts in this regard that while EPA Guidance provides that "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)." (Response to Comment 14.3, p. 12.) The Regional Board concludes its Response by asserting that "federal regulations do not suggest that the iterative/adaptive process is an inherent component of BMP-based permit requirement," and that "[i]ndefinitely 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." (Response to Comment 14.3, p. 13.)	Comment noted.
32.53	(Proposed MS4 Limitations)	The Regional Board thus appears to simply disagree that an iterative BMP approach should be referenced in the TMDL as being the approach to be utilized to implement and incorporate the wasteload allocations into an MS4 Permit, and disagrees that an iterative deemed-compliant BMP approach, given the amount of time (in the Regional Board's opinion) that has transpired, cannot continue to be used in MS4 Permits to implement TMDLs or otherwise.	The State Water Board disagrees with the commenter's assertions. See response 32.58 below.
32.54	(Proposed MS4 Limitations)	Unfortunately, the Regional Board fundamentally misunderstood the point of the Cities' comments and, more importantly, the intent of Congress in amending the Clean Water Act in 1987 to cover urban runoff. In the case of <i>Divers' Environmental Conservation Organization v. State Water Resources Control Board</i> (Divers' Environmental) (2006) 145 Cal.App.4th 246, the plaintiff brought suit claiming that an NPDES Permit issued to the United States	Comment noted. However, this case was decided in 2006, and the USEPA has since updated and revised its recommendation with its memorandum dated November 12, 2010 on Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those

No.	Author	Comment	Response
		<p>Navy by the San Diego Regional Board was contrary to law because it did not incorporate wasteload allocations from a TMDL as numeric effluent limits into the Navy's permit. After discussing the relevant requirements of the Clean Water Act, as well as governing case authority, the Court of Appeal acknowledged that in regulating stormwater permits, EPA "has repeatedly expressed a preference for doing so by the way of BMPs, rather than by way of imposing either technology-based or water quality-based numerical limitations." (Id. at 256.) The Court went on to find that "it is now clear that in implementing numeric water quality standards, such as those set forth in CTR, permitting agencies are not required to do so solely by means of a corresponding numeric WQBEL's." (Id. at 262.)</p>	<p>WLAs). The 2010 memo is clear that MS4 effluent limits and conditions must be consistent with the assumptions and requirements of a TMDL. Under the MEP standard, the Regional Board has flexibility whether to translate WLAs into numeric effluent limitations or BMPs: "Where the NPDES authority determines that MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion, EPA recommends that, where feasible, the NPDES permitting authority exercise its discretion to include numeric effluent limitations as necessary to meet water quality standards. ... EPA recommends that NPDES permitting authorities use numeric effluent limitations where feasible as these types of effluent limitations create objective and accountable means for controlling stormwater discharges." The decision whether to impose numeric limits is permit-specific, and the Regional Board must take into account the WLA, the nature of the stormwater discharge, any available data and modeling results, and any other relevant information.</p>
32.55	(Proposed MS4 Limitations)	<p>Similarly, and as discussed in the RB Comments, in BIA of San Diego County v. State Board (2004) 124 Cal.App.4th 866, 874, the Court of Appeal acknowledged that the Clean Water Act is to be applied differently to municipal stormwater discharges than to industrial stormwater discharges, finding in part as follows: "With respect to municipal stormwater discharges, Congress clarified that the EPA has the authority to fashion NPDES Permit requirements to meet water quality standards without specific numeric effluent limits and instead to impose controls to reduce the discharge of pollutants to the maximum extent practicable."</p>	<p>See response 32.54.</p>

No.	Author	Comment	Response
32.56	(Proposed MS4 Limitations)	In fact, in a February 11, 1993 Memorandum issued by the State Board's Office of Chief Council, subject " <i>Definition of Maximum Extent Practicable</i> " (<u>Exhibit 17</u> to the RB Comments), the Office of the Chief Council recognized that the intent of Congress in establishing the maximum extent practicable ("MEP") standard was to include a requirement "to reduce the discharge of pollutants, rather than totally prohibit such discharge," and that Congress presumably applied an MEP Standard, rather than a strict numeric standard with the "knowledge that <i>it is not possible</i> for municipal dischargers to prevent the discharge of all pollutants in stormwater." (<u>Exhibit 17</u> to the RB Comments, p. 2.)	The State Water Board acknowledges the existence of this memorandum. This memorandum was written in 1993, however, and now almost 19 years later, the knowledge, technology, and guidance concerning MS4s has changed. When it is time for the Regional Board to incorporate the TMDL into the MS4 Permit, the Regional Board has flexibility to choose whether numeric limitations or BMPs equal MEP. 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)). See also responses 32.54 and 32.58.
32.57	(Proposed MS4 Limitations)	Moreover, as the State Board will recall, it specifically commissioned an Expert Storm Water Quality Numeric Effluent Limits Panel, who, in June of 2006, issued a report entitled "Stormwater Feasibility of Numeric Effluent Limits Applicable to Discharges of Stormwater Associated with Municipal, Industrial and Construction Activities," dated June 29, 2006 (<u>Exhibit 27</u> to the RB Comments) to address the viability of applying numeric limits to stormwater dischargers. The Numeric Limits Expert Panel concluded as follows in this regard: "It is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban dischargers." (Id. at p. 8, <i>emph. added.</i>)	Comment noted.
32.58	(Proposed MS4 Limitations)	The Regional Board claims it is not required at this time to address how the wasteload allocations within the TMDL are to be utilized to amend the MS4 permits, but then goes on to do precisely that, by claiming the iterative/adaptive approach without the use of numeric limits "is not in the best interest of water quality." (Responses to Comment 14.3, p. 13.) This Response not only ignores the reality of the difficulties in addressing	The State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. The TMDL for Toxic Pollutants in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters does not dictate whether an NPDES municipal separate storm sewer system (MS4)

No.	Author	Comment	Response
		<p>stormwater/urban runoff discharges, it further ignores long-established policy expressed by the State Board in favor of the iterative BMP approach. (See, Exhibit 24 to the RB Comments, State Board Order No. 2001-3, p. 3 ["In prior orders this Board has explained the need for the municipal stormwater programs and the emphasis on BMPs in lieu of numeric effluent limitations."]; Exhibit 25 to the RB Comments, State Board Order No. 2001-15, p. 8 ["While we continue to address water quality standards in municipal stormwater permits, we also continue to believe that the iterative approach, which focuses on timely improvements in BMPs, is appropriate."]; and Exhibit 26 to RB Comments, State Board Order No. 2006-12, p. 17 ["Federal regulations do not require numeric effluent limitations for discharges of stormwater."].)</p>	<p>permit expresses the TMDL's waste load allocations (WLAs) as best management practices or numeric effluent limitations. The means of expression will be determined when NPDES MS4 permits are revised to incorporate provisions consistent with the assumptions and requirements of the WLAs to effectively implement the TMDL. Federal regulations require that NPDES permits must contain requirements necessary to achieve water quality standards (40 CFR § 122.44(d)(1)) and that water quality based effluent limitations 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 as an expression of a TMDL's WLA where the permit's administrative record substantiates that the BMPs are expected to be sufficient to fully implement the WLA in the TMDL, consistent with the implementation schedule established in the TMDL (US EPA 2002). Iterative approaches without such a record to substantiate them shall not qualify for consideration as an expression of a TMDL's WLA. Furthermore, this does not substitute for the permitting authority's obligation to include other requirements such as numeric effluent limitations that may be necessary to achieve water quality standards.</p> <p>The State Board recently addressed the issue of</p>

No.	Author	Comment	Response
			<p>translating TMDL waste load allocations into effluent limitations in NPDES MS4 permits and concluded that, “whether a future municipal storm water permit requirement appropriately implements a storm water wasteload allocation 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).” State Water Board staff agrees with the Los Angeles Water Board’s response in regards to the absence of an Adaptive/Iterative process.</p> <p>Moreover, the Los Angeles Water Board has provided permittees under the LA County MS4 NPDES permit 19 years, since the first MS4 Permit was adopted in 1990, to iteratively apply BMPs to achieve water quality standards. TMDLs are the backstop for the Clean Water Act in cases where effluent limitations, or BMPs in the case of MS4 permits, 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 necessarily in the best interest of water quality.</p> <p>This TMDL provides a 20-year implementation schedule, which supports adaptive stormwater management while providing a firm date for reaching compliance with the WLAs.</p>
32.59	(Proposed)	In addition, the Regional Board's logic in assuming that "numeric" limits must now be required because, it claims, iterative BMPs do	The State Water Board disagrees with the commenter’s assertions. Nowhere and at no time

No.	Author	Comment	Response
	MS4 Limitations)	not do the job, is fundamentally flawed. Specifically, every objective evaluation of the utility of using numeric limits in stormwater permits, such as by the State Board's Numeric Effluent Limits Panel, has concluded that numeric limits are not feasible at this time for stormwater/urban runoff. Municipal dischargers do not have the luxury of simply ceasing operations or installing a single or a series of multiple filtration or treatment systems to address urban runoff to meet numeric limits. Further, municipalities do not generate urban runoff and cannot close a valve to prevent the rain from falling or runoff from entering their MS4 systems. To assert that iterative BMPs are not sufficiently protective of water quality, and thus that numeric limits must now be required, ignores reality. In fact, the only means municipalities have to improve water quality is through the use of iterative BMPs.	has the Regional Board ever claimed that iterative BMPs “do not do the job” and are fundamentally flawed. See also response 32.58.
32.60	(Proposed MS4 Limitations)	Moreover, the use of numeric effluent limits in a municipal NPDES Permit will not improve water quality, given that numeric limits are not a means of complying with wasteload allocations, but instead are simply the proposed end goals or desired targets of the BMPs. In short, the only means a city or other MS4 permittee has available to it to comply with a wasteload allocation in a TMDL, is through the use of iterative BMPs, and yet the Regional Board refuses to recognize this obvious fact.	See response 32.58.
32.61	(Proposed MS4 Limitations)	Adopting a TMDL applicable to Cities that does not recognize that compliance is to be achieved through the use of iterative BMPs, with the municipalities then being found to be deemed in compliance with the incorporated terms of the WLAs (so long as they are acting in good faith and implementing the iterative BMPs), is an abuse of discretion and is action that is contrary to the clear intent of Congress under the Clean Water Act.	See response 32.58.
32.62	(Proposed	In sum, based on the comments set forth herein, as well as those set forth in the RB Comments, the Cities respectfully request that	Comment noted. See also response 32.58.

No.	Author	Comment	Response
	MS4 Limitations)	any TMDL that is ultimately adopted for the subject water bodies include clear direction to permit writers that the wasteload allocations within the TMDL are to be complied with through the use of MEP deemed compliant iterative BMPs, and that numeric limits will not be required to be included in any such municipal NPDES permits.	
32.63	(Unlawful Load Calculations)	The Cities hereby incorporate and reassert all of the points asserted in their RB Comments in connection with the subject TMDL not being suitable for calculation, including the Regional Board's failure to include a "total maximum daily load" in the TMDL, as required by the Clean Water Act.	The State Water Board reviewed the Regional Board's response to these comments and agrees with its response. In response to comment 39.6, the Los Angeles Water Board disagreed with the commenter and stated, "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 the numeric

No.	Author	Comment	Response
			<p>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)).”</p> <p>The commenter’s reference to <i>Friends of the Earth, Inc. v. Environmental Protection Agency</i> (D.C. Circuit 2006) 446 F.3d 140, is inapposite. In <i>Friends of the Earth</i>, the court stated that “daily means daily, nothing else.” The court clarified that a “daily” load means “daily” and not “annual” or “seasonal” which has no bearing on the Commenter’s assertion that this TMDL is not suitable for calculation. 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.” (<i>Natural Resources Defense Council v. Muszynski</i> (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.</p>

No.	Author	Comment	Response
32.64	(Unlawful Load Calculations)	In Response to Comments, Regional Board Staff generally asserted it believes the TMDL is "suitable for calculation," with Staff then explaining how a handful of the loads were calculated. (Response to Comment 9.6, p. 259-60.) The Regional Board's Responses to Comments also take issue with the discussion in the District of Columbia Court of Appeals Decision in Friends of the Earth, Inc. v. Environmental Protection Agency (D.C. Circuit 2006) 446 F.3d 140, but does so relying solely on a decision issued by the Second District Court of Appeal some five years earlier, in Natural Resources Defense Counsel v. Muszynski (2d Cir. 2001) 268 F.3d 91. Of course, a decision by the Second Circuit Court of Appeal issued five years prior to the D.C. Circuit Court of Appeal's decision, has no legal impact on the validity of the D.C. Circuit Court of Appeal's determination. In fact, the exact opposite is true, i.e., the D.C. Circuit Court of Appeal's later decision should be given far more weight than a prior decision of the Second District Court of Appeal.	Comment noted.
32.65	(Unlawful Load Calculations)	In its Responses to Comments, the Regional Board also claims that it need not develop load or wasteload allocations that are "daily" loads, claiming that the applicable federal regulations provide that "[TMDLs] can be expressed in terms of either mass for time, toxicity or other appropriate measure." (Response to Comment 39.6, p. 260, citing 40 C.F.R. § 130.2(i).) Yet, the Regional Board fails to explain, other than its reliance on the Muszynski case, distinguished above, why a "total maximum daily load," may consist of anything other than a "daily" load, and particularly why a TMDL may ever be expressed as a single concentration-based numeric target never to be exceeded, or, as discussed above, as a requirement that compels the removal of existing contaminated sediment and/or other "secondary remediation activities."	See response 32.63.
32.66	(Unlawful Load Calculations)	As discussed in the RB Comments, the TMDL contains a number	See response 32.63.

No.	Author	Comment	Response
	ul Load Calculations)	of wasteload allocations, load allocations and other requirements that are anything but "daily" loads, and particularly includes various requirements that cannot properly be considered "daily" requirements under any interpretation of the regulations, including 40 C.F.R. § 130.2(i). In short, the Regional Board failed to respond to the particular comments and concerns raised in the RB Comments on its failure to develop a total maximum "daily" load, and its general arguments in the Responses to Comments in this regard are without basis.	
32.67	(Unlawful Load Calculations)	Moreover, the inclusion of the added language involving the fish tissue targets in the TMDL, at the close of the public hearing, is similarly a violation of the Clean Water Act's requirement of only developing TMDLs that are "suitable for such calculation" (33 U.S.C. § 1313(d)(1)(C)). Per EPA regulations, a TMDL is "suitable for calculation" only where there are "proper technical conditions" that exist to develop the TMDL. (See 43 Fed. Reg. 60662.) If nothing else, the language on fish tissue targets added to the TMDL after the close of the hearing (Transcript, pp. 182-197), confirms that "proper technical conditions" do not exist at this time, and thus that the TMDL is not presently "suitable for calculation." (33 U.S.C. § 1313(d)(1)(C).)	See responses 32.63, 32.4, 32.5.
32.68	(Unlawful Load Calculations)	In light of the Regional Board's inability to respond in any adequate fashion to the RB Comments on these issues, and given the discussion set forth in this regard in the RB Comments, as well as the fish tissue targets language added after the close of the public hearing, the subject TMDL does not include appropriate "total maximum daily loads," and is not presently "suitable for calculation" as required by the Clean Water Act. As such, it cannot be adopted at this time.	See responses 32.63, 32.4, 32.5.
32.69	(No Local Agency	The Cities reiterate and incorporate in their entirety their comments involving the lack of appropriate consultation with the local agencies as required by law. The Regional Board asserts in	Comment noted.

No.	Author	Comment	Response
	Consultation)	its Responses to Comments that it has been working to develop the TMDL for "a number of years," and that numerous municipal stakeholders have participated in the process leading to the development of this TMDL. (Response to Comment 39.7, p. 260-61.) The Regional Board also asserts that it "is not bound by Water Code § 13144, but it takes its outreach efforts to local agencies seriously," and that its efforts "have satisfied the requirements of section 13240 of the Water Code." (Id.)	
32.70	(No Local Agency Consultation)	First, the Responses to Comments fail to address EPA's TMDL Guidance for California, which provides that: "EPA strongly encourages the State to develop detailed Work Plans to guide the technical analysis and stakeholder's participation aspects of the TMDL before starting the TMDL." (See, Exhibit 14 to the RB Comments, EPA's TMDL Guidance for California, p. 19.)	<p>While a workplan for TMDL development is not a regulatory requirement, in November of 2004, EPA and the Los Angeles Water Board made available the "Los Angeles and Long Beach Harbor Complex Framework for Calculating TMDLs" which outlined the plan for the development of this TMDL including the waterbodies, impairments, and technical methods anticipated to be addressed or used in the development.</p> <p>http://www.waterboards.ca.gov/losangeles/board/decisions/basin_plan_amendments/technical_documents/66_New/05_0915/Draft%20LA%20Harbor%20TMDL%20Framework.pdf</p> <p>A Project Plan with interim milestones for TMDL development and a section on stakeholder participation was made available for stakeholders in May 2006.</p> <p>http://www.waterboards.ca.gov/losangeles/board/decisions/basin_plan_amendments/technical_documents/66_New/06_0530/Revised%20Project%20Plan%20051006.pdf</p>
32.71	(No Local	The Responses to Comments also fail to address EPA's Draft Handbook included as Exhibit 18 to the RB Comments, where, at	In fact, stakeholders were very involved and were encouraged to be involved throughout the

No.	Author	Comment	Response
	Agency Consultation)	page 5 of the Draft Handbook, EPA found as follows: "Stakeholder involvement and public participation to engage affected parties and solicit input, feedback and buy-in for a successful TMDL. This process can occur throughout the TMDL development (and implementation) process." (Exhibit 18, p. 5.)	development of the TMDL. In November of 2004, EPA and the Los Angeles Water Board. held the "kick-off" meeting for this TMDL in the Port of Los Angeles' Board meeting room and more than 50 people attended. Later, Los Angeles Water Board staff hosted a publicly-noticed scoping meeting to solicit input from stakeholders on the reasonably foreseeable environmental impacts from the implementation of this TMDL, pursuant to the California Environmental Quality Act (CEQA). Numerous technical meetings have been held with stakeholders including the County of Los Angeles; the City of Los Angeles and its port; the City of Long Beach and its port; City of Inglewood, City of Lawndale, City of Carson and other watershed municipalities; Caltrans, dischargers; and non-governmental organizations. During development of the TMDL, Los Angeles Water Board staff attended Dominguez Channel Watershed Council meetings to provide stakeholders with updates on the development of the TMDL and to invite participation in its development. During development of the TMDL, Los Angeles Water Board staff participated in the stakeholder meetings where the Port of Los Angeles and Port of Long Beach "Water Resources Action Plan" was being developed which gave staff another opportunity to reach out to new stakeholders and inform them of the TMDL development and opportunity to participate. The development of the model used in this TMDL has been vetted, in detail, with stakeholders, including a stakeholder-led Technical Advisory Committee. Presentations, meeting notes and draft documents have been shared on the

No.	Author	Comment	Response
			<p>Regional Board website since 2006. Currently, the Regional Board website is a repository for over 100 documents related to this TMDL (not including the additional documents made available after the public notice of the TMDL in December of 2010) .</p> <p>The draft TMDL and supporting documents were publicly noticed in December 2010 for a 60-day comment period. Staff has met with numerous stakeholders, including the two Ports, Los Angeles and other cities, Heal the Bay, and representatives of private industry to address specific questions and concerns during the 60-day public comment period.</p>
32.72	(No Local Agency Consultation)	<p>In addition, the Regional Board failed to address the EPA Administrator's recent Memorandum to EPA employees, stressing the importance of public trust in connecting with local agencies in meeting their environmental responsibilities, and particularly asserting that "public trust of the agency [EPA] demands that we reach out to all stakeholders fairly and impartially, that we consider their views and data presented carefully and objectively, and that we further disclose the information that forms the basis for our decisions (Exhibit 30 to RB Comments, Memo to EPA employees, p. 2.) In this same Memorandum the Administrator also asserts that EPA is to "take special pains to connect with those who have been historically underrepresented in EPA decision-making, including, ... small businesses, cities and towns working to meet their environmental responsibilities. Like all American's, they deserve an EPA with an open mind, a big heart and a willingness to listen." (Id., emph. added.)</p>	<p>While the "recent memorandum" was to EPA employees not to waterboard employees, the Los Angeles Water Board (and EPA through its involvement) have reached out to stakeholders; and see response 32.71.</p>
32.73	(No Local Agency	<p>In this case, in spite of the enormous complexity of the TMDL, the countless modeling and formulas utilized to develop the TMDL, and the expansive nature of the TMDL, there is virtually no</p>	<p>The commenter mischaracterizes the process used to develop this TMDL. The Regional Board staff developed this TMDL over the course of 6</p>

No.	Author	Comment	Response
	Consultation)	evidence the Regional Board had any substantive or significant consultation with the numerous small cities that are to be impacted by this TMDL. To the contrary, it appears the Regional Board's primary communications in the development of the TMDL were with the Ports of Los Angeles and Long Beach, and that the Cities were not included in the process. As such, for the reasons discussed above and those set forth in the RB Comments, the proposed TMDL has not been developed in and consultation with the local agencies, as required by both State and federal law.	years. Numerous municipal stakeholders participated in the process leading to the development of this TMDL, including The Cities represented by the commenter were provided opportunities to participate. See also response 32.71.
32.74	(No Cost Benefit Analysis, Required by CWC §§ 13165, 13225(C) and 13267)	The Cities hereby reiterate and incorporate their comments in connection with the need to comply with CWC sections 13165, 13225 and 13267 involving the importance of considering the costs and the benefits associated with the monitoring, reporting, and related requirements in the TMDL. Regional Board Staff in its Responses to Comments asserts that these statutes do not require a "cost/benefit analysis." (Response Comment 39.8, p. 261.) Yet, on its face, for example, CWC section 13225(c) requires that the Regional Board, before it imposes any investigation or reporting obligation, including monitoring obligations, upon a State or local agency, must first make a determination 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 therefrom." (Water Code § 13225(c).)	<p>The commenter accurately quotes Water Code section 13225(c), which states 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 therefrom" with respect to monitoring and technical reporting. However, the statutes do not require a "cost-benefit analysis." The Los Angeles Water Board set forth the water quality impairment 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 toxic metals. Further, section 13267 is inapplicable at this stage because the TMDL does not impose any orders under section 13267. See <i>Arcadia I</i> at p. 1414 ("The Water Boards persuasively contend Water Code section 13267 is inapplicable, and references to that statute in the Trash TMDL are to contemplated future orders.")</p> <p>In addition, there are enormous public health, water quality, and other environmental benefits to be obtained once this TMDL is implemented to</p>

No.	Author	Comment	Response
			<p>reduce the heavy metals and organic pollutants discharged into the Dominguez Channel watershed. These waters include a variety of beneficial uses for aquatic life, including warm water and marine habitat and use by rare, threatened or endangered species. The estuaries include unique estuarine habitat and are recognized as areas for spawning, reproduction and/or early development, migration of aquatic organisms, and wildlife habitat. Pollutant loading from urban runoff, stormwater, historic spills, and harbor activities has impaired the water, sediment, and fish tissue.</p>
32.75	(No Cost Benefit Analysis, Required by CWC §§ 13165, 13225(C) and 13267)	<p>A consideration of the burdens, including the costs of a report, in relationship to the benefits to be obtained therefrom, per the plain language of the statute cannot be described as anything other than an "analysis" of the costs and benefits of the program, i.e., a "cost/benefit analysis." The statute expressly requires that the Regional Board consider the burdens, including their costs, in relationship to the benefits to be obtained therefrom. This same type of analysis is required of the State Board under section 13165. To attempt to argue that a "cost/benefit analysis" as that term is generally understood to mean, is not required under the present circumstances, would be to ignore the clear mandate imposed upon the Boards by the California Legislature.</p>	<p>First, Water Code section 13165 does not apply to any Regional Board; rather, this section applies to the State Water Board's authority to order another state agency, such as the California Energy Commission, or a local agency, to conduct an investigation or report. Second, the TMDL is not an order subject to this section. Third, the Los Angeles Water Board's parallel authority to order investigations and reports is found in section 13267. However, as the Los Angeles Water Board noted in response 39.8, "section 13267 is inapplicable at this stage because the TMDL does not impose any orders under section 13267." The State Water Board agrees with the Los Angeles Water Board's response in comment 39.8. Finally, the cost and benefit analysis performed under sections 13165 and 13267 only requires the board to establish that the burden of preparing such reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports, it is not a formal</p>

No.	Author	Comment	Response
			cost/benefit analysis as suggested by the commenter.
32.76	(No Cost Benefit Analysis, Required by CWC)	Similarly, although the Regional Board asserts that CWC section 13267 does not yet apply at this time because no specific order has been issued under section 13267 (Response to Comment 39.8, p. 261), clearly the Boards' justification for imposing these monitoring and reporting requirements, and requiring the other required studies of the Cities at this time, is being provided as a part of the TMDL analysis. Accordingly, to not conduct the analysis at this time, and to instead assert that it is not technically required under CWC section 13267, unless and until a 13267 Order is issued, although potentially technically correct, is practically and from a policy perspective, entirely irresponsible.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response 32.75, and Los Angeles Water Board response 39.8.
32.77	(No Cost Benefit Analysis, Required by CWC)	Either way, the requirements of sections 13225 and 13267 impose a cost/benefit analysis obligation upon the Regional Board, and section 13165 imposes the same obligation upon the State Board, before the monitoring, reporting and investigation requirements can lawfully be imposed upon the Cities or any local agency. The "cost/benefit" analysis requirements under the California Water Code have not been complied with and the TMDL should not be approved until such time as these requirements have been met.	See response 32.75 and Los Angeles Water Board response 39.8.
32.78	(Imposition of Unfunded State Mandates)	The Cities reiterate and incorporate in their entirety their RB Comments concerning the fact that the TMDL would result in unfunded State mandates in violation of the California Constitution, if the TMDL is not funded by the State before it is enforced against the municipalities. In its Responses to Comments, the Regional Board asserts that it "does not agree" that the TMDL provisions contain unfunded State mandates, but goes on to assert that "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	Comment noted.

No.	Author	Comment	Response
		<p>over unfunded mandate issues." (Response to Comment 20.16, p. 62.) The Response to Comments also asserts that the TMDL is compelled by federal law, and as such, is not a State mandate but a federal one, and further that TMDL requirements are not exclusive to municipalities, "but apply with an even hand to all responsible parties, municipal and private alike." (Id. at p. 63.) Last, the Regional Board asserts that "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," and that the "availability of such funding mechanisms precludes a claim for subvention." (Id.)</p>	
32.79	(Imposition of Unfunded State Mandates)	<p>The Cities agree that the Commission on State Mandates is the entity with jurisdiction to determine whether a claim is an unfunded State mandate or not. However, the Cities believe that in deciding to impose a TMDL of this magnitude, i.e., at a cost that will easily be in the billions of dollars, with the actual benefits from these expenditures being unclear at best, the State Board should be apprised of the fact that ultimately it may be required to reimburse the municipalities for the cost of implementing such a TMDL.</p>	<p>The State Water Board disagrees with the commenter's assertions. Commenter provides no authority for its theory that the TMDL would result in an unfunded state mandate, in violation of the state's constitution. Consequently, the State Board assumes the proposition is without any foundation.</p> <p>Furthermore, the TMDL does not result in an unfunded state mandate for the following general reasons.</p> <p>Article XIIIB, Section 6 of the California Constitution provides, "[w]henever the Legislature or any state agency mandates a new program or higher level of service on any local government, the State shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service." The TMDL does not require subvention for various reasons.</p>

No.	Author	Comment	Response
			<p>First, as a threshold matter, it does not require a new program or higher level of service. The Los Angeles Water Board's adoption of the TMDL was a nondiscretionary duty required by the federal Clean Water Act. Clean Water Act section 303(d) requires each state to identify and rank the waters within its boundaries that do not meet water quality standards. These substandard waters are placed on the state's 303(d) List, where for each listed waterbody, the state is required to establish a TMDL for each pollutant impairing the water quality standards in that waterbody Both the identification of impaired waters and TMDLs established for those waters must be submitted to U.S. EPA for approval. If U.S. EPA disapproves a state's submitted TMDL, U.S. EPA must establish its own TMDL. Even if the TMDL was interpreted as going beyond federal law, any cost increases that result solely from additional state requirements are de minimis. The California Supreme Court has held that, "[f]or purposes of ruling upon a request for reimbursement, challenged state rules or procedures that are intended to implement an applicable federal law—and whose costs are, in context, de minimus—should be treated as part and parcel of the underlying federal mandate." (<i>San Diego Unified School District v. Commission on State Mandates</i> (2004) 33 Cal.4th 859, 890.)</p> <p>Second, the TMDL is not an unfunded state mandate because it applies generally to public and private entities and does not involve requirements imposed uniquely upon local government. Laws of general application are not</p>

No.	Author	Comment	Response
			<p>entitled to subvention. (<i>County of Los Angeles v. State of California</i> (1987) 43 Cal.3d 46, 56-58.) Reimbursement to local agencies is required only for the costs involved in carrying out functions peculiar to government, not for expenses incurred by local agencies as an incidental impact of laws that apply generally to all state residents and entities. The fact that a requirement may single out local governments is not dispositive; where local agencies are required to perform the same functions as private industry, no subvention is required. (See <i>City of Richmond v. Commission on State Mandates</i> (1998) 64 Cal.App.4th 1190, 1197.)</p> <p>Third, any requirements imposed by the TMDL would not be subject to reimbursement because the commenter's cities have the independent authority to levy service charges, fees, or assessments sufficient to pay for any cost increases. Subvention would only be required if expenditure of tax monies is required, and not if the costs can be reallocated or paid for with fees. (<i>County of Los Angeles v. Commission on State Mandates</i> (2003) 110 Cal.App.4th 1176, 1189; <i>Redevelopment Agency v. Commission on State Mandates</i> (1997) 55 Cal.App.4th 976, 987.)</p> <p>And fourth, while water quality standards and TMDLs are federally compelled, they themselves are not executive orders directly enforceable against a discharger. This is because water quality standards and TMDLs are not self-implementing under the Clean Water Act or the Porter-Cologne Act. TMDLs established under</p>

No.	Author	Comment	Response
			<p>section 303(d) of the Clean Water Act function primarily as informational tools and planning devices for the state or U.S. EPA to establish further pollution controls. Water quality objectives and TMDLs form the framework for further administrative actions with respect to particularized pollutant discharges and waterbodies. (See, e.g., <i>City of Arcadia v. U.S. Environmental Protection Agency</i> (9th Cir. 2005) 411 F.3d 1103, 1105 (citing <i>Pronsolino, supra</i>, 291 F.3d at p. 1129 ("TMDLs are primarily informational tools that allow states to proceed [with additional planning] TMDLs serve as a link in an implementation chain that includes . . . state or local plans for point and nonpoint source pollution reduction").)</p>
32.80	(Imposition of Unfunded State Mandates)	<p>The Cities disagree, however, that this particular TMDL is compelled by federal law, as clearly the Boards have significant discretion in developing the TMDL terms, and nothing in federal law (as discussed above) compels any of the particular wasteload allocations, numeric limits or other requirements in the TMDL, including specifically the requirements to conduct dredging/removal of contaminated sediment, or to carry out other "secondary remediation activities." Further, a vast majority of the requirements set forth in the subject TMDL are specific to local agencies, and thus, contrary to the Regional Board's contentions, do not apply "with an even hand to all responsible parties, municipal and private alike." A simple reading of the TMDL shows that the Regional Boards' claim in this regard is not accurate.</p>	See response 32.79.
32.81	(Imposition of Unfunded	<p>Last, the existence of "time" does not change the ability of Cities to adopt taxes or fees to pay the costs to comply with the TMDL. In fact, the California Constitution does not provide local agencies with the authority to impose new taxes or fees, or to simply</p>	See response 32.79.

No.	Author	Comment	Response
	State Mandates)	increase existing taxes and/or fees to fund the TMDL and the Regional Board has failed to identify any particular funding mechanisms that are available to fully fund the requirements set forth in the subject TMDL.	
32.82	(California Environmental Quality Act Violations)	The Cities hereby reiterate and incorporate herein all of the RB Comments concerning the lack of compliance with CEQA, into these Comments as though fully set forth herein. Under both CEQA and the State Board's Regulations, the State and Regional Boards must evaluate comments on the draft Substitute Environmental Document (SED) and prepare written responses thereto. (Pub. Res. Code § 21091(d); 23 Cal. Code Regs. §§ 3779(d).) As such, both the CEQA Guidelines and the State Board's Regulations further require that when a comment raises a specific question about a significant environmental issue in an environmental document, the State and Regional Boards must provide a specific response thereto. (14 Cal. Code Regs. §§ 15088(b), 15204(a); 23 Cal. Code Regs. §§ 3779(b), (d), 3779.5(b)(2).)	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1. The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.
32.83	(California Environmental Quality Act Violations)	Moreover, the law is crystal clear as to what a lead agency's responsibilities are under CEQA when responding to comments: (i) Specific, detailed responses by the Boards, supported by a reasoned analysis, are required, and are particularly important when the impact analysis is criticized by experts or other public agencies, as has occurred here. (Berkeley Keep Jets Over the Bay Corn. v. Board of Port Cmr. (2001) 91 Cal.App.4th 1344, 1367.) (ii) At a minimum, the final environmental document must acknowledge the conflicting opinions and explain why suggestions made in the comments have been rejected, supporting its statements with relevant data. (Berkeley Jets, 91 Cal.App.4th at 1367.) (iii) Conclusory statements unsupported by specific references to empirical information, scientific authorities, or explanatory information are insufficient as responses to comments. (14 Cal.	State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 32.82. The Los Angeles Water Board responded to all CEQA comments received and the State Water Board has provided additional responses as appropriate.

No.	Author	Comment	Response
		<p>Code Regs. §§ 15088(c); Cleary v. County of Stanislaus (1981) 118 Cal.App.3d 348, 357-358.)</p> <p>(iv) If the lead agency rejects recommendations or objections on major environmental issues, the lead agency must address those issues in detail and explain its reasons for not accepting the recommendations or objections. (14 Cal. Code Regs. §§ 15088(c); Cleary, 118 Cal.App.3d at 357-358.)</p> <p>(v) Failure to respond to comments before approving a project frustrates the informational purpose of CEQA, and renders the environmental document inadequate. (See Rural Land Owners Assn. v. City Council (1983) 143 Cal.App.3d 1013, 1020.)</p>	
32.84	(California Environmental Quality Act Violations)	<p>The Regional Board not only failed to provide detailed responses, supported by a reasoned analysis, to the City's comments on the SED, it failed to provide a specific response to a single comment by the City! Indeed, it is as if the Regional Board has never prepared Responses to Comments before. Although there is no one standard method of responding to comments that is required under CEQA, typically the lead agency breaks down a comment letter into the specific issues raised, assigns a number to each issue, and then provides a response to each issue under a corresponding number. If a particular issue has been raised by another commenter, the lead agency can respond to that issue by referring the commenter to the specific number of the other response. (A "Responses to Comments" letter illustrating the typical method of responding to comments is attached hereto as Exhibit A [concerning responses to comments by the City of Riverside to a Port of Long Beach project].)</p>	<p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>
32.85	(California Environmental Quality Act)	<p>Here, the Cities submitted a comprehensive set of comments to the Regional Board in February of 2011 (the RB Comments). The RB Comments contained 33 pages of detailed CEQA comments on issues raised by the SED concerning:</p> <ul style="list-style-type: none"> • The SED's unclear and inconsistent project description. • The SED's inadequate analysis of dredging impacts. 	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1, 32.90 - 32.101 and Los Angeles Water Board's response to comment 20.8-20.15; 36.10, 36.30; 36.31; 36.48, and Port</p>

No.	Author	Comment	Response
	Violations)	<ul style="list-style-type: none"> • The SED's failure to evaluate or mitigate impacts on governmental services. • The SED's failure to analyze Greenhouse Gas impacts. • The SED's failure to adequately discuss mitigation measures. • The SED's failure to adequately analyze the cumulative impacts of the Project. • The SED's inadequate alternatives analysis. • The SED's failure to analyze specific sites. • The SED's failure to include certain required information. • The SED's unlawful segmentation of the Project. • The Board's inadequate findings approving the Project, and the lack of substantial evidence to support the findings that were made. 	<p>additional RTC B4.1-B4-38</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>
32.86	(California Environmental Quality Act Violations)	<p>Each of the issues identified above had several specific sub-issues that were raised in detail in the RB comments. Instead of assigning a number to each issue and sub-issue raised by the Cities and providing reasoned responses thereto, the Regional Board simply summarized the 33 pages of multiple issues raised by the Cities as follows:</p> <ul style="list-style-type: none"> • "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 [sic] required by the California Environmental Quality Act. The economic impacts of this project from dredging 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 [sic] of the likely benefits expected from conducting the dredging." 	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 32.90 - 32.101 and Los Angeles Water Board's response to comment 20.8-20.15; 36.10, 36.30; 36.31; 36.48, and Port additional RTC B4.1-B4-38.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>
32.87	(Califor	This woeful attempt to summarize 33 pages of detailed, specific	State Water Board reviewed the Los Angeles

No.	Author	Comment	Response
	nia Environ mental Quality Act Violatio ns)	environmental comments of the Cities suggests that the Cities' CEQA comments concerned, in a general sense, only the dredging and alternatives analyses in the SED. There is no mention of the Cities' comments regarding an inconsistent project description; the failure to adequately analyze impacts to government services, GHG emissions, mitigation measures, cumulative impacts, or specific sites; the failure to include certain required information; the unlawful segmentation of the project; or the inadequate findings and the insufficient evidence to support the findings that were made. Thus, not only did the Regional Board fail to state any reasons for rejecting the Cities' recommendations or objections in the RB Comments, it failed to even acknowledge the specific recommendations and objections that were made.	<p>Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 32.90 - 32.101 and Los Angeles Water Board's response to comment 20.8-20.15; 36.10, 36.30; 36.31; 36.48 and Port additional RTC B4.1-B4-38.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>
32.88	(Califor nia Environ mental Quality Act Violatio ns)	Because the Regional Board failed to properly identify the detailed concerns of the Cities, said Board failed to properly respond to those concerns. It simply responded: "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."	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 32.90 - 32.101 and Los Angeles Water Board's response to comment 20.8-20.15; 36.10, 36.30; 36.31; 36.48, and Port additional RTC B4.1-B4-38.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>
32.89	(Califor nia Environ mental Quality Act Violatio	Responses 20.8 — 20.15 and 23.9, however, do not address the specific issues raised by the Cities -- which is understandable because those responses address the issues raised by the Port and City of Long Beach (collectively, "Long Beach"), which issues are different than those raised by the Cities. Although Long Beach had some of the same concerns that the Cities had regarding the SED's analysis of dredging impacts, the responses regarding	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1, 32.90 - 32.101 and Los Angeles Water Board's response to comment 20.8-20.15; 36.10, 36.30; 36.31; 36.48, and Port additional RTC B4.1-B4-38.</p>

No.	Author	Comment	Response
	ns)	dredging did not address all of the Cities' comments regarding dredging. Nor did the responses address any of the Cities' other stated concerns.	The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.
32.90	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>INCONSISTENT PROJECT DESCRIPTION</p> <p>The RB Comments objected that the SED violated CEQA because it contains an unclear and inconsistent project description. Specifically, among other things, (i) the SED describes the TMDL as including three inconsistent dredging-requirement scenarios; and (ii) the TMDL Staff Report stated that 2 to 8 feet of sediment may be dredged, but inconsistently assumed that dredging depths would be 2 to 3 feet when estimating costs, a huge disparity that would have a profound difference in the scale of the impacts that would result from dredging.</p> <p>Inconsistently describing the project prevents the SED from serving as a vehicle for intelligent public participation in the decision-making process. (County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 197.) The shifting project description also indicates that the SED is minimizing project impacts by not discussing reasonably foreseeable aspects of the project, which contributes to the SED's inadequacy. The Cities asserted that the Board must make the project description consistent, clarify just what the TMDL will require in terms of dredging, and recirculate the SED so that the public and the decision makers would have a clear understanding of the environmental impacts of the TMDL.</p> <p>The Regional Board simply ignored these objections and</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 39.10.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p> <p>The Staff Report, the SED, and the TMDL clearly explain that the purpose of the project is to establish WLAs and LAs to address the impairments in the affected water bodies due to various heavy metals and organic pollutants. The dredging scenarios are set forth as examples of potential means of compliance.</p>

No.	Author	Comment	Response
32.91	(California Environmental Quality Act Violations)	<p>recommendations.</p> <p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>DREDGING IMPACTS</p> <p>The RB Comments objected that:</p> <p>(i) The SED underestimates the cubic yards of material that would likely need to be dredged from areas within the Los Angeles and Long Beach Harbors if the TMDLs' ERL targets are to be met.</p> <p>(ii) Dredging/capping will not be limited to the areas within the Harbor complex as suggested by the TMDL Staff Report, and the TMDL documents do not evaluate the expected costs for dredging outside of the Harbor areas.</p> <p>(iii) Dredging activities will disrupt soil such that sediment concentrations in the water column are greatly increased, and may disrupt contaminants in the soil such that contaminant water concentrations are higher on a long-term basis.</p> <p>(iv) The SED's claim that dredging will involve removal of only the top layers of sediment is belied by the statement that dredging depths will be up to 8 feet. No analysis of pollutant concentrations in deep Harbor sediments has been made. Deeper dredging, likely required to meet TMDL targets, would be very disruptive to the sediments, potentially exposing the water column to very high contaminant concentrations and requiring the dredging of significant additional volumes of sediment.</p> <p>(v) Capping Harbor sediments could cause significant disturbance in the Harbor sediments, resulting in higher contaminant concentrations in the water column.</p> <p>(vi) The analysis fails to disclose how much total material will need to be dredged, how much material will need to be stored, how many truck and/or boat trips will be needed to move the material to temporary and permanent storage locations, and</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 39.11.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>

No.	Author	Comment	Response
		<p>where those locations are.</p> <p>(vii) The analysis underestimates the potential for destruction or alteration of landscaped areas adjacent to the Harbor as a result of dredge spoil storage.</p> <p>(viii) The SED underestimates the difficulty of controlling erosion from dredged spoils stored adjacent to the Harbor.</p> <p>(ix) The SED should identify the known or potentially contaminated sites within the proposed Project area, and evaluate whether conditions at the sites pose a threat to human health or the environment.</p> <p>(x) The SED overlooks the potential for erosion of submerged Harbor sediments during the process of dredging.</p> <p>(xi) The proposed dredging has the potential to result in significant changes in deposition in near-shore environments adjacent to the Harbor.</p> <p>(xii) The huge scale of proposed dredging guarantees that there would be a substantial air quality impact as a result of dredging, and that such impacts will persist for years.</p> <p>(xiii) The SED does not mention any specific BMPs or mitigation measures, so it is wholly unclear whether the impact of dredging activities on soil compaction and surface water runoff can, in fact, be mitigated.</p> <p>(xiv) Given that dredging will expose and disturb significant quantities of sediment on the Harbor floor, there is considerable potential for ongoing underwater sediment erosion and redistribution, which could increase turbidity and contaminant concentrations in the water column on timescales significantly longer than the period of active dredging operations.</p> <p>(xv) Newly exposed sediments could significantly increase the flow of contaminants from the soil into the water column, thereby increasing contaminant concentrations in the water column over a longer period, and perhaps permanently.</p> <p>(xvi) The SED should also discuss the chemical characterization of the proposed material to be dredged, and special management of the materials. To avoid potential harm to</p>	

No.	Author	Comment	Response
		<p>marine resources, materials should be capped and isolated, or additional tests run to demonstrate the materials' suitability for unconfined disposal into marine waters.</p> <p>(xvii) The SED should describe the project's compliance with Clean Water Act section 404(b)(1) Guidelines and its consistency with the goals of the Los Angeles Contaminated Sediment Task Force.</p> <p>(xviii) The SED does not adequately analyze the extent of potentially significant impacts to plants and animals.</p> <p>(xix) Given an estimated project schedule of 20 years, or 7,300 days, the proposed turbidity-inducing activities would be extensive, and water quality in the immediate vicinity of the dredging activities would be severely affected. Nowhere does the document analyze the potential for these activities to overlap and the resulting impacts from having multiple activities happening at once.</p> <p>(xx) There is no evidence that the implementation of a range of structural and non-structural BMPs in the basin draining to the Los Angeles and Long Beach Harbors would be sufficient to reduce contaminant concentrations to the levels required by the TMDLs. Thus, it is unclear whether such measures would be adequate, raising the possibility that other more radical and expensive measures would be required.</p> <p>Because the Regional Board failed to separately identify the objections and recommendations of the Cities regarding dredging, the Board failed to provide specific, detailed responses, supported by a reasoned analysis, which the Board is required to do when the impact analysis is criticized by another public agency. (14 Cal. Code Regs. §§ 15088(b), (c), 15204(a); 23 Cal. Code Regs. §§ 3779(b), (d), 3779.5(b)(2); Berkeley Jets, 91 Cal.App.4th at 1367; Cleary, 118 Cal.App.3d at 357-358.) Accordingly, the Regional Board failed to comply with the requirements of CEQA. (Id.)</p>	

No.	Author	Comment	Response
32.92	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>GOVERNMENTAL SERVICES IMPACTS</p> <p>The RB Comments objected that the SED also violated CEQA because it failed to evaluate the potential impacts of the project on the provision of government services. Specifically, the Cities objected that because local agencies within the watershed area did not have sufficient resources to comply with the project or to meet the additional annual maintenance costs, the project will necessarily result in a diversion of funds from other governmental services, such as police, fire, capital improvements. Because these potential governmental services impacts have not been evaluated, and thus none of the potential ways to mitigate these impacts have been identified, CEQA's purposes were clearly not served with the subject SED.</p> <p>The Regional Board simply ignored these objections.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 39.12.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p> <p>The SED does in fact evaluate impacts on governmental services. See SED checklist.</p>
32.93	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>GREENHOUSE GAS (GHG) IMPACTS</p> <p>The RB Comments also objected that the SED failed to adequately evaluate the project's GHG emissions and its contribution to global climate change. Specifically, the Cities objected that the SED failed to (i) quantify the total GHG emissions from the project; (ii) disclose the calculations necessary to determine how much extra carbon dioxide equivalencies would be emitted as a result of the project; (iii) support its conclusory finding that the project would not conflict with the state's ability to meet AB32 goals with evidence in the record; and (iv) disclose what emission factors, fuels, source data, etc., were used.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 39.13.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>

No.	Author	Comment	Response
		<p>Without disclosure of the calculations and factors utilized in the calculations, it is impossible to evaluate the accuracy of the SED's findings. Thus, the SED failed to adequately inventory greenhouse gas emissions from the project, or identify potential reduction opportunities.</p> <p>The Cities also objected that the SED failed to (i) set forth what threshold of significance it used or provide the underlying calculations, or (ii) provide the quantification of GHG emissions for any alternative methods of complying with the TMDL or their cumulative impacts. Thus, there was no way to verify the conclusions in the SED regarding GHG emissions or potential climate change impacts of the project.</p> <p>None of these points have even been attempted to be addressed by the Regional Board, and the SED is wholly deficient in its discussion of GHG Emissions.</p>	
32.94	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>MITIGATION MEASURES</p> <p>The RB Comments also objected that:</p> <p>(i) Although the SED conceded that there would be significant impacts to plants and animals (some of which are endangered or threatened) and to their habitat, the SED made no attempt to quantify the impacts or to devise mitigation measures to lessen the potential impacts.</p> <p>(ii) Although it was represented throughout the SED that certain mitigation measures could reduce potential project impacts to "less than significant," there were no performance goals identified or monitoring and remediation measures that would be ongoing to ensure project impacts meet those performance goals.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 39.14.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p> <p>The SED identifies possible mitigation measures where it has identified potentially significant impacts. See SED checklist.</p>

No.	Author	Comment	Response
		<p>(iii) The SED provides that the TMDLs will rely on a menu of best management practices, but without knowing which of those practices will likely ultimately be implemented, there is no device in place to either verify the environmental conclusions in the SED, or to ensure that those forecasted conclusions will come to fruition.</p> <p>(iv) The SED failed to include a mitigation monitoring or reporting program or to provide language that ensured implementation of mitigation efforts.</p> <p>The Regional Board simply ignored these objections.</p>	
32.95	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>CUMULATIVE IMPACTS</p> <p>The RB Comments also objected that the SED's cumulative impacts analysis:</p> <p>(i) Failed to summarize the expected environmental effects of the project and related projects, provide an analysis of cumulative impacts, and/or examine options for mitigating the project's contribution to any significant cumulative impacts.</p> <p>(ii) Analyzed cumulative impacts in certain resource areas in a cursory 2 pages. The SED erroneously stated, in conclusory fashion, that certain impacts, like noise and vibration, would be insignificant "due to the temporary nature of noise increases." The implementation of the project will take place over 20 years, which can hardly be deemed to be "temporary."</p> <p>(iii) Failed to disclose what other projects may be contributing to cumulative impacts, and failed to disclose upon which method of analysis (the list-of-projects approach or the summary-of-projections approach) it was purportedly based.</p> <p>(iv) Considered only other TMDLs that will likely occur in the future, while completely ignoring other non-TMDL projects (e.g.,</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 39.15.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p> <p>The SED evaluates cumulative impacts. See SED. Public Resources Code Section 21159(d) specifies that CEQA does not require the agency to conduct a project-level analysis. The Los Angeles Water Board evaluated reasonably foreseeable means of compliance and associated environmental effects suitable for a program level SED.</p>

No.	Author	Comment	Response
		<p>POLA's China Shipping Project and POLB's Middle Harbor, Gerald Desmond Bridge, and Pier S Projects) that include dredging and filling of various parts of the Harbors. The SED failed to evaluate whether the cumulative impacts of the project and these Port projects would be significant (e.g., whether the Port projects would also (a) require the disposal of contaminated sediments either in the Harbor or offsite; (b) impact the availability of storage sites for the project; (c) impact turbidity, dissolved oxygen, etc. in the Harbors).</p> <p>(v) Although the SED concedes that a Dominguez Channel Bacteria TMDL will likely be developed shortly, the SED fails to evaluate the impacts of that TMDL which could make the incremental impacts of the project cumulatively considerable.</p> <p>The Regional Board simply ignored these objections.</p>	
32.96	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>THE ALTERNATIVES ANALYSIS</p> <p>The RB Comments also objected that the SED:</p> <p>(i) Failed to establish Project objectives. Although the SED included a general statement of the ultimate purpose of the project, it did not include a clearly written statement of project objectives, which is a separate, more detailed requirement than the statement regarding the purpose of the project. This defect led to the SED improperly treating mitigation measures and the alternatives analysis as overlapping approaches to mitigation. Thus, while the SED acknowledged impacts to several resource areas, the "alternatives" in the SED were clearly not selected in a manner calculated to address those potentially significant environmental impacts.</p> <p>(ii) Unlawfully confused the concept of "alternatives to the project" with the concept of "alternative methods of compliance"</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 39.16.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>

No.	Author	Comment	Response
		<p>with the TMDLs. The alternatives analysis assumed it was complying with the obligation to analyze alternatives to the "project" (the TMDL), by purportedly analyzing alternative "methods of compliance" with the TMDL. By attempting to analyze alternative methods of compliance with the TMDLs, the SED does not fulfill its obligation under CEQA to analyze alternatives to the project.</p> <p>(iii) Failed to analyze a reasonable range of legitimate Project alternatives. The SED had to evaluate a reasonable range of alternatives to the Toxic Pollutant TMDL. To be legitimate, the alternatives had to potentially offer substantial environmental advantages over the project proposed, and had to be potentially capable of being feasibly accomplished. Although the SED stated that it examined three alternatives to the project, in actuality it failed to analyze even one legitimate project alternative.</p> <p>(iv) Did not analyze three alternatives as alleged. The SED represented that it analyzed three project alternatives. Such statement is false because included within the three purported "alternatives" was the proposed project, which cannot be an alternative to itself.</p> <p>Of the two purported "alternatives" that were actually included, the "no project" alternative, as described in the SED, could not be considered within a reasonable range of project alternatives because it would not accomplish the most basic objectives of the project. Thus, only one alternative was included, and even were that a legitimate alternative, one alternative does not amount to a reasonable range of alternatives.</p> <p>(v) Included a "No Project" alternative which was not a legitimate alternative, and a true "No Project" alternative must be discussed and considered. The SED should have evaluated the likelihood that the existing contaminated sediment in issue, which is the prime concern to be addressed by the subject TMDL, would be dredged and/or capped pursuant to the ongoing CERCLA cleanup process that was commenced more than two decades ago in connection with the Montrose Superfund Site. This</p>	

No.	Author	Comment	Response
		<p>CERCLA cleanup process may entirely negate the need for this TMDL project, and a more accurate and complete description of the "no project" alternative had to be included before this project could be lawfully considered under CEQA.</p> <p>(vi) Included a US EPA TMDL alternative that was not a legitimate alternative. The US EPA TMDL could not be considered within a reasonable range of project alternatives because it also did not meet the requirement that a legitimate alternative offer substantial environmental advantages over the project proposed. The SED expressly asserted that the environmental impacts of this alternative "may be of greater severity [than the proposed project] as the intensity of implementation actions will be greater to comply with the shorter time frame." (SED, 17.) Consequently, the SED failed to analyze even one alternative that met the requirements of CEQA. The Regional Board's failure to consider a single legitimate alternative means it failed to consider a reasonable range of alternatives.</p> <p>(vii) Did not include the type of alternatives analysis that should have been conducted, an example of which was set forth by the Cities. The deficiencies of the alternatives analysis was starkly revealed by comparing it to the analysis undertaken in In re Bay-Delta, 43 Ca1.4th 1143, which the Cities pointed out to the Regional Board as the methodology that should have been employed with regard to this TMDL. The program EIS/EIR in In re Bay-Delta clearly defined project objectives, which helped the agency in ultimately selecting three legitimate alternatives with twelve variations of each, plus a "no action" alternative. Here, the SED did not clearly define project objectives, and only one project "alternative" was cursorily analyzed, the US EPA TMDL, which was the same as the "no project" alternative. Neither of those so-called "alternatives" constituted a legitimate alternative under CEQA.</p> <p>(viii) Failed to provide an adequate review of the alternatives it did evaluate. CEQA required that the alternatives selected for an EIR be reviewed in-depth. The EPA TMDL and "no project"</p>	

No.	Author	Comment	Response
		<p>alternatives discussions violated CEQA because they were extremely cursory and unsupported by the record. The SED devoted a scant 3 pages to the entire alternatives analysis. No evaluation was undertaken of the alternatives' impacts in each of the resource areas as compared to the project's alleged impacts in those areas, and the conclusory statements in the SED were unsupported by any quantitative or comparative analysis. At a minimum, a matrix displaying the major characteristics and significant environmental effects of each alternative in each of the resource areas should have been included to summarize the comparison of the project and the alternatives.</p> <p>(ix) Failed to explain why it selected and rejected alternatives, and failed to identify an environmentally superior alternative. The SED failed to disclose its reasoning for selecting the alternatives it chose; failed to identify the alternatives, other than a "partial" TMDL, that were considered and explain why they were rejected; and failed to identify an environmentally superior alternative. (x)</p> <p>Did not comply with 14 Cal. Code Regs. section 15123.</p> <p>The SED also failed to include a summary identifying each significant effect, with proposed mitigation measures and alternatives that would reduce or avoid that effect. The SED acknowledged several potentially significant effects, but made no effort to identify, on an impact-by-impact basis, how any alternative would better address environmental impacts. Equally important, the SED did not identify how each alternative would reduce each significant effect, if at all.</p> <p>(xi) Failed to consider other alternatives that were feasible, many examples of which were suggested by the Cities. Potentially feasible alternatives that offered substantial environmental advantages over the proposed project were suggested by the Cities. The SED failed to evaluate even a single alternative that satisfied the requirements of CEQA, and the Regional Board failed to respond to the Cities' suggested alternatives or explain why they were not considered.</p>	

No.	Author	Comment	Response
		<p>The Regional Board simply ignored these objections and recommendations regarding the SED's alternatives analysis.</p>	
32.97	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>FAILURE TO ANALYZE SPECIFIC SITES</p> <p>The RB Comments also objected that the SED failed to take into account "specific sites" as required by Public Resources Code section 21159(c) and 14 California Code of Regulations section 15187(d). The SED discussed only implementation alternatives without discussing any specific sites.</p> <p>The Regional Board simply ignored these objection.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 39.17.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate. The Staff Report and SED discuss in detail various specific sites covered by the TMDL and evaluated potential environmental effects associated with implementation of the TMDL.</p>
32.98	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>FAILURE TO INCLUDE REQUIRED INFORMATION</p> <p>The RB Comments also objected that the SED failed to include certain information, such as a separate "summary" section that identifies each significant effect of the project with proposed mitigation measures, areas of controversy known to the Board, including issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects. (14 Cal. Code Regs. § 15123.) CEQA also required that energy conservations measures, including those in CEQA Guidelines Appendix F, be discussed. (14 Cal. Code Regs. § 15126.4(a)(1)(C).) This had not been done. Also, the potential Environmental Justice impacts, general population and housing impacts, and S. B. 375 impacts</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 39.18.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>

No.	Author	Comment	Response
		<p>and related issues potentially caused by the project have not been analyzed. The Regional Board simply ignored these objections and recommendations.</p>	
32.99	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>UNLAWFUL SEGMENTATION OF THE PROJECT</p> <p>The RB Comments also objected that the SED violated CEQA by segmenting the project by its lack of specificity in the mitigation measures, which amounted to an unlawful deferral until the project level stage of any review of the problems associated with the acknowledged environmental impacts that will result from the project; i.e., the SED illegally truncated the project and treated those various impacts as separate, independent projects. Also, the SED and TMDL Report indicated the project was necessary because of the EPA TMDL Consent Decree. Under the EPA TMDL Consent Decree, the "project" should be the establishment of a series of TMDLs for the Los Angeles River and other impaired waters in the Basin. Instead of evaluating the whole series of TMDLs together, or even the series of TMDLs for the Dominguez Channel and Los Angeles and Long Beach Harbor areas alone, the Board separated each TMDL into an individual project, thus focusing on the constituent parts of the real project, minimizing the real project's environmental impacts, and avoiding full environmental disclosure.</p> <p>The Regional Board failed to respond to these objections and recommendations.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 39.19.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>
32.100	(California Environ	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p>

No.	Author	Comment	Response
	mental Quality Act Violations)	<p>DEFICIENT FINDINGS AND EVIDENCE</p> <p>The RB Comments also objected that the Regional Board's findings did not support the decision, and the evidence in the record did not support the findings. The Board failed to make specific findings for each impact under Public Resources Code section 21081 and 14 California Code of Regulations section 15091. Moreover, the Board failed to make findings concerning the project alternatives even though it did not find that all of the project's significant impacts would be avoided or substantially lessened by mitigation measures.</p> <p>Similarly, the draft Statement of Overriding Considerations was deficient because it inappropriately predetermined that the undisclosed, unknown, and perhaps unmitigable adverse impacts were outweighed by the necessity of implementing this particular TMDL. This determination was unsupported and uninformed by substantial evidence, and thus the analytic route of the Board was not disclosed, because the extent of the impacts was not even evaluated by the Board (e.g., there is no hint as to why a different schedule would not achieve most of the project's objectives at a fraction of the environmental cost). Further, a Statement of Overriding Considerations could not properly be made because the potentially significant adverse impacts had not been fully identified and analyzed and no conclusion had been reached that the impacts were significant and could not be mitigated. Such a conclusion cannot be reached until the significant impacts have been analyzed in comparison to the benefits that will result from the project. Finally, the Statement improperly preempted the decisions of local agencies, which as the lead agencies on the implementation decisions, were the appropriate bodies to determine whether the impacts of a particular implementation method were overridden by project benefits.</p> <p>Again, the Regional Board failed to respond to these objections and recommendations.</p>	<p>See response to comment 0.1 and Los Angeles Water Board's response to comment 39.20.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p>

No.	Author	Comment	Response
32.101	(California Environmental Quality Act Violations)	<p>To briefly name just a few of the issues that were not addressed in the Regional Board's responses:</p> <p>INADEQUATE RESPONSES TO THE LONG BEACH COMMENTS</p> <p>Not only did the Regional Board improperly ignore the RB Comments on CEQA by simply directing the Cities to see the Board's responses to Long Beach's comments, but the responses to Long Beach's comments were also deficient as a matter of law. For example, Long Beach commented that the dredging impacts of the SED are understated because dredging and capping will be the only feasible method of meeting the sediment targets of the TMDL within the implementation time frame. (RTCs, p. 49.) In response, the Board stated in conclusory fashion that dredging impacts are not understated because the Ports "will not dredge if not necessary." (Id. at 50.) Conclusory statements unsupported by specific references to empirical information, scientific authorities, or explanatory information are insufficient responses. (14 Cal. Code Regs. §§ 15088(c); Cleary, 118 Cal.App.3d at 357-358.) The Board cannot simply contradict Long Beach, an expert agency with empirical knowledge about its dredging operations, and thereby provide the necessary good faith, reasoned response required by CEQA.</p> <p>The Board's responses also acknowledge that Long Beach has made good points on certain issues, and thus the SED "will be revised " to address certain subjects. (See, e.g., RTCs, pp. 53 ["The SED will be revised to include electric dredging"]; 54 ["The SED will be revised to address this [noise] comment"]; 55 ["Regarding mitigation measures, the SED will be revised to address this comment"]; 56 ["Regarding mitigation measures, the SED will be revised to address this comment"].) There is no indication, however, as to how those issues were addressed, if at all, and no list of changes was produced by the Board as required</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses.</p> <p>See response to comment 0.1 and Los Angeles Water Board's response to comment 20.8.</p> <p>The Los Angeles Water Board responded to all CEQA comments it received and the State Water Board has provided additional responses as appropriate.</p> <p>Additional information included in the revised SED included: added information in Section 5.1.6 on dredging methods; modification of the checklist 2.c. "<i>Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally</i>" from "<i>less than Significant</i>" to "<i>Potentially Significant Impact</i>;" additional discussion of removal of contaminated sediment by dredging in Section 6 air a; Section 6 plant life a, plant life b, and plant life c discussed additional mitigation methods available; Section 6 animal life b removed discussion of the brown pelican; Section 6 noise, discussion of noise and dredging and an additional table was added; additional discussion of existing TMDLs was added to the <i>Program Cumulative Impacts</i> Section and; an additional reference was added.</p>

No.	Author	Comment	Response
		<p>by CEQA. Moreover, these changes necessitated a recirculation of the SED for further public input on the changes made. (Pub. Res. Code § 21092.1; 14 Cal. Code Regs. § 15088.5.)</p> <p>Finally, many of the responses to Long Beach's comments simply seek to excuse the Board's failure to undertake certain analyses by asserting that the SED is a program level document, and that further environmental review will occur at the local level; i.e., the local agencies will tier off of the SED. However, "tiering does not excuse the lead agency [here, the Board] from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration." (14 Cal. Code Regs. § 15152(b).) That is exactly what the Regional Board did here through its failure to adequately respond to the RB Comments on CEQA.</p>	

32.102	(Conclusion)	<p>In light of the foregoing Comments and the RB Comments, along with Dr. Paulsen's comments (submitted under separate cover and incorporated herein), as well as the oral comments presented at the hearing before the Regional Board on May 5, 2011, the proposed TMDL is contrary to law and should not be adopted at this time.</p> <p>We appreciate the State Board's consideration of the above and the incorporated comments and Exhibit A hereto, and request that you contact this office should you have any questions or need any additional information concerning this matter.</p>	Comment noted.
33	United States Environmental Protection Agency (USEPA)		
33.1		The U.S. Environmental Protection Agency (EPA) supports the Los Angeles Regional Water Quality Control Board's proposed Basin Plan amendment to establish Total Maximum Daily Loads (TMDLs) for many toxicants in Dominguez Channel and greater	Comment noted.

		Los Angeles/Long Beach Harbor waters. We concur with the technical approach to restore beneficial uses for aquatic life and fish consumption via pollutant load reductions from upstream sources as well as existing bed sediments. We find the proposed TMDLs meet all federal regulatory requirements.	
33.2		TMDL numeric targets for water are consistent with numeric criteria in the California Toxics Rule (CTR). Numeric targets are also identified for sediment and fish tissue, consistent with EPA guidance for addressing narrative water quality standards. The Regional Board has selected sediment quality guidelines based on Effects Range-Low values (ERLs) to protect benthic organisms living within contaminated sediments. Scientific studies defend this approach based on sediment mixtures of copper, DDT and pyrene (a PAH compound) and the adverse effects on benthic community structure (Balthis et al, 2010).	Comment noted.
33.3		<p>The TMDL includes a hydrodynamic and water quality model that builds upon existing watershed information as well as expanding into the estuarine and marine waters. The model specifically incorporated the following monitoring results: freshwater inputs from Dominguez Channel, Los Angeles River and San Gabriel River from 1995-2005, physical sediment parameters and transport information from 1998 to 2005, sediment chemistry results from 2000-2006 including those generated by Port of Los Angeles and Port of Long Beach monitoring project in 2006. Model specifications and results were reviewed by and generated comments from technical advisory group of stakeholders.</p> <p>Furthermore, in response to TMDL development, the Ports have utilized this publically available model (as opposed to previous ACOE models) as part of their Water Resources Action Plan for investigating future pollutant load reduction strategies.</p>	Comment noted.
33.4		The TMDL acknowledges the Montrose facility within the Dominguez Channel watershed. EPA's Superfund program has	Comment noted.

		<p>made considerable progress on controlling exposures from DDT in soils: a temporary cap was installed over the DDT-contaminated soils at the former Montrose plant property, and EPA removed contaminated soils from some areas within the stormwater pathway, which flows into Kenwood Drain, through Torrance Lateral and into Dominguez Channel estuary.</p> <p>Monitoring results to date show low DDT concentrations passing thru Torrance Lateral; nonetheless, the TMDL establishes additional monitoring - to further characterize this pollutant pathway - if higher DDT levels are observed in the stormwater pathway from routine monitoring.</p>	
33.5		The implementation plan provides adequate description of requirements and expectations for all concerned stakeholders.	Comment noted.
34	Western States Petroleum Association		
34.1		<p>Substantive and materially important changes were made to the TMDL at the adoption hearing after the close of all opportunity for public comment.</p> <p>The specific, troublesome change that was made reads as follows: "If at any point during the implementation plan, monitoring data or special studies indicate that load and waste load allocations will be attained, but fish tissue targets may not be achieved, the Regional Board shall reconsider the TMDL to modify the waste load and load allocations to ensure that the fish tissue targets are attained."</p> <p>This change indicates that the Regional Board may alter the TMDL requirements at any time during the implementation period. As noted in previous comments, the requirements of the TMDL, including how it would be implemented in permits and what would be required of stakeholders to demonstrate compliance with the TMDL, are factors that are already exceedingly difficult to understand. The new language appears to make the requirements that may be imposed upon regulated entities even more problematic by suggesting a moving target.</p>	<p>The statement included in the adopted Basin Plan Amendment "<i>If at any point during the implementation plan, monitoring data or special studies indicate that load and waste load allocations will be attained, but fish tissue targets may not be achieved, the Regional Board shall reconsider the TMDL to modify the waste load and load allocations to ensure that the fish tissue targets are attained</i>" is true for this TMDL (and other Basin Plan Amendment TMDLs) regardless of whether the statement is explicitly included in the Basin Plan Amendment. If data or studies make clear that allocations are insufficient to attain targets, than the allocations, in fact, need to be recalculated. While the allocations are the method of reaching the targets, the goal of the TMDL is the targets, not the allocations in and of themselves. While the Los Angeles Basin Plan, including this amendment, can be reconsidered at any time the Los Angeles Board determines, this</p>

		<p>As detailed in the attached table of comments, this change is all the more troubling because fish within the Harbor may be geographically wide ranging (such that pollutant concentrations in fish may well be beyond the control of parties regulated by this TMDL), and because the fish tissue targets of the TMDL are based upon OEHHA's "Fish Contaminant Goals," which were developed "without regard to economic considerations, technical feasibility, or the counterbalancing benefits of fish consumption" (OEHHA, 3008). The fish tissue targets are thus far more stringent than necessary to "best promote the overall health of the fish consumer" (see also OEHHA 3008, and attached detailed comments).</p> <p>Recommendation: REMOVE the added language. If the Board wishes to incorporate new data into a TMDL, then the entire TMDL process should be re-initiated so that the entirety of data collected up to that time as well as efforts that have been undertaken by sources can be adequately considered.</p>	<p>adopted Basin Plan Amendment includes a specific commitment to reconsider the TMDL, including allocations, at year 6 of implementation.</p> <p>The tentative Basin Plan Amendment released on December 17, 2010, included this specific task in Table 7-40.2: <i>"Regional Board will reconsider targets, WLAs, and LAs based on new policies, data or special studies as necessary. Regional Board will consider requirements for additional implementation or TMDLs for Los Angeles and San Gabriel Rivers and interim targets and allocations for the end of Phase II."</i> This task was assigned a deadline of <i>"6 years after the effective date of the TMDL."</i></p> <p>The revised tentative Basin Plan Amendment released prior to the Los Angeles Hearing on May 5, 2011 and the final, adopted Basin Plan Amendment, included the same language with the words "as necessary" removed.</p> <p>The tentative Basin Plan Amendment and the final adopted Basin Plan Amendment also include in the <i>Implementation Plan</i> section No.4 <i>Special Studies and Reconsideration of TMDL Targets, Allocations, and Schedule</i> a discussion of the potential need to adjust targets, allocations, and the schedule based on new science, special studies or policy.</p> <p>State Board notes that, if the Los Angeles Board reconsiders the fish targets, then, at that time, the commenter can recommend data to be considered.</p>
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34.2		<p>Application of toxicity targets as numeric effluent limitations, or to stormwater discharges, is inappropriate.</p> <p>In our comments to the Regional Board, WSPA raised a number of technical and scientific concerns associated with the application of the toxicity allocations as effluent limitations generally, application of chronic toxicity tests to short-term discharges such as stormwater, and application of chronic toxicity tests to effluent rather than receiving water samples. WSPA also objected to the way in which the interim toxicity allocation was calculated, as it was calculated as an average value for receiving water samples, but would be applied as a never-to-be-exceeded limit for individual effluent (source) samples. The Regional Board has not addressed many of the technical or practical concerns raised in our comments, as detailed in the attached table.</p> <p>Recommendation: Initiate a continuing effort to review as appropriate, and incorporate as necessary, guidance on use of chronic toxicity tests prior to inclusion in a TMDL. Should new data warrant the use of chronic toxicity testing, such new data should be considered within a new TMDL rule-making effort.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and changes to the Basin Plan Amendment and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 19.2 and 21.6.</p>
34.3		<p>The Harbor TMDL is contrary to the State's Sediment Quality Objectives Policy.</p> <p>The State Water Board explicitly considered and rejected the future use of Sediment Quality Guidelines, such as ERLs and TECs, when it adopted the Sediment Quality Objective (SQO) Policy in 3008. That policy was approved by USEPA and became effective on August 25, 3009. The SQO Policy recognizes that no individual line of evidence (such as pollutant sediment concentrations) "is sufficiently reliable when used alone to assess sediment quality impacts due to toxic pollutants" (SQO Policy at p. 7).</p> <p>The SQO Policy also requires a "stressor identification" step to identify if the impairment is caused by pollutant(s), and, if so,</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment. 20.1 and 38.7a.</p> <p>State Board notes that required by the adopted Basin Plan Amendment under the Sediment Management Plan to be developed, sediment quality will be evaluated by the SQOs including stressor identification (SQO Part 1 (VII.F.)).</p>

		<p>which pollutant(s) are responsible for the impairment. The Harbor TMDL uses Sediment Quality Guidelines as TMDL targets, and fails to perform the stressor identification process required by the State's Policy. Thus, the Harbor TMDL may regulate pollutants that are not contributing to impairment and, more importantly, by failing to identify responsible pollutants, the Harbor TMDL likely fails to require implementation measures that could result in attainment. Because the Harbor TMDL targets and allocations are not based upon the State's SQO policy, the Harbor TMDL fails to be scientifically supported and is therefore legally questionable.</p> <p>Recommendation. Evaluate sediment quality using the SQO Policy and conduct stressor identification prior to establishing TMDL targets.</p>	
34.4		<p>WSPA's Response to Regional Board's Response to Comment no. 38.2a.</p> <p>Language was incorporated into the final Basin Plan Amendment as follows: "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" (3000) and current NPDES permits. The fresh water 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."</p> <p>While this language clarifies that an exceedance of the 2 TUC interim allocation for toxicity shall trigger the TIE/TRE process, the response to comment 14.6 states that "this interim limit will be incorporated into the appropriate permits and become enforceable." This language clearly implies that the 2TUC interim limit will be applied as a numeric effluent limitation.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and changes to the Basin Plan Amendment and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 14.6.</p> <p>State Board notes that Immediately after "this interim limit will be incorporated into the appropriate permits and become enforceable." The Los Angeles Board response states <i>"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)."</i></p>

		<p>We continue to assert that inclusion of this interim toxicity limitation as a numeric effluent limit is inappropriate, for the range of technical reasons raised in our original comment letter and the attachment to that letter. We note that others (see Comments 21.6 and 14.6) have raised both technical and practical concerns related to the implementation of the toxicity allocations as effluent limitations. Although the Regional Board did include some clarifying language regarding the TRE/TIE process, the Regional Board did not specify that toxicity allocations should not be used as effluent limitations (as requested), and the Regional Board did not respond to the technical or practical concerns raised by WSPA or by other parties in any way.</p> <p>WSPA requests that the SWRCB clearly specify that that the toxicity allocations are not to be used as effluent limitations within NPDES permits.</p>	
34.5		<p>WSPA's Response to Regional Board's Response to Comment no. 38.2b.</p> <p>First, it is a fundamental principle in toxicology that toxicity testing involves the frequency, magnitude, and duration of exposure (see USEPA, Technical Support Document for Water Quality-Based Toxics Control, 1991). "In chronic toxicity tests, the exposure duration in the EPA testing protocols is almost always assumed to be the 7-day short-term period..." (USEPA 1991 at p. 4) Although it is theoretically possible to assess chronic toxicity by artificially extending the exposure period (e.g., it is possible in the laboratory to expose a chronic test organism to a test sample for a 7-day period, even if that exposure could not occur in the environment for a short-term storm event), that test result has no toxicological relevance to the condition(s) that may actually occur in the environment. Thus, it is inaccurate and inappropriate to suggest that short discharge conditions may cause an adverse sub-lethal effect when the exposure duration is far shorter than the test duration.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and changes to the Basin Plan Amendment and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 19.6, 30.3, 38.2 and 40.3.</p>

		<p>Second, it is not recommended practice to conduct a chronic exposure test using a single water sample. USEPA (1991, at p. C-1) notes that the following procedure is used for chronic testing: "... Collect a daily grab sample or a daily composite sample of receiving water from each station. Use a renewal testing method to expose test organisms to the daily samples collected at each station. Use an appropriate number of replicates (10 for Ceriodaphnia) for each sampling station..."</p> <p>USEPA's short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms (4th edition; 3002) reads as follows: "8.3.2 When tests are conducted off-site, a minimum of three samples are collected. If these samples are collected on Test Days 1, 3, and 5, the first sample would be used for test initiation, and for test solution sample would be used for test solution renewal on Days 5, 6, and 7."</p> <p>Thus, USEPA consistently recommends the collection of multiple samples over the relevant chronic toxicity testing time period for valid chronic toxicity tests. The Regional Board's response to comments has also failed to respond to other concerns raised in WSPA's comments (e.g., that sublethal chronic toxicity endpoints were never examined for correlation with instream conditions by USEPA, or that sublethal endpoints for chronic toxicity testing are less reliable than other test endpoints and may not indicate any impact in ambient waters, and so should not be used to determine non-compliance).</p> <p>For these reasons, WSPA reiterates its prior recommendation that chronic toxicity testing should never be applied for discharges or conditions that are shorter in duration than the chronic toxicity test period.</p>	
34.6		<p>WSPA's Response to Regional Board's Response to Comment no. 38.2c.</p> <p>The Regional Board has not stated the time period or number of</p>	<p>The freshwater toxicity interim allocation is set at 2 TUc based on current monitoring results performed by the Los Angeles County Department</p>

		<p>samples that constitute the “recent data,” and to our knowledge has not made these data publicly available. Without these data, it is not possible to determine if the “recent data” indicate that the 2 TUc interim limit has not been exceeded by any single sample.</p> <p>If, in fact, the dataset is either small (contains few samples) or does not include a representative range of ambient conditions (e.g., dry and wet season samples, dry and wet climate periods, etc.), it would continue to be inappropriate to apply this interim limitation as a value never to be exceeded in any single sample. If the interim limit has been derived as the average value calculated from multiple samples, then, by definition, many of the individual samples in the dataset would have concentrations higher than the interim target. In this case, the interim target should be compared to the average value from multiple samples.</p> <p>Also, as noted below in response to comment 38.3d, toxicity targets should be applied within the receiving waters, not to individual effluent samples. Indeed, it is our understanding that the “recent toxicity data for the Dominguez Channel” collected by the Los Angeles County Department of Public Works are for receiving water samples. Since the available data are for receiving water samples, applying them to effluent samples is not an appropriate way to determine that “water quality is not further degraded.”</p> <p>For these reasons, WSPA requests that the State Water Board clearly specify that the interim toxicity limits of the TMDL cannot and will not be used as effluent limitations.</p>	<p>of Public Works from 2002-2010, which have shown values less than 2 TUc. The data are publicly available on Los Angeles County Department of Public Work. There is no individual sample in the data set has value higher than 2TUc.</p> <p>The TMDL clarify that 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.</p> <p>The fresh water 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. Stormwater dischargers are allow to select a coordinated compliance monitoring option, the compliance point for the stormwater WLA may be at storm drain outfalls or at a point in the receiving water.</p>
34.7		<p>WSPA’s Response to Regional Board’s Response to Comment no. 38.3d.</p> <p>As noted in our comments on comment 38.3c, WSPA understands that available toxicity monitoring data collected by the Los Angeles County Department of Public Works are for receiving water samples. WSPA believes that it is not appropriate</p>	<p>Toxicity should be evaluated in the receiving water and in addition, as NPDES permits are developed, appropriate permit limits or conditions such as triggers may be developed.</p> <p>State Board notes that mixing zones have not</p>

		<p>to apply numeric effluent limits for toxicity as effluent limitations; toxicity should be evaluated in the receiving water, as the water quality objectives for toxicity specify that “the survival of aquatic life in surface waters, subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same waterbody in areas unaffected by the waste discharge or, when necessary, other control water” (Basin Plan at p. 3-17). The Basin Plan also specifies that “there shall be no chronic toxicity in ambient waters outside mixing zones” (at p. 3-17), indicating that chronic toxicity should be evaluated within the receiving water.</p> <p>WSPA also notes that it is exceedingly difficult for a discharger to determine from the Harbor TMDL what that discharger may be required to do to comply with the TMDL. WSPA and other stakeholders repeatedly asked the Regional Board how the TMDL might be implemented within permits, and were repeatedly told that Regional Board staff could not determine this, as it would be up to permit writers at the time a permit is issued. WSPA therefore requests that the SWRCB provide clarity with respect to the appropriate application of chronic toxicity limits to stormwater.</p> <p>Specifically, WSPA requests that the State Water Board clearly specify that the interim toxicity limits of the TMDL cannot and will not be used as effluent limitations.</p>	<p>been established for any discharges in the Dominguez Channel.</p> <p>State Board understands that the eventual, exact, permit requirements are more directly critical for dischargers than targets and allocations. However, Regional Boards do not open and reissue all effected permits with every TMDL. The TMDL establishes necessary targets and allocations and the conditions of the permits are established at the time the permit is reopened, established or re-established.</p>
34.8		<p>WSPA’s Response to Regional Board’s Response to Comment no. 38.6a.</p> <p>WSPA notes that the CTR numbers were not developed in consideration of sediment pollutant concentrations, or with the intent of protecting sediment concentrations. The Regional Board’s response provides no evidence that CTR values are intended to or appropriate for this purpose. Thus, the Regional Board’s response is inadequate.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and Los Angeles Water Board's response to comment 38.6.</p> <p>State Board notes that there are impairments in the water in the Dominguez Channel and CTR targets are appropriate to address those impairments.</p>

34.9		<p>WSPA’s Response to Regional Board’s Response to Comment no. 38.7.</p> <p>As noted by WSPA and by multiple other stakeholders, the State’s SQO Policy requires that the “stressor identification” process be followed to determine (a) if pollutant(s) are responsible for the observed impairment, and (b) if so, which pollutant(s) are responsible for the impairment. See also comment 38.7a, below.</p> <p>Only after the responsible pollutant(s) are identified can appropriate action be determined and implemented. Development of TMDLs prior to stressor identification is premature and will likely result in inappropriate TMDL endpoints and unnecessary management actions. For example, if it is later determined that pyrethroid compounds, and not the compounds regulated by the TMDL, are responsible for the impairment (as has been shown for many other water bodies in the State), the TMDL will have resulted in unnecessary implementation actions to control other pollutants. More importantly, the TMDL will have failed to require implementation measures (e.g., source controls, bans on the use of pyrethroids in affected watersheds) that could result in removal of the impairment.</p> <p>By not following the State’s SQO Policy, the Regional and State Water Boards are ignoring their own requirements and failing to implement best available science.</p> <p>WSPA recommends that SWRCB specify in its adopting resolution that TMDL implementation measures be required only after the SQO Policy has been followed and stressor identification is complete and used to adjust TMDL targets and allocations, as necessary.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and agrees with its responses. See response to comment 0.1 and 23.3 and Los Angeles Water Board's response to comment 21.5.</p>
34.10		<p>WSPA’s Response to Regional Board’s Response to Comment no. 38.7a.</p>	<p>State Water Board reviewed the Los Angeles Water Board's responses to these comments and</p>

		<p>The State's SQO Policy became effective when approved by USEPA on August 25, 2009. Many of the TMDLs within the Los Angeles Region that included the use of ERLs were adopted prior to this date. As clearly stated within the SQO Policy itself, one reason the SQO Policy was adopted was because the use of a single line of evidence (LOE), such as pollutant sediment concentration, produced erroneous and misleading results; the SQO Policy was intended to correct and supersede the practice of using SQGs as regulatory endpoints.</p> <p>There is much evidence within the record for the SQO Policy, and the SWRCB explicitly considered the continued use of Sediment Quality Guidelines such as ERLs as a CEQA alternative when it adopted the SQO Policy. The SWRCB Staff Report for the SQO Policy examined a number of scientific research articles, and utilized the input of a highly qualified Scientific Steering Committee and peer reviewers, in evaluating and rejecting the use of Sediment Quality Guidelines like ERLs for future use within the State (see, for example, SQO Policy Staff report, September 16, 2008, at p. 5-24).</p> <p>Although the Harbor TMDL does allow one to demonstrate compliance by demonstrating that sediment meets the SQO designations of "Unimpacted" or "Likely Unimpacted," the process for removing or supplanting the ERLs embedded within the TMDL, and the allocations that are based upon the ERLs, is unclear.</p> <p>Likewise, if it is found in the future that a separate pollutant is responsible for impairment, the process for removing the targets based upon ERLs is unclear. As noted in Comment 38.7, the failure to follow the Stressor Identification process of the SQO Policy means that the TMDL may not be regulating the pollutant(s) that may be causing the alleged impairment within the sediments. When asked at a meeting on February 7, 2011, what would happen if the Regional Board determined that a chemical</p>	<p>agrees with its responses. See response to comment 0.1 and 23.2 and Los Angeles Water Board's response to comment 38.7a.</p>
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		<p>not regulated by the TMDL was responsible for impairment, Regional Board staff indicated that the responsible pollutant “would be addressed by a separate TMDL,” and that there would be no “automatic updating” of the current Harbor TMDL. The TMDL itself is silent on this point. Thus, we conclude that the ERLs would continue to be applied.</p> <p>Thus, the Harbor TMDL is directly contrary to the State’s SQO Policy, which represents best available science and the law in the State of California. For these reasons, we ask the SWRCB to specify that the targets and allocations of the TMDL shall not be implemented in NPDES permits until such time as the TMDL has been amended to eliminate the use of Sediment Quality Guidelines and made consistent with the State’s SQO Policy.</p>	
34.11		<p>Language was added to the TMDL at the close of the adoption hearing, after the close of the public comments, as follows: “If at any point during the implementation plan, monitoring data or special studies indicate that load and waste load allocations will be attained, but fish tissue targets may not be achieved, the Regional Board shall reconsider the TMDL to modify the waste load and load allocations to ensure that the fish tissue targets are attained.”</p> <p>This language, which was added to the TMDL near the close of the adoption hearing and after all opportunity for public comment had passed, is an important and material change to the TMDL itself. The addition of this sentence in effect means that the TMDL requirements can be changed at any time during the implementation period, including within the interim compliance period. Thus, the requirements that the TMDL imposes upon regulated entities, which were already exceedingly difficult to understand, appear to have become a moving target with the addition of a single sentence.</p> <p>This change is even more troubling because it is well established</p>	Concerning the language added to the Basin Plan Amendment at the Los Angeles Board hearing, see response 30.50 and 34.1.

		<p>that fish within the Harbor may range widely to areas outside the Harbor, potentially including more polluted areas like the Palos Verdes Shelf, such that pollutant concentrations within fish tissues are not within the control of the parties regulated by the TMDL. Yet, if fish tissue targets are not achieved, the Regional Board may alter the requirements of the TMDL at any time.</p> <p>Additionally, this change makes the choice of fish tissue targets all the more important. The targets of the TMDL are the “Fish Contaminant Goals” (“FCGs”) proposed by OEHHA, not the more appropriate “Advisory Tissue Levels” (ATLs). FCGs are goals because they do not consider the health benefit achieved by eating fish, while ATLs recognize and consider the health benefits of consuming fish in addition to the risk posed by pollutants. OEHHA’s 3008 report (<i>Development of Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene</i>) states that “FCGs are based solely on public health considerations without regard to economic considerations, technical feasibility, or the counterbalancing benefits of fish consumption,” while “Advisory Tissue Levels (ATLs), while still conferring no significant health risk to individuals consuming sport fish in the quantities shown over a lifetime, were developed with the recognition that there are unique health benefits associated with fish consumption and that the advisory process should be expanded beyond a simple risk paradigm in order to best promote the overall health of the fish consumer.”</p> <p>The use of FCGs, rather than ATLs, will now, with the late addition of the new language, have consequences that are potentially extraordinarily costly, that may require controls that are unnecessary to “best promote the overall health of the fish consumer,” and that may be unachievable.</p> <p>For these reasons, WSPA asks the SWRCB to strike the new sentence in its entirety.</p>	
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